Laboratory

Emerging Pathogens Initiative (EPI)

Version 5.2

Roll Up Modifications Technical and User Manual

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Revision History

Date	Version	Description	Author
9/2015	LR*5.2*442	Updates for LR*5.2*442, ICD-10 PTF Modifications: Updated title page and footers. Added text to Preface (p.iv), added reference to ICD-10 PTF Modifications Installation Guide (pp.21, 30), added new DBIA #6130 (p.22), updated Post Installation (p.34).	REDACTED
07/2014	LR*5.2*421 pp. iv-ii, p. iii, p. v p. ix-xvi pp.74, 78, 111, 122, 127, 131, 135, 139, 142, 146, 149, 153, 157, 161, 165, 169, 173, 176, 179, 183, 186, 189, 193, 197, 201, 205, 214, 219 pp.16, 66, 114, 141, 144, 148, 171, 175, 178, 191, 212, 226, 234, 262, 264, 266 p. 362, 387 p. 40 pp.36, 39, 45, 50 pp.229, 230 Multiple pages	Updated for ICD-10 Remediation: Added Revision History. Updated information in Preface. Updated Orientation Updated and renumbered TOC. Added information on ICD-10 input screens and examples. General changes from ICD-9 to ICD. Updated DG1 Segment of HL7 message to utilize ~ rather than ^. Updated file (#69.5) file fields. Added notes that refer users to the LR*5.2*421 Release Notes for Required Patches, Installation and Post	REDACTED

Date	Version	Description	Author
		Installation instructions. Removed Personally Identifiable Information (PII). Changed AAC to Austin Information Technology Center (AITC) throughout manual	
05/2008	LR*5.2*175	Initial release	VA OI&T

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Preface

The Veterans Health Information Systems and Architecture (VistA) Laboratory Emerging Pathogens Initiative (EPI) Rollup Modifications Patch LR*5.2*281 Technical and User Manual provides assistance for installing, implementing, and maintaining the EPI software application enhancements.

The International Classification of Diseases, Tenth Revision (ICD-10) Remediation patch LR* 5.2*421 makes the following changes to the Emerging Pathogens Initiative (EPI) application:

- The following fields and screens have been updated to refer to "ICD" rather than "ICD9":
    - Laboratory Search/Extract Parameters Input screens
    - Enter/Edit Local Pathogens screens
    - Detailed Verification Report
    - Help text
- Within the Enter/Edit Local Pathogens and Laboratory Search/Extract Parameters Input screens, users are prompted to specify a code set on which to search prior to entering an ICD code. Based on this input, the system will only allow ICD-9 entry or ICD-10 entry.
- The Pathogen Inquiry option has been modified to list both ICD-9 and ICD-10 codes.
- The Generate Local Report/Spreadsheet option has been modified to include both the Diagnosis Code Set Designation and the Diagnosis Code.
- Health Level 7 (HL7) Reports that are sent to Austin Information Technical Center (AITC), formerly Austin Automation Center (AAC), have been modified to include ICD-10 Codes and Descriptions, which are included in the DG1 HL7 Segments.

The ICD-10 PTF Modifications patch LR*5.2*442 made changes to the Emerging Pathogens Initiative (EPI) application to ensure the software would accommodate the expanded number of ICD-10 codes that may be contained in a patient record.

Intended Audience

The intended audience for this manual includes the following users and functionalities:

- Veterans Health Administration (VHA) facility Information Resource Management (IRM) staff (will be important for installation and implementation of this package)
- Laboratory Information Manager (LIM) (will be important for installation and implementation of this package)
- Representative from the Microbiology section in support of the Emerging Pathogens Initiative (EPI) Rollup enhancements (i.e., director, supervisor, or technologist) (will be important for installation and implementation of this package especially with parameter and etiology determinations; may also have benefit from local functionality)

- Total Quality Improvement/Quality Improvement/Quality Assurance (TQI/QI/QA) staff or persons at the VHA facility with similar function (will be important for implementation of this package given broad-ranging impact on medical centers and cross-cutting responsibilities that extend beyond traditional service lines; may also have benefit from local functionality)

- Infection Control Practitioner (likely to have benefit from local functionality)

NOTE: It is highly recommend that the Office of the Director (00) at each VHA facility designate a person or persons who will be responsible for the routine implementation of this patch (both at the time of this installation and afterwards) and to take the lead in trouble-shooting issues that arise with the routine functioning of the process. This decision is left at the discretion of the director since the functions that persons perform locally may have different titles and meanings. The definitions of installation and implementation are provided below to help the Office of the Director in assigning the responsibility.

The term installation refers to the process of actually integrating the software into the currently existent VistA system locally. This is usually a process that occurs over a short period of time and does not recur. By default, this process is usually accomplished by personnel in IRM.

The term implementation refers to the process of executing the software after installation, adjusting parameters and maintaining the day-to-day functioning of the data cycle that the Laboratory EPI Rollup Modifications entail. There are two main functionalities that will need to be addressed by implementation (national functionality and local functionality). The national functionality will have limited local resource requirements, but will require periodic, on-going attention. Initial parameter set-up will take about 1-2 hours of time with personnel representing the LIM function, microbiology function and IRM function working in concert to set the parameters appropriately. Thereafter, a once-yearly review of the parameter set-up for all national EPI-specified pathogens is the minimum expected. Day-to-day functioning does not refer to the maintenance of the actual software patch, but, instead, refers to the EPI data cycle to assure that the national pathogen information has been appropriately sent to and received by the central data repository—by this definition, it is not necessarily the IRM function to oversee this. Because this will involve review of information sent, confirmation of information receipt, and, most importantly, troubleshooting of errors received from the processing into the central data repository, a local site function that has experience with numerous areas at the local facility from where the data are extracted (medical administrative services, social work, patient demographic information, laboratory information) and that cuts across multiple lines of authority should be considered by the Office of the Director (00) for this task. The local functionality resource requirements will be dependent upon the use at the local site.

Orientation

This section of the EPI Roll Up Modifications Technical and User Manual addresses package or audience-specific notations or directions pertaining to symbols used to indicate terminal dialogues and user responses, information for accessing the EPI Technical and User Manual via the Office of Information Field Offices (OIFOs) Anonymous Software directories, VistA website, VistA Documentation Library (VDL), EPI software phased installation and implementation procedures, instructions for seeding EPI historical data, and Austin Information Technology Center (AITC) transmission schedule for seeding the EPI historical data.

EPI Roll Up Modifications Technical and User Manual

The EPI Roll Up Modifications Technical and User Manual contains the following sections:

Introduction - conveys the major functions, purposes, and how the software accomplishes the objectives.

Security Information - addresses any legal requirements pertaining to the EPI Patch LR*5.2*281, software product and identifies any security measures necessary to protect the integrity of the product and database.

Pre-Installation Information - contains information that should be acknowledged prior to the installation of Patch LR*5.2*281.

Installation Instructions - provides information regarding the installation process for Patch LR*5.2*281.

Post Installation Instruction - provides all the necessary information required for the IRM and LIM personnel to implement the Laboratory EPI Rollup Modifications software application.

EPI Rollup Modifications User Manual - provides the necessary information for implementing and maintaining the EPI criteria.

Appendix A - provides instructions for editing/printing files, using input screens, linking data, and a Workload and Suffixes Codes Request Form.

Appendix B - suggest helpful hints and examples regarding for EPI preferred methods, transmissions, and data validation suggestions.

Appendix C - provides VistA Health Level Seven (HL7) Protocol tables used to transmit EPI Roll Up Modifications data to the Austin Information Technology Center (AITC)

Appendix D - provides a copy of the IMPLEMENTATION OF LOGICAL OBSERVATION IDENTIFIERS NAMES AND CODES (LOINC®) FOR LABORATORY DATA (VHA Directive 2001-039)

Screen Dialogue

Screen Captures - The computer dialogue appears in courier font, no larger than 10 points. **Example:** **`Courier font 10 points`**

User Response - User entry response appears in boldface type Courier font, no larger than 10 points. **Example:** **`Boldface type`**

Return Symbol - User response to computer dialogue is followed by the **`<Enter>`** symbol that appears in Courier font, no larger than 10 points, and bolded. **Example:** **`<Enter>`**

Tab Symbol - User response to computer dialogue is followed by the symbol that appears in Courier font, no larger than 10 points, and bolded. **Example:** **`<Tab>`**

References

Please review the following guide and manual prior to installing and implementing the VistA Laboratory EPI Rollup Modifications Patch LR*5.2*281:

- Kernel Systems Manual V. 8.0
- VA FileMan V. 21.0
- VA MailMan V. 7.1

EPI Roll Up Modifications Software Phased Installation and Implementation Instructions

Due to extensive historical data transmission requirements and mandated setups required for such, a phased installation and implementation of this patch (LR*5.2*281) is utilized for releasing this patch. The software download information is made available to sites attending one of the following national audio conference training calls:

Tuesday, June 8 at 1:00 - 3:00 PM EST for VISNs 1-2-3-4-5-6
Thursday, June 10 at 3:00 - 5:00 PM EST for VISNs 7-8-9-10-11
Tuesday, June 15 at 4:00 - 6:00 PM EST for VISNs 12-15-16-16-23
Wednesday, June 16 at 2:00 - 4:00 PM EST for VISNs 18-19-20-21-22
Thursday, June 17 at 2:00 - 4:00 PM EST for those unable to attend the other calls.

The VANTS telephone number is 1 800 767-1750 and the access code for all calls is 13143.

This patch will involve reseeding of the EPI databases for each site to allow the new data created by this patch to be captured. It is imperative that each site attend an audio conference prior to installation and implementation of the EPI patch LR*5.2*281.

Instructions for Seeding EPI Historical Data:

EPI historical data **must** be gathered from October 1, 2000 through June 14, 2004. Use the Lab EPI Manual Run (Enhanced) [LREPI ENHANCE MANUAL RUN] option to extract and transmit 6 manual runs (consecutive runs) at a time.

WARNING: SITES - DO NOT transmit the EPI historical data reports on June 16 or July 4, 2004 to avoid Austin Automation Center (AITC) capacity limitations.

Batch #1: October 1, 2000 -March 31, 2001
Batch #2: April 1, 2001 - September 30, 2001
Batch #3: October 1, 2001 - March 31, 2002
Batch #4: April 1, 2002 - September 30, 2002
Batch #5: October 1, 2002 - March 31, 2003
Batch #6: April 1, 2003 - September 30, 2003
Batch #7: October 1, 2003 - March 31, 2004
Batch #8: April 1, 2004 - June 14, 2004

Sites will run 8 batches of EPI historical data reports. Each batch should contain 6 separate monthly extracts which are tasked separately by month, (i.e., OCT 2000, NOV 2000, DEC 2000, JAN 2001, FEB 2001, MAR 2001 = 1 batch) and will generate six separate processing reports back to the station and transmit them over a five week period June 10, 2004 – July 12, 2004. You do not have to wait for one monthly extract to run before starting the next in a batch. You do not have to wait for one batch to complete running before queuing the next batch. If you receive any fatal errors and the monthly extract is rejected, you will need to fix the error and retransmit that month.

Austin Information Technology Center (AITC) Schedule for Transmitting EPI Historical Data:

WARNING: SITES - DO NOT transmit the EPI historical data reports on June 16 or July 4, 2004 to avoid Austin Automation Center (AITC) capacity limitations.

Sites may transmit EPI historical data reports to AITC on evenings and weekends following this schedule:

1. VISNs with odd numbers are asked to transmit batches on Tuesday & Thursday during the PM hours and Saturdays.

2. VISNs with even numbers are asked to transmit on Monday & Friday during the PM hours and Sundays.

EPI Roll Up Modifications Manual Retrieval

The VistA Laboratory EPI Rollup Modifications Technical and User Manual (i.e., LR_52_281_EPI_TUM.PDF) file is available for retrieval via the File Transfer Protocol (FTP). All VA medical centers are encouraged to use the Transmission Control Protocol/Internet Protocol (TCP/IP) FTP functionality to obtain the documentation file at the following Office of Information Field Offices (OIFOs) ANONYMOUS SOFTWARE directories:

OIFOs	FTP ADDRESS	DIRECTORY
REDACTED		
REDACTED		
REDACTED		
REDACTED		

EPI Roll Up Modifications Manual Formats

VistA Laboratory EPI Rollup Modifications Technical and User Manual is exported as part of Patch LR*52*281 in the following file name and retrieval format:

FILE NAME	RETRIEVAL FORMATS
LR_52_281_EPI_TUM.PDF	LR EPI Technical and User Manual

Website Locations:

The VistA Laboratory EPI Rollup Modifications Patch LR*5.2*281 Technical and User Manual is available in MS Word (i.e., LR_52_281_EPI_TUM.DOC) format and Portable Document Format (PDF) (i.e., LR_52_281_EPI_TUM.PDF) at the following website locations:

Laboratory Version 5.2 Home Page
REDACTED
VistA Documentation Library (VDL)
http://www.va.gov/vdl/

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Introduction

Overview

The Infectious Diseases Program Office was tasked by the Under Secretary for Health to retrieve tracking and trending information about emerging and re-emerging infectious diseases (including antibiotic resistance) that are important to VHA. Data would be used for tracking and trending of specified infectious diseases entities, policy decision-making, and resource allocation at the national level. To accomplish this, the VistA Laboratory Emerging Pathogens Initiatives (EPI) software was initially installed at all VAMC facilities in February 1997 via VistA EPI Patch LR*5.2*132, with modifications occurring by means of the VistA Laboratory Search/Extract Patch LR*5.2*175 in March 1998. This software was originally developed by the CIOFO-Dallas in conjunction with the Infectious Diseases Program Office. As this proved to be a successful and beneficial endeavor, the Under Secretary for Health further tasked the Infectious Diseases program Office to retrieve Hepatitis C antibody testing data for a one-day survey nationwide, Hepatitis C Surveillance Day (March 17, 1999). The EPI software application was selected to accomplish this task because data were already stored in the standard VistA data set and linked to patient identifiers. Information retrieved from both the routine running of the EPI, as well as Hepatitis C Surveillance Day was an extremely important component that resulted in the VHA obtaining additional Congressional funding for hepatitis C disease care. Information obtained from the EPI assisted in determining the importance of the emerging pathogen, hepatitis C, as a significant issue for VHA. Data from EPI have been used by the Allocation Resource Center (ARC) in determinations for Veterans Equitable Resource Allocation (VERA) hepatitis C resource allocation to local facilities; EPI data are still provided to ARC for this purpose.

For Hepatitis C Surveillance Day, temporary modifications were necessary to achieve prompt data acquisition. More lasting modifications/enhancements were to occur with the release of the combined process from VistA Laboratory EPI Hepatitis Extract Patch LR*5.2*260, Patch PXRM*1.5*1, PSJ*5*48, and Patch PSO*7*45 in August 2000. However, due to significant pressures and time constraints applied to this project to produce the National Hepatitis C Risk Assessment portion of the requests, the Infectious Diseases Program Office agreed to delay the below-listed components of that approved request until this time; one of the key functionalities that was delayed was the ability of local facilities to use the software to extract locally-relevant data.

The following delayed enhancement components were requested and have been addressed with the release of VistA Laboratory Emerging Pathogens Rollup Modifications Patch LR*5.2*281 (note that due to systems constraints and set-ups, not all requested components are deliverable with this patch):

- New EPI Summary Verification Report of EPI-extracted data from site in plain text (human-readable) format for nationally rolled-up pathogen information

- New EPI Detailed Verification Report of EPI-extracted data from site in plain text (human-readable) format for nationally rolled-up pathogen information

- New EPI Processing Report (error report) concerning data processed at the central data repository for the EPI delivered to site in plain text (human-readable) format containing only patients with error/warning codes or indicating that the data were processed into the central data repository without any errors

- New Local Pathogen Menu [LREPI LOCAL PATHOGEN MENU]

- New EPI option to add locally-relevant pathogens using the EPI search/extract backbone, without altering nationally rolled-up pathogen information

- Improvement of the extraction tool to capture and report tuberculosis (due to constraints of long incubation periods in the results reporting, embedded within an accessioning acquisition framework of the EPI extracts)

- Ability to capture and report International Classification of Diseases, ICD-10, codes in association with outpatients who have a reported EPI pathogen (system constraints will not allow this requested component to be completed for this release)

- Ability to capture and report Logical Observations, Identifiers, Names and Codes (LOINC) information along with laboratory-based testing information acquired by EPI (system constraints will not allow this requested component to be fully realized for this release; partial realization will occur for CH-subscripted laboratory tests)

- Ability to capture and report Master Patient Index codes for patients identified as meeting an EPI pathogen parameter

- Ability to capture and report antibiotic susceptibility MIC values

- Ability to use antibiotic susceptibility MIC values as an identification parameter for either national or locally-relevant pathogens (system constraints will not allow this requested component to be completed for this release)

- Ability to capture and report actual site/location (institution and division designations) in which the patient actually received care associated with the EPI pathogen trigger for data acquisition (not just the reporting site) in order to accurately assess where the pathogens are occurring (system constraints will not allow this requested component to be completed for this release)

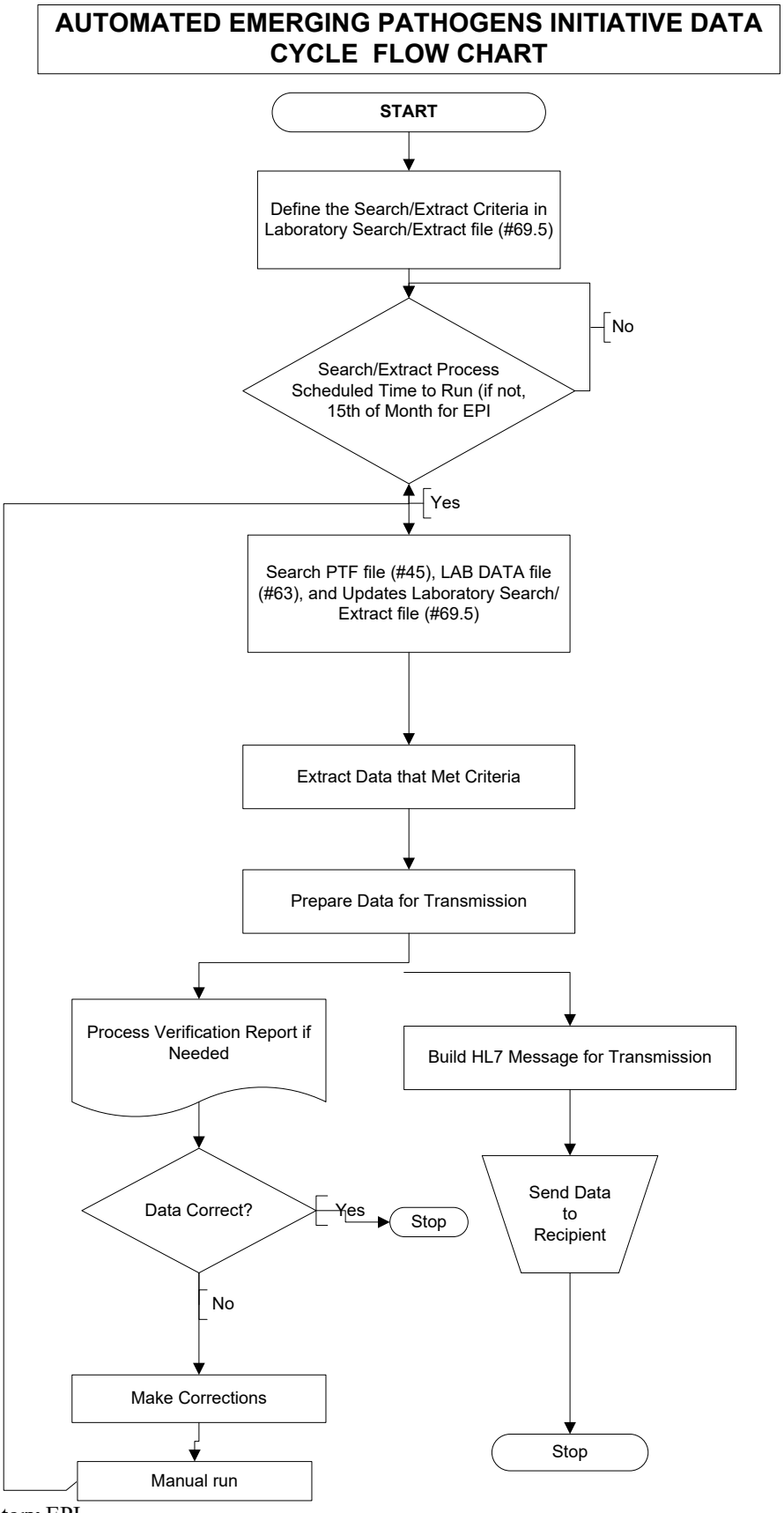
- Ability to capture and report county and state information from patient's identified by the EPI process

- Ability to capture and report the newly implemented race and ethnicity coding, along with the prior race/ethnicity coding

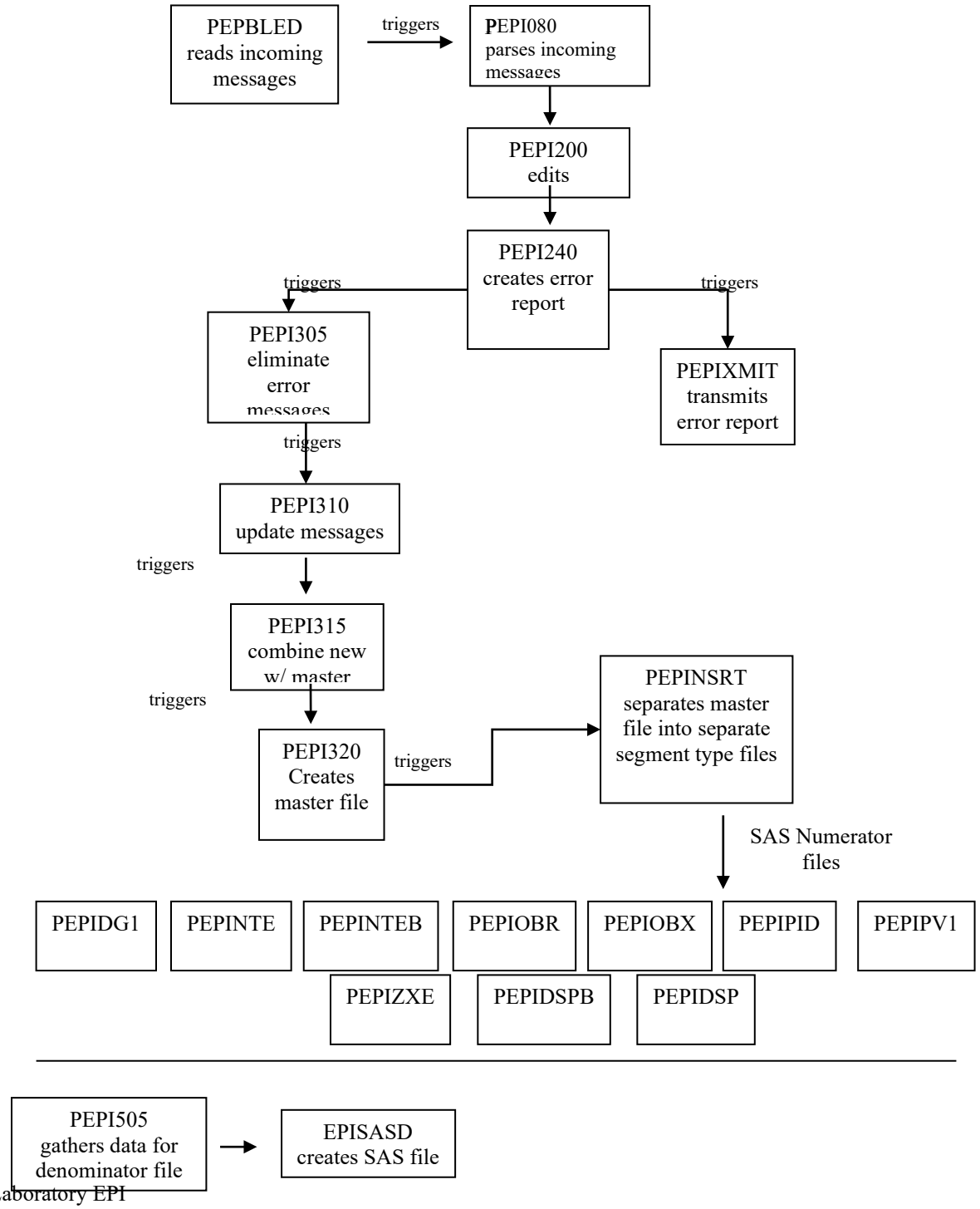
- Ability to capture and report the actual station location (unit) of care for a patient at the time of EPI pathogen data acquisition (this currently only applies to inpatient information and only for information that is CH-subscripted)

- Six new national EPI Emerging Pathogens to be added for national roll-up

- New documentation of the prior Legionella pathogen to provide guidance for use of recently FDA-approved Legionella Urinary Antigen test that can be used for diagnosis


AUTOMATED EMERGING PATHOGENS INITIATIVE DATA CYCLE FLOW CHART
START
Define the Search/Extract Criteria in Laboratory Search/Extract file (#69.5)
Search/Extract Process Scheduled Time to Run (if not, 15th of Month for EPI
No
Yes
Search PTF file (#45), LAB DATA file (#63), and Updates Laboratory Search/ Extract file (#69.5)
Extract Data that Met Criteria
Prepare Data for Transmission
Process Verification Report if Needed
Build HL7 Message for Transmission
Data Correct?
Yes
Stop
Send Data to Recipient
No
Make Corrections
Manual run
Stop

AUSTIN AUTOMATION CENTER
EMERGINING PATHOGENS INITIATIVE PROCESS FLOWCHART



VistA Blood Bank Software Version 5.2

EFFECT ON BLOOD BANK FUNCTIONAL REQUIREMENTS: Patch LR*5.2*281 does not contain any changes to the VISTA BLOOD BANK Software as defined by VHA DIRECTIVE 99-053 titled VISTA BLOOD BANK SOFTWARE VERSION 5.2.

EFFECT ON BLOOD BANK FUNCTIONAL REQUIREMENTS: Patch LR*5.2*281 does not alter or modify any software design safeguards or safety critical elements functions.

RISK ANALYSIS: Changes made by patch LR*5.2*281 have no effect on Blood Bank software functionality, therefore RISK is none.

VALIDATION REQUIREMENTS BY OPTION: Because of the nature of the changes made, no specific validation requirements exist as a result of installation of this patch.

NOTE: As with previous Lab EPI patches, it is highly recommended that the **Office of the Director** (00) at each facility designate a person or persons to be responsible for the routine implementation of this patch (both at the time of this installation and afterwards) and to take the lead in trouble-shooting issues that arise with the routine functioning of the process

Enhancements and Modifications

VistA Laboratory EPI Rollup Modification patch LR*5.2*281 contain the following software enhancements and modifications:

Enhancements:

Renamed EPI Menu/Options

Lab Search Extract Primary [LREPI SEARCH EXTRACT MENU] menu RENAMED to Lab EPI Primary [LREPI SEARCH EXTRACT MENU] menu:
For consistency of this software release, the Lab Search Extract Primary [LREPI SEARCH EXTRACT MENU] menu is **RENAMED** Lab EPI Primary [LREPI SEARCH EXTRACT MENU] menu. This is the main EPI menu containing four existing options, two **new** options, and one **new** submenu containing 4 **new** options. This **new** submenu may be assigned to users without the Lab EPI Primary [LREPI SEARCH EXTRACT MENU] menu.

Lab Search/Extract Manual Run (Enhanced) [LREPI SEARCH/EXTRACT ENHANCED MANUAL RUN] option RENAMED Lab EPI Manual Run (Enhanced) [LREPI ENHANCE MANUAL RUN] option:
For consistency of this software release, the Lab Search/Extract Manual Run (Enhanced) [LREPI SEARCH/EXTRACT ENHANCED MANUAL RUN] is **RENAMED** Lab EPI Manual Run (Enhanced) [LREPI ENHANCE MANUAL RUN] option. This option is used ONLY to manually extract National EPI data, transmit the manually extracted data to the Austin Information Technology Center (AITC), and to generate the **new** EPI Summary Verification Report. This **new** EPI Summary Verification Report is automatically sent to the EPI-Report mail group after being generated. This option has been **enhanced** to generate the **new** Detailed Verification Report which can be printed using the **new** Print Detailed Verification Report [LREPI VERIFICATION REPORT] option.

NOTE: ONLY national emerging pathogens extract data are transmitted to the AITC, local emerging pathogens extract data will NOT be transmitted.

Modified Lab EPI Primary [LREPI SEARCH EXTRACT MENU] menu options:

Lab EPI Parameter Setup [LREPI (EPI) PARAMETER SETUP] option:
The Lab EPI Parameter Setup [LREPI PARAMETER SETUP] option is used to define the search criteria associated with the National Emerging Pathogen Initiative extract data. This option only allows editing of the EPI Parameter Setup input screens. Local pathogens CANNOT be added using this option. This option has been **enhanced** by adding the **new** PREVIOUS CYCLE field which is automatically defined as '1' for TB ONLY and CANNOT be edit. For all other emerging pathogens the **new** PREVIOUS CYCLE field is blank and CANNOT be EDITED. The existing PROTOCOL field can no longer be EDITED. The ACTIVE: 'YES' has been changed to display INACTIVE: 'NO', and Lag Days for the six new EPIs have been defined as 15 with the release of the new EPI enhancement software.

New Lab EPI Primary [LREPI SEARCH EXTRACT MENU] menu options

Print Detailed Verification Report [LREPI VERIFICATION REPORT] option:
This **new** option is use to print the **new** Detailed Verification Report mailman message.

Pathogen Inquiry [LREPI PATHOGEN INQUIRY] option:
This **new** option is used to inquire into the LAB SEARCH/EXTRACT file (#69.5) parameter description fields (i.e., INACTIVE: NO, LAG DAYS: 15, RUN DATE: OCT 07, 2003, CYCLE: MONTHLY, PROTOCOL: LREPI, FOLLOW PTF: YES, REFERENCE NUMBER: 23, and ETIOLOGIES) for defined emerging pathogen.

New Local Pathogen Submenu and Options:

Local Pathogen [LREPI LOCAL PATHOGEN MENU] Submenu:
This **new** submenu contains four **new** options use to enter/edit local pathogens, generate and print local EPI reports and spreadsheets, and delete local pathogens.

Example: New Local Pathogen [LREPI LOCAL PATHOGEN MENU] Menu

```
Local Pathogen Menu

   ENT    Enter/Edit Local Pathogens
   GEN    Lab EPI Generate Local Report/Spreadsheet
   PRT    Lab EPI Print Local Report/Spreadsheet
   DEL    Delete Local Pathogen
   DRS    Delete Local Report or Spreadsheet
```

Enter/Edit Local Pathogens [LREPI ENTER/EDIT LOCAL PATH] option:
This **new** option is use to enter or edit local pathogens into LAB SEARCH/EXTRACT file (#69.5).

Lab EPI Generate Report/Spreadsheet [LREPI GENERATE REPORT/SP] option:
This **new** option is used to generate Lab EPI reports or spreadsheets for national and local emerging pathogens extract data. After selecting national or local emerging pathogens, time period, segments and fields, report or spreadsheet, the job is automatically tasked. The tasked job will take approximately 2-3 hours to generate. An alert is automatically sent to the requester/user after the tasked job has finished generating. The Lab EPI report or spreadsheet can then be viewed on the screen or printed using the **new** Lab EPI Print Local Report/Spreadsheet [LREPI PRINT] option. **NOTE:** NO data will be transmitted to AITC when using this option.

Lab EPI Print Local Report/Spreadsheet [LREPI PRINT REPORT/SPSHT] option:
This **new** option is used to print a report or spreadsheet that was generated with the Lab EPI Generate Local Report/Spreadsheet [LREPI GENERATE REPORT/SP] option.

Delete Local Pathogen [LREPI DELETE LOCAL PATHOGEN] option
This **new** option is use to delete local pathogens entries ONLY.

NOTE: National emerging pathogens entries CANNOT be deleted.

Delete Local Report or Spreadsheet [LREPI DELETE LOCAL REPORT] option
This **new** option is use to delete local reports or local spreadsheets.

New EPI Reports

New EPI Summary Verification Report of EPI Extracted Data from Site for Nationally Rolled-Up Emerging Pathogens:

The **new** Summary Verification Report of EPI Extracted Data from Site contains the following **new** functionality:

- Automatically sent to EPI-REPORT mail group after EPI extract data transmissions to AITC on the 15th each month
- Displays in a human readable format used for quick reviewing
- Displays reporting site name and station number
- Displays emerging pathogens total number of occurrences during the monthly processing cycle
- Displays emerging pathogens total number of persons with occurrences during the monthly processing cycle
- Displays number of persons with the nationally rolled-up resolutions for the National Hepatitis C Risk Assessment Clinical Reminder that occurred during the monthly processing cycle
- Displays report in several pages
- ENHANCE MANUAL RUN] option (**Note** that each manual run generates HL7 message transmission to the central data repository [AITC])
- Automatically sent to EPI-REPORT mail group after manual generation

New Detailed Verification Report of EPI Extracted Data from Site for Nationally Rolled-Up Emerging Pathogens:

The **new** Detailed Verification Report of EPI Extracted Data from Site' contains the following **new** functionality:

- Displays reporting site station number with Notes and Comment Segments (NTE) findings in a human readable format
- Displays the site reporting NTE findings of 1, 2, 3…23, starting with a new page for each NTE findings.
- Displays listing by emerging pathogens
- Recreation of the report on demand using the Lab EPI Manual Run (Enhanced) [LREPI ENHANCE MANUAL RUN] option
- Recreation of the manually generated EPI extract data is automatically sent to Austin Automation Center.
- Displays Clinical Reminder data transmitted to EPI data stream regarding nationally rolled-up data about Hepatitis C Risk Assessment and associated hepatitis laboratory data.

New EPI Processing/Error Report Mailman Message sent from Austin

The **new** EPI Processing (Error) Report mailman message itemizes all transmissions received by AITC and document the records status as either being accepted or rejected (with the reason and reject code identified*).* This report will be sent to EPI mail group. *(Examples of the **new*** EPI Processing/Error Report mailman message and *"Tables of Rejects and Errors and/or Warning Codes" are located in the Appendix - B section of this manual).*

New EPI Data Extracted:

Logical Observation, Identifiers, Name, and Codes (LOINC)

EPI Roll up Modifications software provides the ability to automatically extract LOINC data, transmit the data to the AITC, and display the data on the **new** Verification Detailed Report of EPI Extracted Data from Site.

Master Patient Index (MPI)

EPI Roll Up Modifications software provides the ability to automatically extract MPI values and transmit the data to AITC.

Susceptibility Results MIC Values

EPI Roll Up Modifications software provides the ability to automatically extract Susceptibility Results MIC values from the ANTIMICROBIAL SUSCEPTIBILITY file (#62.06), Susceptibility Result field (#.01), Susceptibility Result subfile (#2), and transmit the data to AITC. These MIC values can be displayed via the **new** Verification Detailed Report of EPI Extracted Data from Site.

Site Institution/Division Number

EPI Rollup Modifications software release provides the ability to automatically capture the patient's site division number during an encounter.

Patient Demographics

EPI Roll Up Modifications software release provides the ability to extract patient's demographics county and state data, transmit data to the AITC, and display the demographic data on the **new** Verification Detailed Report of EPI Extracted Data From Site.

Race and Ethnicity

EPI Roll Up modifications software release provide the ability to capture patient's race and ethnicity data using the new race/ethnicity protocols, transmit data to AITC, and display the data on the **new** Verification Detailed Report of EPI Extracted Data from Site.

Six New Emerging Pathogens

EPI Roll-Up Modifications software provides the ability to automatically extract data for the following **six new** emerging pathogens without the necessity of any manual data entry once the parameter descriptions are set up using the Lab EPI Parameter Setup [LREPI PARAMETER SETUP] option:

- All *Staphylococcus aureus* (Reference #18)
- Methicillin-Resistant *Staphylococcus aureus* (MRSA) (Reference #19)
- Vancomycin-Resistant S*taphylococcus aureus* (VRSA) (Reference #20)
- Vancomycin-Resistant Coagulase Negative *Staphylococci/Staph* epi (VRSE) (Reference #21)
- All Streptococcus *pneumoniae* (Reference #22)
- All Enterococci (Reference #23)

New Legionella Urinary Antigen Test

The Legionella Urinary Antigen test is FDA-approved and available clinical use. Suggestions will be provided for updating parameter setups to capture the results of this testing in the already existent Legionella (Reference #7) EPI national pathogen and allow for national roll-up. This newer test **must** be added for LEGIONELLA using the Lab EPI Parameter Setup [LREPI PARAMETER SETUP] option. The preferred Lab EPI parameter setup for etiology for the **newer** Legionella Urinary Antigen test is *POSITIVE FOR LEGIONELLA PNEUMOPHILA*.

New EPI Informational Alert

This alert is created when the new Lab EPI Generate Local Report/Spreadsheet [LREPI GENERATE REPORT/SP] option is accessed. This alert is sent to the user who generated the report or spreadsheet when the report or spreadsheet is finished generating.

Modifications

VistA Laboratory EPI Roll-Up Modification Patch LR*5.2*281 software contains the following modifications:

EPI Single Day Transmissions:

Date handling for start and stop date was **modified** because it created a problem with EPI single day transmissions. It showed the beginning date and time to be 10:00 a.m. yesterday. The end time is (in effect) midnight tonight. This was corrected by creating a beginning time of one tenth of a second after midnight and the end time is the following midnight.

LAB EPI Search Criteria

Currently, some TB cultures are not being captured because it can require up to six weeks for TB cultures to grow and obtain the results. This delay causes the result to be overlooked in the subsequent EPI reporting. A new search criterion has been added to the Lab EPI engine. The LAB SEARCH/EXTRACT file (#69.5), contains the **new** PREVIOUS CYCLE field (# 19), which is a numeric value of 1, automatically set by the EPI software. This **new** field instructs the LAB SEARCH EXTRACT engine to also look for TB pathogen(s) in previous cycles. **Note:** The **new** PREVIOUS CYCLE field (# 19), is used for the automated run (i.e., 15th day of the month) ONLY. This field CANNOT be EDITED.

National Center for Health (NCH) Data Screening No Longer Required:

NCH data screening is no longer required and NCH transmissions to AITC have been terminated. NCH Cholesterol and NCH Pap smear entries has been removed from the Lab EPI Parameter Setup entries.

Deletion of National Center for Health (NCH) Protocol

The LRNCH AITC and LRNCH SEND CLIENT protocols have been deleted since the NCH data screening is no longer required.

Lab EPI Nightly Task [LREPI NIGHTLY TASK] option

The Lab Search/Extract Nightly Task [LREPI SEARCH/EXTRACT NIGHTLY TASK] option is **renamed** to Lab EPI Nightly Task [LREPI NIGHTLY TASK]. This option builds a HL7 message and sends it to the defined location specified in the EPI Protocols. The EPI Nightly Task [LREPI NIGHTLY TASK] option **must** be scheduled to run each night by TaskMan.

Austin Information Technology Center Database Processing

The Austin Information Technology Center (AITC) serves as the central data repository for the national EPI pathogen data that is rolled-up from sites. AITC creates two file structures, both in Statistical Analysis System (SAS) file format. These two file structures are used as a source of data for the VHA Headquarters Infectious Disease Program Office. The data are available to the VA Central Office Infectious Diseases Program Office to be used for analysis and reporting. The two file structures are referred to as the "Numerator Files" and "Denominator File" because of their planned utilization.

Numerator Files:

The Numerator files contain accumulated data sent by all VHA facilities. The Numerator file information is specific to unique patients with a VA Central Office Infectious Diseases Program Office designated national emerging pathogen. Emerging pathogen data entries are flagged through the V*ist*A Laboratory EPI software process. Numerator files data are collected and transmitted to AITC monthly by VHA facilities.

Denominator File:

The Denominator file provides the VHA Headquarters Infectious Diseases Program Office total and unique counts of patients each VHA facility. The individual files that these data elements are extracted from are the National Patient Care (NPC), Inpatient Treatment File (PTF), VHA Work Measurement (VWM), and Cost Distribution Report (CDR) systems.

The data elements are:
* Unique SSN served (inpatient and outpatient together)
* Total # of discharges
* Total unique SSN discharges
* Inpatient hospital days
* Inpatient ICU days
* Unique SSN encounters for both inpatient and outpatient

Unique and total counts are available for the individual months, current month, and previous eleven months for a year's set of totals, current month, and previous three month periods for a quarter's set of totals.

AITC EPI Data Transmission

National emerging Pathogens, as defined by VA Central Office, act as triggers for data acquisition for Patch LR*5.2*281. The software then retrieves relevant, predetermined, and patient-specific data for transmission to the EPI central data repository at the AITC. Once at that location, the data are uploaded into Statistical Analysis System (SAS)-based statistical software accessible files. VA Central Office reports may then be generated for appropriate use and distribution at the national level.

With the installation of patch LR*5.2*281, automated data transmissions will occur. Receipt of this transmission at the AITC queue will trigger a confirmation message back to the originating site to "confirm" that data has been sent. Then at the next processing cycle (~25th of the month), a processing/error report will also be generated and sent back to the originating site. This processing/error report will serve as the definitive "confirmation" that data has been accepted. If there is a fatal error in any segment of the message, the entire message will be rejected and must be resent manually. Warning codes/errors are accepted into the data set, but serve to remind the originating site that a correction of the process generating the error may be needed.

AITC Transmission Reports

EPI Confirmation Mailman Message sent from AITC

An EPI Confirmation mailman message is sent from the AITC upon receipt of the VHA facilities EPI monthly transmission via the EPI mail group. The EPI mail group members are notified that the original EPI HL7 format mailman message data transmission has been received by AITC for processing.

NOTE: This EPI Confirmation mailman message ONLY means that the sending VHA facility data transmission has been received by the AITC for processing.

New EPI Processing (Error) Report Mailman Message from Austin

The **new** EPI Processing Error Report mailman message itemizes all transmissions received by AITC and document the records status as either being accepted or rejected (with the reason and reject code identified). This report will be sent to the EPI mail group. (*Examples of the "Table of Rejects and Errors and/or Warning Codes" are located in the Appendix - B section of this manual).*

Security Information

This section addresses any legal requirements pertaining to the EPI Patch LR*5.2*281, software product and identifies any security measures necessary to protect the integrity of the product and database.

Security Management:

According to VA Directive 6214, the existing Laboratory EPI software meets the requirements for VA IT Security Certification and Accreditation Program. The Lab EPI Enhancement software (LR*5.2*281) does not constitute a major change that requires new risk assessment and re-accreditation of the Laboratory system. Lab EPI security is maintained through menu assignment and VA FileMan protection.

Security Features:

EPI Mail Groups

EPI mail group:
This mail group is used by the VHA facilities to transmit EPI HL7 format mailman messages to AITC and for AITC to transmit EPI Confirmation mailman messages back to the sending VHA facilities once the EPI HL7 format mailman messages data transmission has been received by AITC.

EPI-Report mail group:
This mail group is used to receive the Emerging Pathogens Verification Report and the EPI Processing Report mailman messages sent from AITC. The members of this mail group will assist in the EPI data validation and corrections process.

New EPI Informational Alert

An alert is created by the Lab EPI Generate Local Report/Spreadsheet [LREPI GENERATE REPORT/SP] option. This alert is sent to the user who generated the report or spreadsheet when the report or spreadsheet is finished generating.

Example: Alert Display

```
The local report/spreadsheet finished generating at JAN 23, 2004@18:45:00
          Enter "VA to jump to VIEW ALERTS option
```

Remote Systems
The EPI software retrieves relevant, predetermined patient-specific data for transmission to the Austin Automation Center database repository.

Archiving/Purging
Archiving and Purging utilities are not provided with this software release.

Contingency Planning
Each facility using the **V*IST*A** Laboratory EPI software application **must** develop a local contingency plan to be used in the event of application problems in a live environment. The facility contingency plan **must** identify procedures used for maintaining the functionality provided by the software in the event of a system outage.

Interfacing
No specialized (not VA-produced) products (hardware and/or software) are embedded within or required by the EPI software product.

Electronic Signatures
There is no electronic signature utilized in the VistA EPI software application.

Menus
The Lab EPI Primary [LREPI SEARCH EXTRACT MENU] menu contains six options. IRM staff assigns the menu to have access to all options and the **new** submenu [Local Pathogen Menu…] that has 4 options. The new [Local Pathogen Menu…] submenu may be assigned independent from the Lab EPI Primary [LREPI SEARCH EXTRACT MENU] menu; this will allow only access to the submenu options.

Security Keys
There are no locks or security keys associated with the EPI Lab EPI Primary [LREPI SEARCH EXTRACT MENU] menu or options.

File Security
EPI changes and enhancements **do not** modify any existing file security schemes. New files exported by the patch installation have no file security applied. However, VA FileMan security access Ll code is recommended if file security is deemed necessary by the facilities.

References
Please review the following guide and manual prior to installing and implementing the Laboratory EPI Rollup Modifications Patch LR*5.2*281:

- Kernel Systems Manual V. 8.0
- VA FileMan V. 21.0
- VA MailMan V. 7.1

Official Policies
EPI software release reference no official policy unique to the product regarding the modification of software and distribution of the product.

Pre-Installation Information

The following information contain recommendations and requirements that should be acknowledged **prior** to installing the VistA Laboratory EPI Rollup Modifications patch LR*5.2*281.

EPI Phased Installation and Implementation

NOTE: Due to extensive historical data transmission requirements and mandated setups required for such, a phased installation and implementation of this patch will be utilized for release of this patch. The software download information will be made available to sites attending one of the following national audio conference training calls:

Tuesday, June 8 at 1:00 - 3:00 PM EST for VISNs 1-2-3-4-5-6
Thursday, June 10 at 3:00 - 5:00 PM EST for VISNs 7-8-9-10-11
Tuesday, June 15 at 4:00 - 6:00 PM EST for VISNs 12-15-16-16-23
Wednesday, June 16 at 2:00 - 4:00 PM EST for VISNs 18-19-20-21-22
Thursday, June 17 at 2:00 - 4:00 PM EST for those unable to attend the other calls.

The VANTS telephone number is 1 800 767-1750 and the access code for all calls is 13143.

This patch will involve reseeding of the EPI databases for each site to allow the new data created by this patch to be captured. It is imperative each site attend an audio conference prior to installation and implementation of LR*5.2*281.

Intended Audience

IRM Staff:

IRM staff is required for the installation, post installation, assignment of mail groups, and menu options for the EPI Rollup Modifications patch LR*5.2*281.

Laboratory Staff:

It is **highly recommended** that the following person(s) jointly participate in reviewing the national EPI pathogen parameter descriptions and set-ups:

- Laboratory Information Manager (LIM)
- Representative from the Microbiology section for the Emerging Pathogens Initiative (i.e., director, supervisor, or technologist)

Quality Management Staff:

It is **highly recommended** that the following person(s) jointly participate in reviewing the national EPI pathogen parameter descriptions and set-ups:

- Total Quality Improvement/Quality Improvement/Quality Assurance (TQI/QI/QA) staff (or person at the facility with similar function)

Other Staff:

It may also be beneficial to have Infection Control Personnel involved in national EPI pathogen parameter set-ups.

Test Sites:

The VistA Laboratory EPI Rollup Modifications patch LR*5.2*281, has been tested at the following VAMCs:

EPI Test Sites	Operating System
Boston, MA HCS (Beta Test)	ALPHA/Digital Standard Mumps (DSM) Oct 2003 DSM VMS - May 15, 2004
Cincinnati, OH VAMC (Alpha/Beta Test)	OS V7.2-1 – DSM V7.2.1, June 2003
Detroit, MI VAMC (Beta Test)	OS V7.3 – DSM V7.2.1, June 2003
Durham, NC VAMC (Beta Test)	OS V7.2-1 – DSM V7.2.1, March 2003:
Manchester, NH VAMC (Beta Test)	Windows NT 3.2, June 2003
Togus, ME VAMC (Beta Test)	CACHE V7.3 - DSM V7.2.1, October 2003

Hardware and Operating System Requirements:

Vis*t*A software operates on two hardware platforms. The hardware platforms are listed in the mini-computer category, which provides multi-tasking and multi-user capabilities. The hardware platforms systems used are:

Digital Equipment Corporation (DEC) Alpha Series:

Digital Equipment Corporation (DEC) Alpha series is using the DEC Open Virtual Memory System (VMS), Version 6.1 or greater, operating system. This platform uses the DEC System Mumps (DSM), Version 6.3 or greater, of American National Standards Institutes (ANSI) of Massachusetts General Hospital Utility Multi-Programming System (MUMPS) also known as 'M' language. MUMPS is a Federal Information Processing Standard (FIPS) language.

System Performance Capacity:
There are no significant changes in the performance capacity of the VistA operating system once the Lab EPI Roll Up Modification Enhancement patch LR*5.2*281 is installed. The software application should not create any appreciable global growth or network transmission problems. There are no memory constraints.

Memory Constraints:
Sufficient memory is required by sites to maintain the growth of the EPI globals.

Installation Time:
Installation time for the VistA Laboratory EPI Rollup Modifications patch LR*5.2*281 is less than 2 minutes during off peak hours and less than 5 minutes during peak hours.

Disabling EPI Menus Not Required:
The Lab EPI Primary (LREPI SEARCH EXTRACT MENU) menu and options are NOT required to be disabled during the EPI installation process.

Users on the System:
Users may remain on system during the installation of patch LR*5.2*281 and all options may remain in service.

Backup Routines:
It is highly recommended that a backup of the transport global be performed before installing patch LR*5.2*281.

Namespace:
The VistA Laboratory EPI Rollup Modifications Patch LR*5.2*281, uses the Laboratory's LR namespace.

Software Requirements:

The following software applications are **must** be installed prior to the installation of Laboratory EPI Rollup Modifications patch LR*5.2*281:

Software Applications	Versions (or Greater)
VA FileMan	v. 21 (with patches installed)
Kernel	v. 8.0 (with patches installed)
Laboratory	v.5.2 (with patches installed)
PIMS	v. 5.3 (with patches installed)
HL7	v.1.6 (with patches installed)
Social Work	v.3.0 (with patches installed)
Mailman	v.7.1 (with patches installed)
Clinical Reminder	v.1.5 (with patches installed)

Required Patches:

NOTE: For a list of patches required to install patch LR*5.2*442, please refer to the ICD-10 PTF Modifications Installation Guide: http://www.va.gov/vdl/application.asp?appid=118

NOTE: For a list of patches required to install patch LR*5.2*421 , please refer to the ICD-10 Remediation project Release Notes.

Prior to the installation of Laboratory EPI Rollup Modifications patch LR*5.2*281, the following patches **MUST** be installed:

Software Applications	Patches
Laboratory V. 5.2	LR*5.2*175
	LR*5.2*242
	LR*5.2*260
Clinical Reminder V. 1.5	PXRM*1.5*1

Health Level Seven (HL7):

Laboratory EPI Rollup Modifications patch LR*5.2*281 uses the VistA HL7 V. 1.6 software application to transmit EPI data to the AITC.

Protocols:

LREPI: This event driver protocol defines the associated parameters required for building HL7 messages that are used to transmit EPI data to the AITC.
LREPI CLIENT: This subscriber protocol defines the parameter required by the HL7 application that determines where to send the HL7 formatted message containing the emerging pathogens data.

Domain

The Q-EPI-MED.GOV domain is used for transmitting EPI data to AITC.

Database Integration Agreements (DBIAs)

The following new DBIA was approved for VistA Laboratory ICD-10 PTF Modifications patch LR*5.2*442:

- **DBIA#6130**

The following DBIAs were approved for VistA Laboratory EPI Rollup Modifications patch LR*5.2*281:

1. DBIA #418

Laboratory EPI software has been approved to look at the discharge date x-ref in the PTF file (#45). The EPI software gathers lab data to send to Austin.

```
               FILE: 45                        ROOT: DGPT(
        DESCRIPTION:                           TYPE: File #45 PTF file

   ^DGPT("ADS",   cross-reference:
    The routine LREPI5 searches a date range for discharge dates in that
range to gather Lab EPI data to send to Austin.
```

2. DBIA #3018

Laboratory EPI software approved to call the $$IN^VAFHLPV1 to create a PV1 segment to send to the Austin Automation Center.

3. DBIA #3094:

AUPNVPOV (PCE PATIENT CARE ENCOUNTER DESCRIPTION: TYPE: File V POV diagnoses are used as a finding in Clinical Reminders. Therefore, Clinical Reminders needs to read the following fields:

```
GLOBAL REFERENCE:
^AUPNVPOV('AA',
GLOBAL REFERENCE:
^AUPNVPOV(D0,0)
.01      POV                  0;1      Direct Global Read
.03      VISIT                0;3      Direct Global Read
.04      PROVIDER NARRATIVE    0;4        Direct Global Read
.12      PRIMARY/SECONDARY    0;12      Direct Global Read
KEYWORDS: CLINICAL REMINDERS V POV
```

4. DBIA #3530

Laboratory EPI software approved to reference ^AUPNVSIT.

```
      3530     NAME: DBIA3530
  CUSTODIAL PACKAGE: PCE PATIENT CARE ENCOUNTER                Albany
SUBSCRIBING PACKAGE: INTEGRATED BILLING                        Albany
              USAGE: Private             ENTERED: FEB 27, 2002
             STATUS: Active              EXPIRES:
           DURATION: Till Otherwise Agr  VERSION:
               FILE: 9000010               ROOT: AUPNVSIT(
        DESCRIPTION:                       TYPE: File
   Integrated Billing receives encounters from PCE but screens out many based
   on certain criteria. One of these criteria is the Data Source of the
   encounter. The following reference is needed to identify the Data Source
   of an encounter to determine if the encounter should pass to Integrated
   Billing.

   GLOBAL REFERENCE:
     ^AUPNVSIT(D0
       81203    DATA SOURCE          812;3    Direct Global Read
        Visit's Data Source, pointer to file 839.7
           KEYWORDS:
```

5. DBIA 4280

LAB EPI software approved to do a direct read of the global $P(^DIC(21,D0,0),U,3) and a direct global read of the "D" cross reference ^DIC(21,"D".

```
NAME: DIC(21
  CUSTODIAL PACKAGE: REGISTRATION                              Albany
SUBSCRIBING PACKAGE: LAB SERVICE                               Dallas
              USAGE: Private             ENTERED: MAY 27,2004
             STATUS:                     EXPIRES:
           DURATION: Till Otherwise Agr  VERSION:
               FILE: 21                    ROOT: DIC(21
        DESCRIPTION:                       TYPE: File
   LAB EPI software does a direct read of the global $P(^DIC(21,D0,0),U,3)
and
   a direct global read of the "D" cross reference ^DIC(21,"D" The software
   gathers EPI data for transmission to Austin.
   GLOBAL REFERENCE:
     ^DIC(21
```

Data Dictionary Changes

The following data dictionary changes are required for the EPI Roll-Up Modifications Patch LR*5.2*281 software release:

LAB SEARCH/EXTRACT file (#69.5)

This file contains search criteria used by the Laboratory EPI software. This file should ONLY be edited using the EPI Parameter Setup [LREPI PARAMETER SETUP] option provided with this software. This file contains the following changes:

Modified Fields:

NAME field (#69.5.,01)

The Search/Extract parameter name is converted to upper case and stored in the "D" x-ref for easier lookup (i.e., enter a Name (3 to 30 characters) for the Search/Extract parameter you are defining).

```
69.5,.01      NAME                    0;1 FREE TEXT (Required)

              INPUT TRANSFORM:  K:$L(X)>30!($L(X)<3)!'(X'?1P.E)!(X'?.ANP) X
              LAST EDITED:      MAR 16, 2004
              HELP-PROMPT:      Enter a Name (3 to 30 characters) for the
                                Search/Extract parameter you are defining.
              DESCRIPTION:      This is the name of the Search/Extract
                                parameter you are defining.

              NOTES:            XXXX--CAN'T BE ALTERED EXCEPT BY PROGRAMMER

              CROSS-REFERENCE:  69.5^B
                                1)= S ^LAB(69.5,"B",$E(X,1,30),DA)=""
                                2)= K ^LAB(69.5,"B",$E(X,1,30),DA)

              CROSS-REFERENCE:  69.5^D^MUMPS
                                1)= D UP^LRXREF S ^LAB(69.5,"D",X,DA)=""
                                2)= D UP^LRXREF K ^LAB(69.5,"D",X,DA)
                                The name is converted to upper case and
stored
                                in the "D" x-ref for easier lookup.
                                ^LAB(69.5,"D",UPPERCASE NAME, IEN)
```

This field has also been **modified** to add the following 6 **new** emerging pathogens entries:

- All *Staphylococcus aureus* (Reference #18)
- Methicillin-Resistant *Staphylococcus aureus* (MRSA) (Reference #19)
- Vancomycin-Resistant S*taphylococcus aureus* (VRSA) (Reference #20)
- Vancomycin-Resistant Coagulase Negative *Staphylococci/Staph* epi (VRSE) (Reference #21)
- All Streptococcus *pneumoniae* (Reference #22)
- All Enterococci (Reference #23)

NOTE: For Patch LR*5.2*421, the following changes have been made for File (#69.5) to support ICD-10 implementation. The "ICD-9 Diagnosis" field has been modified to "ICD Diagnosis."
Please refer to the ICD-10 Release Notes for LR*5.2*421.

```
69.5,4        ICD DIAGNOSIS      3;0 POINTER Multiple #69.54
              LAST EDITED:       JUN 12, 2012
              DESCRIPTION:       This defines the ICD to search for.

69.54,.01     ICD DIAGNOSIS      0;1 POINTER TO ICD DIAGNOSIS FILE (#80)
                                     (Multiply asked)

                 LAST EDITED:    SEP 17, 2012
                 HELP-PROMPT:    Select the ICD standardized code, used
                                 nationwide in federal and non-federal private
                                 health care facilities, to be included in the
                                 search.
                 DESCRIPTION:    This defines an ICD for use in emerging
                                 pathogens data search/extract.

               CROSS-REFERENCE:  69.54^B
                                  1)= S LAB(69.5,DA(1),3,"B",$E(X,1,30),DA)=""
                                  2)= K ^LAB(69.5,DA(1),3,"B",$E(X,1,30),DA)

69.54,1        CODING SYSTEM      0;2 POINTER TO ICD CODING SYSTEMS FILE
                                  (#80.4)

                 LAST EDITED:     AUG 10, 2012
                 HELP-PROMPT:     Enter the applicable ICD coding system for
                                  this ICD.
```

INACTIVE field (#69.5,1)

This field has been renamed from ACTIVE to INACTIVE.

```
Example: 69.5,1        INACTIVE              0;2 SET

                                  '1' FOR YES;
                                  '0' FOR NO;
               LAST EDITED:       JUN 19, 2002
               HELP-PROMPT:       '1' or 'YES' indicates that this is an
                                  inactive entry. '0' or 'NO' indicates that
                                  this is an active entry.
               DESCRIPTION:
                                  This defines if this entry is active or not.
```

PROTOCOL field (#69.55,12):

This field defines the protocol associated with the parameters. This field has been **changed** to UNEDITABLE.

```
Example: 69.5,12       PROTOCOL              0;7 POINTER TO LAB
SEARCH/EXTRACT PROTOCOL
                                FILE (#69.4)
```

```
LAST EDITED:      NOV 06, 2003
HELP-PROMPT:      Select the Protocol to be used to define the
                  output messages.
DESCRIPTION:      This defines what protocol is associated with
                  the parameters.

                  UNEDITABLE
```

NEW Fields:

PREVIOUS CYCLE field (69.5,19)

This **new** field is defined as a numeric field, (type a number between 1 and 99). By entering a number here the Lab search engine knows to look at a previous cycle for updates to data. How far back it looks is based on the cycle and number entered. For example if the cycle is monthly and the previous cycle is 1, then the search engine will also search 1 month back for data. This **new** field is UNEDITABLE.

Example: 69.5,19 PREVIOUS CYCLE 0;13 NUMBER

```
INPUT TRANSFORM:  K:+X'=X!(X>99)!(X<1)!(X?.E1"."1.N) X
LAST EDITED:      SEP 09, 2003
HELP-PROMPT:      Type a number between 1 and 99.
DESCRIPTION:      By entering a number here the Lab search
                  engine knows to look at a previous cycle for
                  updates to data. How far back it looks is
                  based on the cycle and number entered.
                  For example if the cycle is monthly and the
                  previous cycle is 1 then the search engine
                  will also search 1 month back for data.

                  UNEDITABLE
```

INDICATOR field (#69.55,1):

NOTE: The **new** INDICATOR field (#69.55,1) located under ANTIMICROBIL SUSCEPTIBILITY sub-field (#69.55) is NOT being used in this release of the EPI software.

This **new** INDICATOR field (#69.55,1) is defined as a SET of CODES. Select the code that will determine how to match lab results. This indicates if the search for the lab test is conditional.

Example:

```
69.55,1          INDICATOR              0;2 SET

                                  '1' FOR Use Reference Ranges;
                                  '2' FOR Contains;
                                  '3' FOR Greater Than;
                                  '4' FOR Less Than;
                                  '5' FOR Equal To;
                 LAST EDITED:      MAR 24, 2004
                 HELP-PROMPT:    Select the code that will determine how to
                                 match lab results.
                 DESCRIPTION:    This indicates if the search for the lab test
                                 is conditional.
```

INDICATED VALUE field (#69.55,2):

NOTE: The **new** INDICATED VALUE field (#69.55,2) located under ANTIMICROBIL SUSCEPTIBILITY sub-field (#69.55) is NOT being used in this release of the EPI software.

The **new** INDICATED VALUE field (#69.55,2) is defined as FREE TEXT. When the search indicator is used then use this field to define the criteria. Answer must be 1-30 characters in length.

Example:

```
69.55,2          INDICATED VALUE         0;3 FREE TEXT

                 INPUT TRANSFORM:  K:$L(X)>30!($L(X)<1) X
                 LAST EDITED:      MAR 24, 2004
                 HELP-PROMPT:    Enter the data to be compared using the
                                 INDICATOR field.
                 DESCRIPTION:    If the search is conditional this defines the
                                 criteria.
```

PROTOCOL file (#101)

Modified Field

Processing Routine field (#771):

Entry in the Processing Routine field (#771) for the Protocol LREPI CLIENT was changed from PROCESS^LREPIRP to a NULL entry.

NOTE: In the LAB SEARCH/EXTRACT file (#69.5), the PROTOCOL field (#101) and PREVIOUS CYCLE field (69.5, 19) has been changed to be UNEDITABLE.

Routine Summary

Example: Checksum

```
The following routines are included in this patch.  The second line
of each of these routines now looks like:
<tab> ;;5.2;LAB SERVICE;<patchlist>;Sep 27, 1994

                 Checksum       Checksum


 Routine Name    Before Patch   After Patch    Patch List
 ------------    ------------   -----------    ------------
 LR281           N/A              4418686      281(Deleted by KIDS)
 LREPI           14217525         14182167     132,175,260,281
 LREPI1          10654552         11822436     132,157,175,260,281
 LREPI2          7199135          8491199   132,157,175,242,260,281
 LREPI2A         NEW              7574864      281
 LREPI3          5462995          9184652      132,175,260,281
 LREPI5          NEW              2408593      281
 LREPIPH         5818757          6144410      260,281
 LREPIPI         NEW              5220624      281
 LREPIRM         5260075          7566388      175,281
 LREPIRP         5973015          20442264     132,157,175,260,281
 LREPIRP1        NEW              15133552     281
 LREPIRP2        NEW              3729823      281
 LREPIRP3        NEW              29061422     281
 LREPIRP4        NEW              1812384      281
 LREPIRP5        NEW              11788836     281
 LREPIRP6        NEW              25502070     281
 LREPIRP7        NEW              17171829    281
 LREPIRP8        NEW              8376752      281
 LREPIRP9        NEW              4718         281
 LREPIRS         NEW              8576522      281
 LREPIRS1        NEW              16664999     281
 LREPIRS2        NEW              22133542     281
 LREPIRS3        NEW              16290972     281
 LREPISRV        12552990         15211664     260,281
 LREPISV1        NEW              4805594      281
```

Installation Instructions

NOTE: For patch LR*5.2*442 installation instructions, please refer to the ICD-10 PTF Modifications Installation Guide: http://www.va.gov/vdl/application.asp?appid=118

NOTE: For Patch LR*5.2*421 installation instructions, please refer to the ICD-10 Release Notes for LR*5.2*421.

VistA Laboratory EPI Rollup Modifications patch LR*5.2*281 uses the Kernel Installation and Distribution System (KIDS). For further instructions on using KIDS, please refer to the Kernel V. 8.0 Systems Manual.

The install time for this patch is less than 2 minutes. This patch can be installed when Laboratory users are on the system.

NOTE: Kernel patches **must** be current on the target system to avoid problems loading and/or installing this patch.

1. If any of the above routines are mapped, disable mapping for them.

2. Use the 'Load a Distribution' option to load the Host file onto your system.

3. The patch has now been loaded into a Transport global on your system. You now need to use KIDS to install the transport global.

4. On the 'Kernel Installation & Distribution System' Menu (KIDS), select the 'Installation' menu.

5. Use the 'Verify Checksum in Transport Global' option and verify that all routines have the correct checksums.

6. On the KIDS menu, under the 'Installation' menu, use the following options:

    Print Transport Global
    Compare Transport Global to Current System
    Backup a Transport Global

    If you wish to preserve a copy of the routines exported in this patch prior to installation, you should use the 'Backup a Transport Global' option at this time. You may also compare the routines in your production account to the routines in the patch by using the 'Compare a Transport Global to Current System' option.

7. Use the 'Install Package(s)' option under the 'Installation' menu and select the package 'LR*5.2*281'.

   If prompted ' Want KIDS to Rebuild Menu Trees Upon Completion of Install? YES//' choose 'NO'.

   If prompted ' Want KIDS to INHIBIT LOGONs during the install? YES// ' choose 'NO'.

   If prompted 'Want to DISABLE Scheduled Options, Menu Options, and Protocols? YES//', choose 'NO'.

8. On a mapped system, rebuild your map set.

9. Routine LR281 will be deleted after successful patch installation.

Installation Example:

```
Select Kernel Installation & Distribution System Option: INSTallation<Enter>

Select Installation Option: 6  Install Package(s)<Enter>
Select INSTALL NAME: LR*5.2*281 <Enter>      Loaded from Distribution
5/24/04@14:18:24     => LR*5.2*281

This Distribution was loaded on May 24, 2004@14:18:24 with header of
   LR*5.2*281
   It consisted of the following Install(s):
     LR*5.2*281
Checking Install for Package LR*5.2*281
Will first run the Environment Check Routine, LR281


                         --- Environment Check is Ok ---

Install Questions for LR*5.2*281

Incoming Files:


   69.5      LAB SEARCH/EXTRACT  (including data)
Note:  You already have the 'LAB SEARCH/EXTRACT' File.
I will MERGE your data with mine.

Want KIDS to Rebuild Menu Trees Upon Completion of Install? YES// NO<Enter>



Want KIDS to INHIBIT LOGONs during the install? YES// NO<Enter>
Want to DISABLE Scheduled Options, Menu Options, and Protocols? YES//
NO<Enter>

Enter the Device you want to print the Install messages.
You can queue the install by enter a 'Q' at the device prompt.
Enter a '^' to abort the install.

DEVICE: HOME//<Enter>   UCX/TELNET



Install Started for LR*5.2*281 :
               May 24, 2004@14:19:41

Build Distribution Date: May 20, 2004

 Installing Routines:
               May 24, 2004@14:19:41

 Running Pre-Install Routine: PRE^LR281

           Deleting NCH entries from LAB/SEARCH EXTRACT file (#69.5)
```

```
*** Preinstall completed ***
```

```
 Installing Data Dictionaries:
              May 24, 2004@14:19:42

 Installing Data:
              May 24, 2004@14:19:43

 Installing PACKAGE COMPONENTS:

 Installing FORM
                                  LR*5.2*281
-------------------------------------------------------------------------------

 Installing PROTOCOL

 Installing OPTION
              May 24, 2004@14:19:46

 Running Post-Install Routine: POST^LR281

 Updating Routine file...

 Updating KIDS files...

 LR*5.2*281 Installed.
              May 24, 2004@14:19:47


 Install Message sent #10960
-------------------------------------------------------------------------------

  100%     |              25              50              75              |
Complete   |_______________________________________________________________|



Install Completed
```

Post Installation and Implementation Instructions

NOTE: There are no post installation instructions for patch LR*5.2*442.

NOTE: For Patch LR*5.2*421 post installation instructions, please refer to the ICD-10 Release Notes for LR*5.2*421.

The following post installation and implementation instructions **must** be completed to ensure a successful performance of the EPI Roll up Modification software enhancements:

IRM Post Installation Instructions:

IRM - Step 1: Verify Lower Level Protocol of the HL7 V. 1.6 background job for EPI – LAB

Example: How to verify that the Lower Level Protocol of the HL7 V. 1.6 background job EPI – LAB is running.

```
Select HL7 Main Menu Option: ?<Enter>

          Event monitoring menu ...
          Systems Link Monitor
          Filer and Link Management Options ...
          Message Management Options ...
          Interface Developer Options ...
          Site Parameter Edit

Enter ?? for more options, ??? for brief descriptions, ?OPTION for help text.

Select HL7 Main Menu Option: FILER and Link Management Options<Enter>

Select Filer and Link Management Options Option: ?<Enter>

   SM     Systems Link Monitor
   FM     Monitor, Start, Stop Filers
   LM     TCP Link Manager Start/Stop
   SA     Stop All Messaging Background Processes
   RA     Restart/Start All Links and Filers
   DF     Default Filers Startup
   SL     Start/Stop Links
   PI     Ping (TCP Only)
   ED     Link Edit
   ER     Link Errors ...

Enter ?? for more options, ??? for brief descriptions, ?OPTION for help text.
```

```
Select HL7 Main Menu Option: FILER and Link Management Options<Enter>

Select Filer and Link Management Options Option: START/Stop Links<Enter>

This option is used to launch the lower level protocol for the appropriate
device. Please select the node with which you want to communicate

Select HL LOGICAL LINK NODE: EPI-LAB<Enter>
The LLP was last shutdown on JUL 14, 2000 08:52:58.

     Select one of the following:

          F         FOREGROUND
          B         BACKGROUND
          Q         QUIT

Method for running the receiver: B// ACKGROUND
Job was queued as 130212.
```

IRM - Step 2: Verify Lab EPI Nightly Task [LREPI NIGHTLY TASK] Option Nightly Run

The Lab EPI Nightly Task [LREPI NIGHTLY TASK] option **must** be scheduled to run nightly. This option will build HL7 messages and send them to the defined locations specified by the LREPI protocol.

Example: How to schedule the Lab EPI Nightly Task [LREPI NIGHTLY TASK] option to run nightly.

```
Select Systems Manager Menu

 Core Applications ...
 Device Management ...
 FM VA FileMan ...
 Manage Mailman ...
 Menu Management ...
 Programmer Options ...
 Operations Management ...
 Spool Management ...
 Information Security Officer Menu ...
 Taskman Management ...
 User Management ...
 Application Utilities ...
 Capacity Management ...
 HL7 Main Menu ...

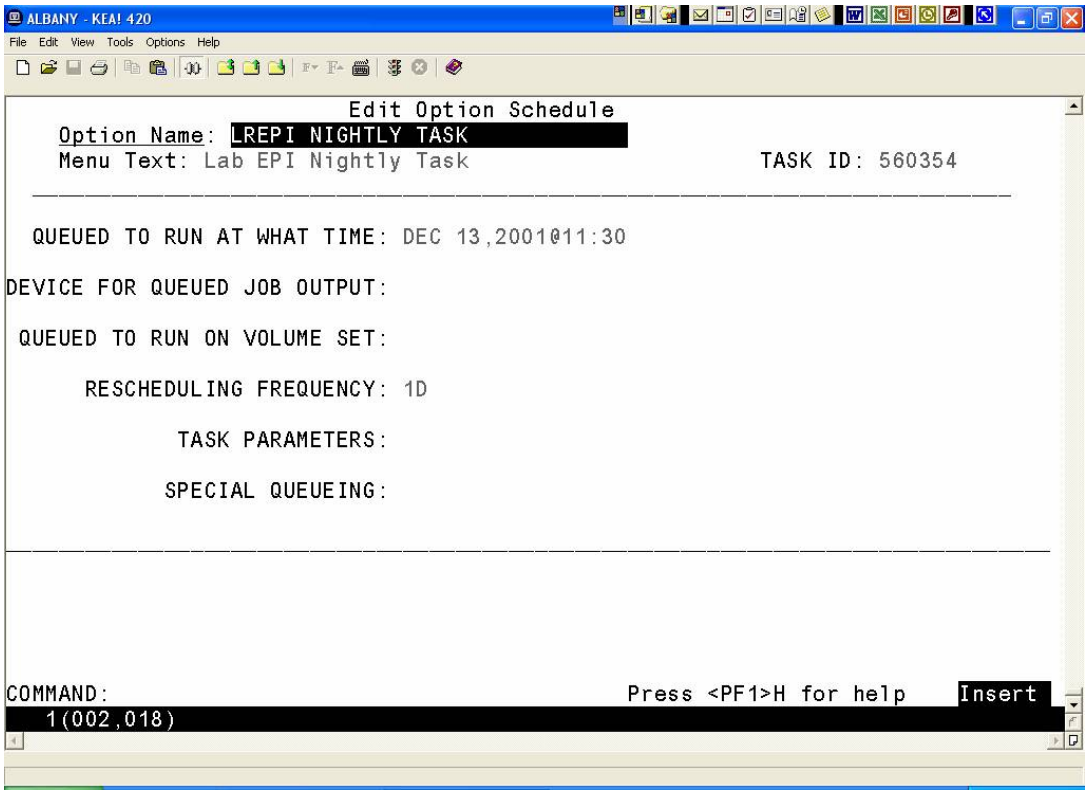
You have 89 new messages.  (Last arrival: 03/17/04@15:30)
Select Systems Manager Menu Option: TASKman Management<Enter>

 Schedule/Unschedule Options
 One-time Option Queue
 Taskman Management Utilities ...
 List Tasks
 Dequeue Tasks
 Requeue Tasks
 Delete Tasks
 Print Options that are Scheduled to run
 Cleanup Task List
 Print Options Recommended for Queueing


Select Taskman Management Option: SCHEDULE/UnscheduleOptions<Enter>

Select OPTION to schedule or reschedule: LREPI NIGHTLY TASK<Enter>
```

Example: How to schedule the Lab EPI Nightly Task [LREPI NIGHTLY TASK] option to run nightly *continued*.



IRM - Step 3: Verify EPI mail group setup entries

This mail group is used by VHA facilities to transmit EPI HL7 format mailman messages **to** Austin Information Technology Center (AITC) and for AITC to transmit EPI Confirmation mailman messages back to the sending VHA facilities once the EPI HL7 format mailman messages data transmission has been received by AITC. The **Office of Director** (00)-designated staff for EPI process implementation should be assigned to this mail group and kept current as personnel assume this responsibility. This/these staff member(s) is/are responsible for that the monthly EPI process has run and generated the appropriately formatted HL7 messages that are transmitted to the AITC. Receipt of the HL7 message series by this mail group is a means of ascertaining that this process has occurred. Installation of this patch provides opportunity to review this EPI mail group and update as needed.

NOTE: It is highly recommended that the **Office of the Director (00)** at each facility initially designate the member(s) responsible for overseeing the EPI mail group data.

Example: How to verify existing EPI mail group setup entries

```
OUTPUT FROM WHAT FILE: LAB EPI// MAIL GROUP<Enter>
                                          (1441 entries)
Select MAIL GROUP NAME: EPI<Enter>
ANOTHER ONE:<Enter>
STANDARD CAPTIONED OUTPUT? Yes//<Enter>   (Yes)
Include COMPUTED fields: (N/Y/R/B): NO//<Enter> - No record number (IEN), no
Computed Fields

NAME: EPI                          TYPE: public
  ALLOW SELF ENROLLMENT?: NO             REFERENCE COUNT: 8499
  LAST REFERENCED: AUG 15, 2000          RESTRICTIONS: UNRESTRICTED
MEMBER: EPI, USER

DESCRIPTION: This mail group is used to deliver a formatted report taken from the HL7 message that is
created to assist in the verification of data.
```

IRM Step 4: Verify EPI-REPORT mail group setup entries

This mail group **receives** the **new** EPI Summary Verification Report that is automatically generated on the 15th day of each month at each VHA facility. The **Office of Director (00)**-designated staff for EPI process implementation should be assigned to this mail group and kept current as personnel assume this responsibility. Other members of this mail group should be personnel who can assist the Office of Director-designated staff validate that the data contained in the **new** EPI Summary Verification Report accurately reflect what has occurred at the facility during the prior month. If the data do no accurately reflect facility activity regarding the national EPI Pathogens, corrections should be undertaken and coordinated by the Office of Director-designated staff; once the corrections are made, it is the responsibility of this designated staff to re-transmit the EPI data to the AITC using the Lab EPI Manual Run (Enhanced) option. Other personnel at the site may have interest in this summary overview of occurrences at the local site and should be permitted to join this mail group—these personnel may include the Infection Control Practitioners, Infectious Diseases physicians, hospital epidemiologists and Quality Managers. Installation of this patch provides opportunity to review this EPI-REPORT mail group and update as needed.

Example: How to verify EPI-REPORT mail group setup entries

```
OUTPUT FROM WHAT FILE: LAB EPI// MAIL GROUP<Enter>
                                        (1441 entries)
Select MAIL GROUP NAME: EPI-REPORT<Enter>
ANOTHER ONE:<Enter>
STANDARD CAPTIONED OUTPUT? Yes//<Enter>   (Yes)
Include COMPUTED fields: (N/Y/R/B): NO//<Enter>  - No record number (IEN), no
Computed Fields

NAME: EPI-REPORT                        TYPE: public
  ALLOW SELF ENROLLMENT?: NO            REFERENCE COUNT: 8499
  LAST REFERENCED: AUG 15, 2000         RESTRICTIONS: UNRESTRICTED
MEMBER: EPI, USER
DESCRIPTION: This mail group is used to deliver a formatted report taken from the HL7 message that is
created to assist in the verification of data.
```

IRM Step 5: Verify REDACTEDRemote Member Entries

Verify designated remote members entries in the MAIL GROUP file (#3.8), MEMBERS - REMOTE field (#12), for the EPI mail group.

Example: How to verify EPI mail groups remote member REDACTED entries:

```
     Select VA FileMan 22.0

     Select OPTION: 1<Enter>ENTER OR EDIT FILE ENTRIES

     INPUT TO WHAT FILE: MAIL GROUP//<Enter>
     EDIT WHICH FIELD: ALL// MEMBERS - REMOTE     (multiple)
        EDIT WHICH MEMBERS - REMOTE SUB-FIELD: ALL//<Enter>
     THEN EDIT FIELD:<Enter>

     Select MAIL GROUP NAME: EPI<Enter>
            1   EPI
            2   EPI-REPORT
     CHOOSE 1-2: 1  EPI<Enter>
     Select REMOTE MEMBER: S.HL V16 SERVER@DEV// REDACTED<Enter>
       Are you adding REDACTED' as a new REMOTE MEMBER (the2ND for this MAIL
GROUP)? No// Y<Enter>(Yes)
```

IRM Step 6: Verify Lab EPI Primary [LREPI SEARCH EXTRACT MENU] menu assignment to all designated users

NOTE: The **Office of Director (00)-**designated staff for EPI process implementation should be assigned to the EPI mail group and kept current as personnel assume this responsibility. It is highly recommended that the Laboratory Information Manager (LIM), a representative from the Microbiology section (director, supervisor, or technologist) and a Total Quality Improvement/Quality Improvement/Quality Assurance (TQI/QI/QA) staff (or person at the facility with similar function) also be assigned the Lab EPI Primary Menu [LREPI SEARCH EXTRACT MENU]. These will be the individual(s) responsible for initially setting the national Lab EPI parameters descriptions and doing periodic reviews of the parameters descriptions to assure they are current.

Example: Lab EPI Primary [LREPI SEARCH EXTRACT MENU] menu

```
Lab EPI Primary Menu

   ENH    Lab EPI Manual Run (Enhanced)
   VR     Print Detailed Verification Report
   LO     Local Pathogen Menu ...
   PI     Pathogen Inquiry
   UP     Lab EPI Parameter Setup
          Lab EPI Protocol Edit
   LK     Antimicrobial Link Update
```

Example: Local Pathogen [LREPI LOCAL PATHOGEN MENU] Menu

```
   ENT...Enter/Edit Local Pathogens
   GEN    Lab EPI Generate Local Report/Spreadsheet
   PRT    Lab EPI Print Local Report/Spreadsheet
   DEL    Delete Local Pathogen
   DRS     Delete Local Report or Spreadsheet
```

NOTE: Assignment of the Local Pathogen [LREPI Local Pathogen Menu] submenu is automatic with assignment of the Lab EPI Primary Menu. However, this submenu may be assigned independent of the primary menu; this independent assignment allows only access to the local pathogen menu functions. This provides one way of limiting access to functionality to only those personnel truly needing access and preventing personnel from inadvertently changing national EPI pathogen parameters.

LIM Implementation Instructions

The following implementation instructions **must** be completed to achieve a successful performance of the EPI Roll up Modification software enhancements:

NOTE: It is highly recommended that the Laboratory Information Manager (LIM), a representative from the Microbiology section (director, supervisor, or technologist) and a Total Quality Improvement/Quality Improvement/Quality Assurance (TQI/QI/QA) staff (or person at the facility with similar function) be assigned the Lab EPI Primary Menu [LREPI SEARCH EXTRACT MENU]. These will be the individual(s) responsible for initially setting the national Lab EPI parameters descriptions and doing periodic reviews of the parameters descriptions to assure they are current.

LIM - Step 1: Review new EPI Descriptions and Input Screens Examples

Review the following 6 **new** emerging pathogens descriptions and input screens examples **prior** to setting up the Lab EPI parameters. Also review the exiting Legionella (Reference #7) pathogen regarding descriptions and input screen examples to capture the Legionella Urinary Antigen) *(i.e., Descriptions and input screens examples are located in the EPI Roll-Up Modifications User Manual 'Use of the Software' section of this manual)*:

- All *Staphylococcus aureus* (Reference #18)
- Methicillin-Resistant *Staphylococcus aureus* (MRSA) (Reference #19)
- Vancomycin-Resistant S*taphylococcus aureus* (VRSA) (Reference #20)
- Vancomycin-Resistant Coagulase Negative *Staphylococci/Staph* epi (VRSE) (Reference #21)
- All Streptococcus *pneumoniae* (Reference #22)
- All Enterococci (Reference #23)

LIM - Step 2: Setup new EPI Parameter Descriptions

Use the Lab EPI Parameter Setup [LREPI PARAMETER SETUP] option to setup the 6 **new** emerging pathogens parameter descriptions (i.e., as specified by the VAHQ Infectious Disease Program Office). *(See the EPI Roll Up Modifications User Manual section of this manual for examples on setting up the six new EPI parameters).*

NOTE: Take this opportunity to perform the expected annual review of the already existing EPI parameter set-ups for the other 17 pathogens to assure that they are up-to-date and correct. Should there be corrections that need to be made, they should be made at this time with the following exception: the 4 hepatitis pathogens (Hepatitis C Antibody Positive, Hepatitis C Antibody Negative, Hepatitis A Antibody Positive and Hepatitis B Positive) are tightly integrated with the Clinical Reminder data stream that the EPI national roll-up accomplishes (see combined products VistA Laboratory EPI Hepatitis Extract Patch LR*5.2*260, PXRM*1.5*1, PSJ*5*48 and Patch PSO*7*45) and changes in the EPI parameters may need to have concomitant changes in the Clinical Reminder data being passed over to the EPI national roll-up—concurrent review (and changes, if necessary), should be undertaken in conjunction with the local Clinical Applications Coordinator for the Clinical Reminder package to assure that appropriate mapping of Health factors to the national pathogens has occurred.

NOTE: LAG DAYS **must** be set at **15** for all EPI-defined pathogens, including the 6 **new** EPI.

LIM - Step 3: Link the Logical Observations, Identifiers, Names, and Codes (LOINC)

For instructions on linking LOINC please refer to the following web site to obtain a copy of the VistA NLT Mapping to LOINC Technical, Installation, and User Guide.

http://www.va.gov/vdl/Clinical.asp?appID=119

Office of Director (00) Designated Staff Implementation Instructions:

The following implementation instructions **must** be completed to achieve a successful performance of the EPI Roll up Modification software enhancements:

NOTE: It is highly recommended that the Laboratory Information Manager (LIM), a representative from the Microbiology section (director, supervisor, or technologist), and a Total Quality Improvement/Quality Improvement/Quality Assurance (TQI/QI/QA) staff (or person at the facility with similar function) be assigned the Lab EPI Primary Menu [LREPI SEARCH EXTRACT MENU]. These will be the individual(s) responsible for initially setting the national Lab EPI parameters descriptions and doing periodic reviews of the parameters descriptions to assure they are current.

(00) Designated Staff - Step 1: Review new EPI Descriptions and Input Screens Examples

Review the following 6 **new** emerging pathogens descriptions and input screens examples **prior** to setting up the Lab EPI parameters. Also review the exiting Legionella (Reference #7) pathogen regarding descriptions and input screen examples to capture the Legionella Urinary Antigen) *(i.e., Descriptions and input screens examples are located in the EPI Roll Up Modifications User Manual 'Use of the Software' section of this manual)*:

- All *Staphylococcus aureus* (Reference #18)
- Methicillin-Resistant *Staphylococcus aureus* (MRSA) (Reference #19)
- Vancomycin-Resistant S*taphylococcus aureus* (VRSA) (Reference #20)
- Vancomycin-Resistant Coagulase Negative *Staphylococci/Staph* epi (VRSE) (Reference #21)
- All Streptococcus *pneumoniae* (Reference #22)
- All Enterococci (Reference #23)

(00) Designated Staff - Step 2: Setup new EPI Parameter Descriptions

Use the Lab EPI Parameter Setup [LREPI PARAMETER SETUP] option to setup the 6 **new** emerging pathogens parameter descriptions (i.e., as specified by the VAHQ Infectious Disease Program Office). *(See the EPI Roll Up Modifications User Manual section of this manual for examples on setting up the 6* ***new*** *EPI parameters).*

NOTE: Take this opportunity to perform the expected annual review of the already existing EPI parameter set-ups for the other 17 pathogens to assure that they are up-to-date and correct. Should there be corrections that need to be made, they should be made at this time with the following exception: the 4 hepatitis pathogens (Hepatitis C Antibody Positive, Hepatitis C Antibody Negative, Hepatitis A Antibody Positive and Hepatitis B Positive) are tightly integrated with the Clinical Reminder data stream that the EPI national roll-up accomplishes (see combined products VistA Laboratory EPI Hepatitis Extract Patch LR*5.2*260, PXRM*1.5*1, PSJ*5*48 and Patch PSO*7*45) and changes in the EPI parameters may need to have concomitant changes in the Clinical Reminder data being passed over to the EPI national roll-up—concurrent review (and changes, if necessary), should be undertaken in conjunction with the local Clinical Applications Coordinator for the Clinical Reminder package to assure that appropriate mapping of Health factors to the national pathogens has occurred.

NOTE: LAG DAYS **must** be set at **15** for all EPI-defined pathogens, including the 6 **new** EPI.

Instructions for Seeding EPI Historical Data:

EPI historical data **must** be gathered from October 1, 2000 through June 14, 2004. Use the Lab EPI Manual Run (Enhanced) [LREPI ENHANCE MANUAL RUN] option to extract and transmit 6 manual runs (consecutive runs) at a time.

WARNING: SITES - DO NOT transmit the EPI historical data reports on June 16 or July 4, 2004 to avoid Austin Information Technology Center (AITC) capacity limitations.

Batch #1: October 1, 2000 -March 31, 2001
Batch #2: April 1, 2001 - September 30, 2001
Batch #3: October 1, 2001 - March 31, 2002
Batch #4: April 1, 2002 - September 30, 2002
Batch #5: October 1, 2002 - March 31, 2003
Batch #6: April 1, 2003 - September 30, 2003
Batch #7: October 1, 2003 - March 31, 2004
Batch #8: April 1, 2004 - June 14, 2004

Sites will run 8 batches of EPI historical data reports. Each batch should contain 6 separate monthly extracts which are tasked separately by month, (i.e., OCT 2000, NOV 2000, DEC 2000, JAN 2001, FEB 2001, MAR 2001 = 1 batch) and will generate six separate processing reports back to the station and transmit them over a five week period June 10, 2004 – July 12, 2004. You do not have to wait for one monthly extract to run before starting the next in a batch. You do not have to wait for one batch to complete running before queuing the next batch. If you receive any fatal errors and the monthly extract is rejected, you will need to fix the error and retransmit that month.

Austin Automation Center (AITC) Schedule for Transmitting EPI Historical Data:

WARNING: SITES - DO NOT transmit the EPI historical data reports on June 16 or July 4, 2004 to avoid Austin Automation Center (AITC) capacity limitations.

Sites may transmit EPI historical data reports to AITC on evenings and weekends following this schedule:

1. VISNs with odd numbers are asked to transmit batches on Tuesday & Thursday during the PM hours and Saturdays.
2. VISNs with even numbers are asked to transmit on Monday & Friday during the PM hours and Sundays.

VistA LABORATORY EPI ROLLUP MODIFICATIONS USER MANUAL

Use of the Software

VistA Laboratory Emerging Pathogens Initiative (EPI) Rollup Modifications User Manual (Patch LR*5.2*281) section provides all the necessary information, instructions, illustrations, and examples required for the EPI coordinators, Laboratory personnel, and other users to implement and maintain the 23 emerging pathogens parameter descriptions:

NOTE: It is **highly recommended** that the following person(s) jointly participate in the review and parameter descriptions setup process for the 23 EPI descriptions at the time of this installation and at least once annually thereafter:

- Laboratory Information Manager (LIM)
- Total Quality Improvement/Quality Improvement/Quality Assurance (TQI/QI/QA) staff (e.g., or person at the facility with similar function)
- Representative from the Microbiology (i.e., director, supervisor, or technologist)

EPI Review Requirements:

The 23 emerging pathogens will require an ongoing review process (i.e., as specified by the VA Central Office Infectious Disease Program Office). The expected minimum for review is once annually. The person(s) participating in the ongoing review process is(are) responsible for ensuring the following requirements are kept current.

- Periodic reviews of ICD codes.
- Periodic reviews of the Lab EPI Parameter Setup [LREPI PARAMETER SETUP] option for the defined EPI parameter description setups.

  NOTE: Remember that if the parameter set up needs to be changed for any of the four hepatitis entities, that a concomitant change needs to be made in the corresponding Reminder logic.

- Annual review of the national EPI pathogen descriptions (i.e., as specified by the VA Central Office Infectious Disease Program Office).

NOTE: To request additional LOINC, Workload, and Suffixes codes access the VistA Laboratory website, National Lab Tests (NLT) Documentation Set and LOINC Request Forms link:

REDACTED

Six New Emerging Pathogens:

The EPI Roll-Up Modifications software release exports the following 6 **new** Emerging Pathogens Initiative and parameter descriptions:

1. All *Staphylococcus aureus* (Reference #18)
2. Methicillin - resistant *Staphylococcus aureus* (MRSA) (Reference #19)
3. Vancomycin-Resistant *Staphylococcus aureus* (VRSA) (Reference #20)
4. Vancomycin-Resistant Coagulase Negative *Staphylococci/Staph* epi (VRSE) (Reference #21)
5. All *Streptococcus pneumoniae* (Reference #22)
6. All Enterococci (Reference #23)

New Legionella Urinary Antigen Test:

The **new** Food and Drug Administration **(**FDA)-approved Legionella Urinary Antigen test may be added to the existing Legionella pathogen criteria.

New Local Pathogen [LREPI LOCAL PATHOGEN MENU] Menu

The **new** submenu contains four **new** options use to enter/edit local pathogens, generate and print local EPI reports and spreadsheets, and delete local pathogens

Lab EPI Primary (LREPI SEARCH EXTRACT MENU) Menu Diagram

Example: Lab EPI Primary [LREPI SEARCH EXTRACT MENU] menu diagram

```
Lab EPI Primary Menu (LREPI SEARCH EXTRACT MENU)
|
|
-----------------------------------------ENH Lab EPI Manual Run (Enhanced)
                                            [LREPI ENHANCE MANUAL RUN]

-----------------------------------------VR Print Detailed Verification
                                            Report [LREPI VERIFICATION
                                            REPORT]

---LO Local Pathogen Menu [LREPI ------------ Enter/Edit Local Pathogens
      LOCAL PATHOGEN MENU]                    [LREPI ENTER/EDIT LOCAL PATH]
         |
         |-------------------------------GEN Lab EPI Generate Local
         |                                    Report/Spreadsheet [LREPI
         |                                    GENERATE REPORT/SP]
         |
         |-------------------------------PRT Lab EPI Print Local
         |                                    Report/Spreadsheet [LREPI
         |                                    PRINT REPORT/SPSHT]
         |
         |-------------------------------DEL Delete Local Pathogen [LREPI
         |                                    DELETE LOCAL PATHOGEN]
         |                                DRS Delete Local Report or
                                              Spreadsheet [LREPI DELETE LOCAL
                                              REPORT]

-----------------------------------------PI Pathogen Inquiry [LREPI
                                            PATHOGEN INQUIRY]

-----------------------------------------UP Lab EPI Parameter Setup [LREPI
                                            PARAMETER SETUP]

------------------------------------------ Lab EPI Protocol Edit [LREPI
                                            PROTOCOL EDIT]

-----------------------------------------LK Antimicrobial Link Update
                                            [LREPILK]
```

Lab EPI Primary [LREPI SEARCH EXTRACT MENU] Menu

For consistency of this software release, the Lab Search Extract Primary [LREPI SEARCH EXTRACT MENU] menu is **RENAMED** Lab EPI Primary [LREPI SEARCH EXTRACT MENU] menu. This is the main EPI menu containing four existing options, two **new** options, and one **new** submenu containing four **new** options.

Example: Lab Search Extract Primary [LREPI SEARCH EXTRACT MENU] menu screen

```
                              Lab EPI Primary Menu

ENH    Lab EPI Manual Run (Enhanced)
VR     Print Detailed Verification Report
LO     Local Pathogen Menu ...
PI     Pathogen Inquiry
UP     Lab EPI Parameter Setup
       Lab EPI Protocol Edit
LK     Antimicrobial Link Update
```

Lab EPI Manual Run (Enhanced) [LREPI ENHANCE MANUAL RUN] option:

This option is used ONLY to manually extract National EPI data, transmit manually extracted data to the Austin Information Technology Center (AITC), and to generate the **new** EPI Summary Verification Report. The **new** EPI Summary Verification Report is automatically sent to the EPI-Report mail group after being generated. This option has been **enhanced** to generate the **new** Detailed Verification Report which can be printed using the **new** Print Detailed Verification Report [LREPI VERIFICATION REPORT] option.

NOTES:

ONLY national emerging pathogens extract data are transmitted to the AITC, local pathogens extract data will NOT be transmitted.

Lab EPI Transmissions to AITC after 6:00 p.m. are processed the next day.

DO NOT use the Lab EPI Manual Run (Enhanced) [LREPI ENHANCED MANUAL RUN] option to transmit EPI data on Wednesdays of PAY ROLL weeks. These transmissions may cause a delay in processing PAY ROLL data.

Example: How to use the Lab EPI Manual Run (Enhanced) [LREPI ENHANCE MANUAL RUN] option.

NOTES:

In the following Laboratory Search rerun option example '`Override Any Inactive indicators: ? NO//`' prompt requires a YES or NO answer. However, ALL National Emerging Pathogens are automatically set by the EPI software as ACTIVE, so either answer is correct.
THIS PROMPT WILL BE REMOVED IN A FUTURE PATCH.

At the 'Select Search Date' prompt choose the month/date/year that you wish to manually re-submit and press ENTER. At this point you should get a message regarding queuing of the task that will run at the queued time.

```
Laboratory Search rerun option

Select Protocol: LREPI <Enter>   EMERGING PATHOGEN   Emerging Pathogens
Initiative (EPI)
Override Any Inactive indicators: ? NO//<Enter>
Include All Search Parameters? YES// <Enter>
Select Search Date: 1/15/04 <Enter>
Requested Start Time: NOW// <Enter> (JAN 27, 2004@12:08:10)


The Task has been queued
Task # 54381
```

Print Detailed Verification Report [LREPI VERIFICATION REPORT] option:

This **new** option is use to print the **new** Detailed Verification Report.

Example: How to use the Print Detailed Verification Report [LREPI VERIFICATION REPORT] option

```
                              Lab EPI Primary Menu


   ENH     Lab EPI Manual Run (Enhanced)
   VR      Print Detailed Verification Report
   LO      Local Pathogen Menu ...
   PI      Pathogen Inquiry
   UP      Lab EPI Parameter Setup
           Lab EPI Protocol Edit
   LK      Antimicrobial Link Update

  <TEST ACCOUNT> Select Lab EPI Primary Menu Option: VR Print Detailed
Verification Report <ENTER>
     Print Detailed Verification Report Option

1 JAN 15,2004@16:07:41
2 JAN 16,2004@01:23:25
3 JAN 17,2004@17:19:28
4 JAN 18,2004@19:36:33
5 JAN 22,2004@22:42:01
6 JAN 23,2004@13:01:50
7 JAN 23,2004@16:15:31
8 JAN 23,2004@20:27:36
9 JAN 24,2004@17:56:01
10 JAN 30,2004@21:27:40
11 FEB 4,2004@01:49:41
12 FEB 4,2004@11:07:52
13 FEB 4,2004@11:59:16
14 FEB 4,2004@15:27
15 FEB 4,2004@18:16:41
16 FEB 8,2004@21:32:11
Choose the number for the report you wish to print:  (1-16): 16<Enter>

This report will contain Confidential Information.
Do you wish to continue/proceed? NO// y  YES<Enter>
Include All Pathogens? NO// y  YES<Enter>
DEVICE: HOME//   <Enter>WAN

                                                                      PAGE 1
               DETAILED VERIFICATION REPORT OF EPI EXTRACTED DATA
                           FROM STATION (your site station number and name
will be displayed)
               PROCESSING PERIOD: 01-01-2003 through 01-31-2003

NTE~1-Report of Vancomycin-resistant Enterococcus
```

```
These data note persons at your facility during the month that had a positive
result for Vancomycin-resistant Enterococcus. Identifying information, along
with specimen and culture results has been provided.
```

```
PATIENT NAME                LAST 4   DOB         SEX    PERIOD OF SERVICE
LABPATIENT~ONE               0001    02-05-1949   M     VIETNAM ERA
Outpatient Accession Date: 01-09-2003@1600
01-09-2003@1600  BACT 03 275  MICRO CULTURE  URINE
     1                              01-12-2003   ENTEROCOCCUS FAECIUM

ORG # 1  01-09-2003@1600  ANTIBIOTIC MIC  URINE
     PENICILLIN                     R                 R
     VANCOMYCIN                     R                 R
     NITROFURANTOIN                 S                 S
     CIPROFLOXACIN                  R                 R
     LEVOFLOXACIN                   R                 R
     GENTAMICIN HP                  SYN-R             SYN-R
     STREPTOMYCIN HP                SYN-R             SYN-R
                                                                  PAGE 2
               DETAILED VERIFICATION REPORT OF EPI EXTRACTED DATA
                          FROM STATION (your site station number and name
will be displayed)
               PROCESSING PERIOD: 01-01-2003 through 01-31-2003
NTE~2 Report of Hepatitis C antibody positive
This represents a line listing of persons reported during the month who had a
positive test for hepatitis C antibody (based on accession date and not
results reported date). Definitions for data to be extracted are provided in
Technical and User Manual documentation for Laboratory EPI LR*5.2*281.

Name                      LAST 4  Accession Date  Test Name   Test Result
_____________________________________________________________________________
_
LABPATIENT~TWO           0002   01-16-2003@0700 HEP C ANTIBODY STRONG POSITIVE
LABPATIENT~THREE         0003   01-14-2003@0909 HEP C ANTIBODY STRONG POSITIVE
LABPATIENT~FOUR          0004   01-22-2003@1833 HEP C ANTIBODY STRONG POSITIVE
LABPATIENT~FIVE          0005   01-30-2003@1137 HEP C ANTIBODY STRONG POSITIVE
LABPATIENT~SIX           0006   01-13-2003@1653 HEP C ANTIBODY STRONG POSITIVE
LABPATIENT~SEVEN         0007   01-17-2003@0941 HEP C ANTIBODY STRONG POSITIVE
LABPATIENT~EIGHT         0008   01-30-2003@1246 HEP C ANTIBODY STRONG POSITIVE
LABPATIENT~NINE          0009   01-13-2003@1516 HEP C ANTIBODY STRONG POSITIVE
LABPATIENT~TEN           0010   01-23-2003@1153 HEP C ANTIBODY STRONG POSITIVE
LABPATIENT1~ONE          0011   01-16-2003@1147 HEP C ANTIBODY STRONG POSITIVE
LAPPATIENT1~TWO          0012   01-16-2003@1317 HEP C ANTIBODY STRONG POSITIVE
LABPATIENT1~THREE        0013   01-29-2003@0700 HEP C ANTIBODY STRONG POSITIVE
LABPATIENT1~THREE        0013   01-15-2003@0700 HEP C ANTIBODY STRONG POSITIVE
LABPATIENT1~FOUR         0014   01-06-2003@0725 HEP C ANTIBODY STRONG POSITIVE
LABPATIENT1~FIVE         0015   01-24-2003@1433 HEP C ANTIBODY STRONG POSITIVE
LABPATIENT1~SIX          0016   01-01-2003@0700 HEP C ANTIBODY STRONG POSITIVE
LABPATIENT1~SEVEN        0017   01-08-2003@1334 HEP C ANTIBODY STRONG POSITIVE
LABPATIENT1~EIGHT        0018   01-08-2003@0901 HEP C ANTIBODY STRONG POSITIVE
LABPATIENT1~NINE         0019   01-21-2003@1708 HEP C ANTIBODY STRONG POSITIVE
LABPATIENT1~TEN          0110   01-28-2003@1618 HEP C ANTIBODY STRONG POSITIVE
LABPATIENT2~ONE          0021   01-13-2003@0700 HEP C ANTIBODY STRONG POSITIVE
LABPATIENT2~TWO          0022   01-30-2003@1108 HEP C ANTIBODY STRONG POSITIVE
LABPATIENT2~THREE        0023   01-15-2003@1653 HEP C ANTIBODY STRONG POSITIVE
```

NOTE: This Detailed Verification Report will include a subsequent page for each national pathogen as well as one for each National Hepatitis C Risk Assessment Clinical Reminder Data element that is integrated into the EPI data stream.

Local Pathogen [LREPI LOCAL PATHOGEN MENU] Menu:

This new submenu contains 5 new options used to enter/edit local pathogens, generate and print local reports and spreadsheets, and delete local pathogens.

Example: New Local Pathogen [LREPI LOCAL PATHOGEN MENU] Menu

```
Local Pathogen Menu

   ENT    Enter/Edit Local Pathogens
   GEN    Lab EPI Generate Local Report/Spreadsheet
   PRT    Lab EPI Print Local Report/Spreadsheet
   DEL    Delete Local Pathogen
   DRS    Delete Local Report or Spreadsheet
```

Enter/Edit Local Pathogens [LREPI ENTER/EDIT LOCAL PATH] option:

This **new** option is use to enter or edit local pathogens into LAB SEARCH/EXTRACT file (#69.5).

Example: How to use the Enter/Edit Local Pathogens [LREPI ENTER/EDIT LOCAL PATH] option to **ENTER** local pathogens.

NOTE: The following LABORATORY EPI PARAMETERS INPUT SCREEN under the Topography Selection screen, Include, Exclude, and Sex prompts are FOR FUTURE USE ONLY.

```
Select Lab EPI Primary Menu

   ENH    Lab Search/Extract Manual Run (Enhanced)
   VR     Print Detailed Verification Report
   LO     Local Pathogen Menu ...
   PI     Pathogen Inquiry
   UP     Lab EPI Parameter Setup
          Lab EPI Protocol Edit
   LK     Antimicrobial Link Update

Select Lab EPI Primary Menu Option: lo Local Pathogen Menu<ENTER>

   ENT    Enter/Edit Local Pathogens
   GEN    Lab EPI Generate Local Report/Spreadsheet
   PRT    Lab EPI Print Local Report/Spreadsheet
   DEL    Delete Local Pathogen
   DRS    Delete Local Report or Spreadsheet

   Select Local Pathogen Menu Option: Enter/Edit Local Pathogens<
```

Example: How to use the Enter/Edit Local Pathogens [LREPI ENTER/EDIT LOCAL PATH] option to **ENTER** local pathogens continued.

```
              LABORATORY EPI PARAMETERS INPUT SCREEN            Page 1 of 5

NAME: Herpes virus539                                        INACTIVE: NO
_____________________________________________________________________________

 Laboratory Test(s)               Indicator                  Value
< >


ICD Coding System [ICD-9 or ICD-10]? (9/10):<RET>

ICD Code             Cd Set                     ICD Description

 < >



_____________________________________________________________________________
Exit     Save     Next Page     Refresh

Enter a command or '^' followed by a caption to jump to a specific field.


COMMAND: n                                   Press <PF1>H for help    Insert
```

```
              LABORATORY EPI PARAMETERS INPUT SCREEN             Page 2 of 5

NAME: Herpes virus539                                        INACTIVE: NO
_____________________________________________________________________________

Selected Etiology                            Selected Snomed Codes

HERPES SIMPLEX VIRUS 1
HERPES SIMPLEX VIRUS 2
< >

Antimicrobial Susceptibility     NLT Code       NLT Description
< >
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

Enter a command or '^' followed by a caption to jump to a specific field.


COMMAND: n                                   Press <PF1>H for help    Insert
```

Example: How to use the Enter/Edit Local Pathogens [LREPI ENTER/EDIT LOCAL PATH] option to **ENTER** local pathogens continued.

NOTE: The following LABORATORY EPI PARAMETERS INPUT SCREEN under the Topography Selection screen, Include, Exclude, and Sex prompts are FOR FUTURE USE ONLY.

```
              LABORATORY EPI PARAMETERS INPUT SCREEN            Page 3 of 5

NAME: Herpes virus539                                          INACTIVE: NO
_____________________________________________________________________________
                           Topography Selection

Include                                  Exclude
< >                                      < >


_____________________________________________________________________________
Exit     Save     Next Page     Refresh

Enter a command or '^' followed by a caption to jump to a specific field.


COMMAND: n                                  Press <PF1>H for help    Insert
```

```
              LABORATORY EPI PARAMETERS INPUT SCREEN            Page 4 of 5

NAME: Herpes virus539                                          INACTIVE: NO
_____________________________________________________________________________

FIRST ENCOUNTER: < >                          FOLLOW PTF: < >

BEFORE DATE OF BIRTH:  < >                    AFTER DATE OF BIRTH: < >

Select SEX: < >


_____________________________________________________________________________
Exit     Save     Next Page     Refresh

Enter a command or '^' followed by a caption to jump to a specific field.


COMMAND: n                                  Press <PF1>H for help    Insert
```

Example: How to use the Enter/Edit Local Pathogens [LREPI ENTER/EDIT LOCAL PATH] option to **ENTER** local pathogens continued.

```
           LABORATORY EPI PARAMETERS INPUT SCREEN              Page 5 of 5
NAME: Herpes virus539                                       INACTIVE: NO
_____________________________________________________________________________

Run Date:   < >                         Protocol: LREPI < >

Run Cycle: < >                          Lag Days: < >

Previous Cycle: < >

General Description: < >

_____________________________________________________________________________
_
Exit     Save     Next Page     Refresh

Enter a command or '^' followed by a caption to jump to a specific field.

COMMAND: n                                 Press <PF1>H for help    Insert
```

How to use the Enter/Edit Local Pathogens [LREPI ENTER/EDIT LOCAL PATH] option

Example: How to use the Enter/Edit Local Pathogens [LREPI ENTER/EDIT LOCAL PATH] option to **EDIT** LOCAL pathogens.

NOTE: The following LABORATORY EPI PARAMETERS INPUT SCREEN under the Topography Selection screen, Include, Exclude, and Sex prompt will NOT be used in this release.

```
Select Lab EPI Primary Menu

   ENH    Lab EPI Manual Run (Enhanced)
   VR     Print Detailed Verification Report
   LO     Local Pathogen Menu ...
   PI     Pathogen Inquiry
   UP     Lab EPI Parameter Setup
          Lab EPI Protocol Edit
   LK     Antimicrobial Link Update

Select Lab EPI Primary Menu Option: lo Local Pathogen Menu<ENTER>

   ENT    Enter/Edit Local Pathogens
   GEN    Lab EPI Generate Local Report/Spreadsheet
   PRT    Lab EPI Print Local Report/Spreadsheet
   DEL    Delete Local Pathogen
   DRS    Delete Local Report or Spreadsheet

   Select Local Pathogen Menu Option: Enter/Edit Local Pathogens<
```

Example: How to use the Enter/Edit Local Pathogens [LREPI ENTER/EDIT LOCAL PATH] option to **EDIT** local pathogens continued.

```
            LABORATORY EPI PARAMETERS INPUT SCREEN          Page 1 of 5

NAME: Herpes virus539                                    INACTIVE: NO
_____________________________________________________________________________

 Laboratory Test(s)               Indicator                 Value
< >


ICD Coding System [ICD-9 or ICD-10]? (9/10):<RET>

ICD Code             Cd Set                    ICD Description
< >

_____________________________________________________________________________
Exit     Save     Next Page     Refresh

Enter a command or '^' followed by a caption to jump to a specific field.

COMMAND: n                                 Press <PF1>H for help    Insert
```

```
              LABORATORY EPI PARAMETERS INPUT SCREEN             Page 2 of 5

NAME: Herpes virus539                                        INACTIVE: NO
_____________________________________________________________________________

Selected Etiology                              Selected Snomed Codes

HERPES SIMPLEX VIRUS 1
HERPES SIMPLEX VIRUS 2
< >

Antimicrobial Susceptibility     NLT Code       NLT Description
< >
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

Enter a command or '^' followed by a caption to jump to a specific field.


COMMAND: n                                     Press <PF1>H for help    Insert
```

Example: *How to use the Enter/Edit Local Pathogens [LREPI ENTER/EDIT LOCAL PATH] option to* ***EDIT*** *local pathogens continued.*

NOTE: The following LABORATORY EPI PARAMETERS INPUT SCREEN under the Topography Selection screen, Include, Exclude, and Sex prompts are for FUTURE USE.

```
              LABORATORY EPI PARAMETERS INPUT SCREEN              Page 3 of 5

NAME: Herpes virus539                                          INACTIVE: NO
_____________________________________________________________________________

                           Topography Selection

Include                                  Exclude

SKIN < >
SKIN APPENDAGE < >
URETHRA
< >
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

Enter a command or '^' followed by a caption to jump to a specific field.

COMMAND: n                                    Press <PF1>H for help    Insert
```

```
              LABORATORY EPI PARAMETERS INPUT SCREEN             Page 4 of 5

NAME: Herpes virus539                                          INACTIVE: NO
_____________________________________________________________________________
_
FIRST ENCOUNTER:   < >                        FOLLOW PTF: < >

BEFORE DATE OF BIRTH:  < >                   AFTER DATE OF BIRTH: < >

Select SEX: < >
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

Enter a command or '^' followed by a caption to jump to a specific field.

COMMAND: n                                    Press <PF1>H for help    Insert
```

Example: How to use the Enter/Edit Local Pathogens [LREPI ENTER/EDIT LOCAL PATH] option to **EDIT** local pathogens continued.

```
          LABORATORY EPI PARAMETERS INPUT SCREEN           Page 5 of 5

NAME: Herpes virus539                                     INACTIVE: NO
_____________________________________________________________________________


Run Date: < >                            Protocol: LREPI < >

Run Cycle: < >                            Lag Days: < >

Previous Cycle: < >

General Description: < >
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

Enter a command or '^' followed by a caption to jump to a specific field.
```

Lab EPI Generate Local Report/Spreadsheet [LREPI GENERATE REPORT/SP] option:

This **new** option is used to generate Lab EPI reports or spreadsheets for national and local emerging pathogens extract data. After selecting national or local emerging pathogens, time period, segments and fields, report or spreadsheet, the job is automatically tasked. The tasked job will take approximately 2-3 hours to generate. An alert is automatically sent to the requester/user after the tasked job has finished generating. The Lab EPI report or spreadsheet can then be viewed on the screen or printed using the **new** Lab EPI Print Local Report/Spreadsheet [LREPI PRINT] option.

NOTE: NO data will be transmitted to AITC when using this option. (*See the EPI Roll Up Modifications User Manual Appendix-A section of this manual for the local Report/Spreadsheet field definitions).*

Example: How to use the **new** Lab EPI Generate Local Report/Spreadsheet [LREPI GENERATE REORT/SP] option to **GENERATE** a local **REPORT**.

NOTE: In the following Lab EPI Generate Local Report/Spreadsheet [LREPI GENERATE REORT/SP] option, the prompt `'Include All Pathogens?'` when answered "YES" will generate ALL NATIONAL and LOCAL Pathogens.

```
  Select Lab EPI Primary Menu Option: lo  Local Pathogen Menu<ENTER>


   ENT    Enter/Edit Local Pathogens
   GEN    Lab EPI Generate Local Report/Spreadsheet
   PRT    Lab EPI Print Local Report/Spreadsheet
   DEL    Delete Local Pathogen
   DRS    Delete Local Report or Spreadsheet

  Select Local Pathogen Menu Option: gen  Lab EPI Generate Local<ENTER>
Report/Spreadsheet

                  Laboratory Generate Local Report/Spreadsheet option

Include All Pathogens? NO//<ENTER>
Include All Local Pathogens? NO//<ENTER>
```

```
Select Pathogens: ?
 Answer with LAB SEARCH/EXTRACT NAME, or REFERENCE NUMBER
 Do you want the entire LAB SEARCH/EXTRACT List? y  (Yes)<ENTER>
   Choose from:
   ALL ENTEROCOCCI
   ALL STAPH AUREUS
   ALL STREP PNEUMO
   CANDIDA
   CLOSTRIDIUM DIFFICILE
   CREUTZFELDT-JAKOB DISEASE
   CRYPTOSPORIDIUM
   CRYPTOSPORIDIUM
   DENGUE
   E. COLI 0157:H7
   Gonorrhea539
   HCV Genotype539
   HEPATITIS A ANTIBODY POS
   HEPATITIS B POS
   HEPATITIS C ANTIBODY NEG
   HEPATITIS C ANTIBODY POS
   Hepatitis C RNA tests539
   Herpes virus539
   Influenza A isolates539
   LEGIONELLA
   LEISHMANIASIS
   MALARIA
   METH-RES STAPH AUREUS
   MRSA Bloodstream isolates539
   Mycobacterium avium
   Mycobacterium fortuitum
   PEN-RES PNEUMOCOCCUS
   STREPTOCOCCUS GROUP A
   Salmonella539
   TUBERCULOSIS
   VANC-RES COAG NEG STAPH
   VANC-RES ENTEROCOCCUS
   VANC-RES STAPH AUREUS

Select Pathogens: sal<ENTER>
 Answer with LAB SEARCH/EXTRACT NAME, or REFERENCE NUMBER
 Do you want the entire LAB SEARCH/EXTRACT List? n  (No)<ENTER>

Select Pathogens: salm<ENTER>
 Answer with LAB SEARCH/EXTRACT NAME, or REFERENCE NUMBER
 Do you want the entire LAB SEARCH/EXTRACT List? n  (No)<ENTER>

Select Pathogens: S
     1   STREPTOCOCCUS GROUP A
     2   Salmonella539
CHOOSE 1-2: 2  Salmonella539<ENTER>
Select Pathogens: <ENTER>
Select Start Date: 1/1/1995<ENTER>
Select End Date: 12/31/2003<ENTER>
```

```
     Select one of the following:

          1         REPORT
          2         SPREADSHEET

Enter response: 1  REPORT<ENTER>

Choose the segments to capture for report.
1-PID
2-PV1
3-DG1
4-NTE
5-OBR
6-OBX
Enter a list or range of numbers (1-7): 1,2,6,7<ENTER>

Choose the fields from the PID segment to capture for report.
1-Set Id
2-SSN
3-MPI
4-Patient Name
5-Date of Birth
6-Sex
7-Race
8-Homeless
9-State
10-Zip Code
11-County
12-Ethnicity
13-Period of Service
Enter a list or range of numbers (1-13): 1,2,4<ENTER>
Choose the fields from the PV1 segment to capture for report.
1-Set Id
2-Patient Class
3-Hospital Location
4-Discharge Disposition
5-Facility
6-Admit Date/Time
7-Discharge Date/Time
```

```
Enter a list or range of numbers (1-7): 1,2,3,5<ENTER>
Choose the fields from the OBR segment to capture for report.
1-Set Id
2-Test Name
3-Accession Date
4-Specimen
5-Accession Number

Enter a list or range of numbers (1-5): 1,2,3,4<ENTER>
Choose the fields from the OBX segment to capture for report.
1-Set Id
2-Value Type
3-Test Name
4-LOINC Code
5-LOINC Name
6-Test Result
7-Units
8-Abnormal Flags
9-Verified Date/Time
Enter a list or range of numbers (1-9): 1,3,6,9<ENTER>
DOCUMENT TITLE: Sam+Ella 1995 thru 2003<ENTER>
Requested Start Time: NOW//<ENTER>(MAR 08, 2004@10:39:54)

The Task has been queued
Task # 75028
```

Example: How to use the **new** Lab EPI Generate Report/Spreadsheet [LREPI GENERATE REORT/SP] option to **GENERATE** a local **SPREADSHEET**.

NOTE: In the following Lab EPI Generate Local Report/Spreadsheet [LREPI GENERATE REORT/SP] option, a 'YES' response at the 'Include All Pathogens? NO//' prompt will include ALL NATIONAL and LOCAL Pathogens.

```
   ENT    Enter/Edit Local Pathogens
   GEN    Lab EPI Generate Local Report/Spreadsheet
   PRT    Lab EPI Print Local Report/Spreadsheet
   DEL    Delete Local Pathogen
   DRS    Delete Local Report or Spreadsheet


  Select Local Pathogen Menu Option: gen  Lab EPI Generate Local
Report/Spreadsheet<ENTER>


                  Laboratory Generate Local Report/Spreadsheet option
Include All Pathogens? NO//<ENTER>
Include All Local Pathogens? NO//<ENTER>


Select Pathogens: S<ENTER>
     1   STREPTOCOCCUS GROUP A
     2   Salmonella539
CHOOSE 1-2: 2  Salmonella539<ENTER>
Select Pathogens: <ENTER>
Select Start Date: 1/1/1995<ENTER>
Select End Date: 12/31/2003<ENTER>

     Select one of the following:<ENTER>

          1         REPORT
          2         SPREADSHEET

Enter response: 2  SPREADSHEET<ENTER>

 Choose the segments to capture for spreadsheet.
1-PID
2-PV1
3-DG1
4-DSP
5-NTE
6-OBR
7-OBX
Enter a list or range of numbers (1-7): 1,2,6,7<ENTER>
```

```
Choose the fields from the PID segment to capture for spreadsheet.
1-Set Id
2-SSN
3-MPI
4-Patient Name
5-Date of Birth
6-Sex
7-Race
8-Homeless
9-State
10-Zip Code
11-County
12-Ethnicity
13-Period of Service
Enter a list or range of numbers (1-13): 1,2,4<ENTER>
Choose the fields from the PV1 segment to capture for spreadsheet.
1-Set Id
2-Patient Class
3-Hospital Location
4-Discharge Disposition
5-Facility
6-Admit Date/Time
7-Discharge Date/Time
Enter a list or range of numbers (1-7): 1,2,3,5<ENTER>
Choose the fields from the OBR segment to capture for spreadsheet.
1-Set Id
2-Test Name
3-Accession Date
4-Specimen
5-Accession Number
Enter a list or range of numbers (1-5): 1,2,3,4<ENTER>
Choose the fields from the OBX segment to capture for spreadsheet.
1-Set Id
2-Value Type
3-Test Name
4-LOINC Code
5-LOINC Name
6-Test Result
7-Units
8-Abnormal Flags
9-Verified Date/Time
Enter a list or range of numbers (1-9): 1,3,6,9<ENTER>
DOCUMENT TITLE: Sam+Ella 1995 thru 2003<ENTER>

Requested Start Time: NOW//<ENTER> (MAR 08, 2004@10:41:29)


The Task has been queued
Task # 75030
```

Lab EPI Print Local Report/Spreadsheet [LREPI PRINT] option:

This **new** option is used to PRINT a report or spreadsheet which has been generated using the **new** Lab EPI Generate Local Report/Spreadsheet [LREPI GENERATE REPORT/SP] option.

Example: How to use the **new** Lab EPI Print Local Report/Spreadsheet [LREPI PRINT] option to **PRINT** a local **REPORT**.

```
Select Lab EPI Primary Menu Option: lo  Local Pathogen Menu<ENTER>


   ENT    Enter/Edit Local Pathogens
   GEN    Lab EPI Generate Local Report/Spreadsheet
   PRT    Lab EPI Print Local Report/Spreadsheet
   DEL    Delete Local Pathogen
   DRS    Delete Local Report or Spreadsheet


  Select Local Pathogen Menu Option: prt  Lab EPI Print Local
Report/Spreadsheet<ENTER>
     Print Local Report/Spreadsheet Option

     Select one of the following:

          1         REPORT
          2         SPREADSHEET

Which one do you wish to print: 1  REPORT<ENTER>
1 JAN 14,2004@14:50:29 Locl EPI 1-09 thru 12-02
2 JAN 14,2004@15:02:02 Cipro Res 1995 thru 2002
3 JAN 14,2004@20:38:46 Histoplasma Jan 90 - Dec 99
4 JAN 14,2004@20:40:58 CiprResPseud 1-99 - 12-02
5 JAN 14,2004@20:43:25 Mfortuitum 01-85 - 12-02
6 JAN 24,2004@15:08:06 TEST REPORT
7 FEB 4,2004@20:56:48 Gonorrhea report
8 FEB 9,2004@11:15:52 Influenza A 1995 thru 2003
9 FEB 11,2004@13:51:27 Flu A 1995 thru 2003
10 FEB 15,2004@14:33:30 HCV Genotyping
11 FEB 26,2004@23:52:09 HCV RNA Jan 96 thru Dec 02
12 MAR 8,2004@10:37:31 Sam+Ella 1995 thru 2003
Choose the number for the report you wish to print:  (1-12): 12<ENTER>

This report will contain Confidential Information.
Do you wish to continue/proceed? NO// y  YES<ENTER>
DEVICE: HOME//<ENTER>   WAN
 ***THIS REPORT CONTAINS CONFIDENTIAL INFORMATION***
         EMERGING PATHOGENS LOCAL REPORT            MAR 8,2004   PAGE 1
         FROM STATION (Your station number is displayed)
         PROCESSING PERIOD FROM 01-01-1995 THROUGH 12-31-2003
Reported Local Pathogens:Salmonella539<ENTER>
```

```
Set Id SSN       Patient Name
Set Id Patient Class Hospital Location   Facility
Set ID Test Name            Accession Date  Specimen
Set Id  Test Name                       Test Result  Verified Date/Time
*********************************************************************
1      000000024 LABPATIENT2, FOUR
1      Outpatient
1      MICRO CULTURE       04-25-2002@0041  BLOOD
1        SALMONELLA SP  05-08-2002
2      ANTIBIOTIC MIC      04-25-2002@0041  BLOOD
1      AMPICILLIN  R
2      TRIMETHOPRIM+SULFAMETHOXAZOLE  S
3      CEFOTAXIME  S
Enter RETURN to continue or '^' to exit:


***THIS REPORT CONTAINS CONFIDENTIAL INFORMATION***
         EMERGING PATHOGENS LOCAL REPORT             MAR 8,2004   PAGE 2
         FROM STATION (Your station number is displayed here)
         PROCESSING PERIOD FROM 01-01-1995 THROUGH 12-31-2003
Reported Local Pathogens:Salmonella539

Set Id SSN       Patient Name
Set Id Patient Class Hospital Location   Facility
Set ID Test Name            Accession Date  Specimen
Set Id  Test Name                       Test Result  Verified Date/Time
4      LEVOFLOXACIN  S
2      Inpatient     6 NORTH~A612~1      539
1      MICRO CULTURE       05-01-2002@0000  FECES
1        SALMONELLA SP  05-08-2002
*********************************************************************
2      000000025 LABPATIENT2, FIVE
1      Outpatient
1      MICRO CULTURE       12-30-2002@0000  BLOOD
1        SALMONELLA SP  01-13-2003

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         EMERGING PATHOGENS LOCAL REPORT             MAR 8,2004   PAGE 3
         FROM STATION (Your station number is displayed)
         PROCESSING PERIOD FROM 01-01-1995 THROUGH 12-31-2003
Reported Local Pathogens: Salmonella539

Set Id SSN       Patient Name
Set Id Patient Class Hospital Location   Facility
Set ID Test Name            Accession Date  Specimen
Set Id  Test Name                       Test Result  Verified Date/Time
2      ANTIBIOTIC MIC      12-30-2002@0000  BLOOD
1      AMPICILLIN  S
2      TRIMETHOPRIM+SULFAMETHOXAZOLE  S
3      CEFOTAXIME  S
4      LEVOFLOXACIN  S
2      Inpatient     6 SOUTH~A667~1      539
1      MICRO CULTURE       12-31-2002@0000  FECES
1        SALMONELLA SP  01-03-2003
*********************************************************************
```

```
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         EMERGING PATHOGENS LOCAL REPORT             MAR 8,2004   PAGE 4
         FROM STATION (Your station number is displayed here)
         PROCESSING PERIOD FROM 01-01-1995 THROUGH 12-31-2003
Reported Local Pathogens:Salmonella539

Set Id SSN       Patient Name
Set Id Patient Class Hospital Location   Facility
Set ID Test Name            Accession Date  Specimen
Set Id  Test Name                      Test Result  Verified Date/Time
3      000000026 LABPATIENT2, SIX
1      Inpatient     MICU/CCU~B608~8     539
1      MICRO CULTURE       05-06-2002@0220  BLOOD
1        SALMONELLA SP  05-24-2002
2      ANTIBIOTIC MIC      05-06-2002@0220  BLOOD
1      AMPICILLIN  S
2      TRIMETHOPRIM+SULFAMETHOXAZOLE  S
3      CEFOTAXIME  S
4      LEVOFLOXACIN  S


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         EMERGING PATHOGENS LOCAL REPORT             MAR 8,2004   PAGE 5
         FROM STATION (Your station number is displayed here)
         PROCESSING PERIOD FROM 01-01-1995 THROUGH 12-31-2003
Reported Local Pathogens:Salmonella539

Set Id SSN       Patient Name
Set Id Patient Class Hospital Location   Facility
Set ID Test Name            Accession Date  Specimen
Set Id  Test Name                      Test Result  Verified Date/Time
********************************************************************************
4      000000027 LABPATIENT2, SEVEN
1      Outpatient
1      MICRO CULTURE       11-03-2000@0000  FECES
1        SALMONELLA SP  11-22-2000
2      ANTIBIOTIC MIC      11-03-2000@0000  FECES
1      AMPICILLIN  S
2      TRIMETHOPRIM+SULFAMETHOXAZOLE  S
3      LEVOFLOXACIN  S


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         EMERGING PATHOGENS LOCAL REPORT             MAR 8,2004   PAGE 6
         FROM STATION (Your station number is displayed here)
         PROCESSING PERIOD FROM 01-01-1995 THROUGH 12-31-2003
Reported Local Pathogens:Salmonella539
```

```
Set Id SSN       Patient Name
Set Id Patient Class Hospital Location   Facility
Set ID Test Name            Accession Date  Specimen
Set Id  Test Name                       Test Result  Verified Date/Time
2      Outpatient
1      MICRO CULTURE       12-29-2000@1400  FECES
1        SALMONELLA SP  01-03-2001
2      ANTIBIOTIC MIC      12-29-2000@1400  FECES
1      GENTAMICIN
2      CEFAZOLIN
3      AMPICILLIN  S
4      POLYMIXIN B
5      TRIMETHOPRIM+SULFAMETHOXAZOLE  S


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         EMERGING PATHOGENS LOCAL REPORT             MAR 8,2004   PAGE 7
         FROM STATION (Your station number is displayed here)
         PROCESSING PERIOD FROM 01-01-1995 THROUGH 12-31-2003
Reported Local Pathogens:Salmonella539

Set Id SSN       Patient Name
Set Id Patient Class Hospital Location   Facility
Set ID Test Name            Accession Date  Specimen
Set Id  Test Name                       Test Result  Verified Date/Time
6      PIPERACILLIN
7      CEFOTAXIME
8      CIPROFLOXACIN
9      IMIPENUM
10     CEFTAZIDIME
11     TIMENTIN
12     AMPICILLIN+SULBACTAM
13     CEFOTETAN
14     CEFTRIAXONE


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         EMERGING PATHOGENS LOCAL REPORT             MAR 8,2004   PAGE 8
         FROM STATION (Your station number is displayed here)
         PROCESSING PERIOD FROM 01-01-1995 THROUGH 12-31-2003
Reported Local Pathogens:Salmonella539

Set Id SSN       Patient Name
Set Id Patient Class Hospital Location   Facility
Set ID Test Name            Accession Date  Specimen
Set Id  Test Name                       Test Result  Verified Date/Time
15     CEFUROXIME-SODIUM
16     CEFUROXIME-AXETIL
17     LEVOFLOXACIN  S
```

```
*************************************************************************
5       000000028 LABPATIENT2, EIGHT
1       Outpatient
1       MICRO CULTURE       06-18-1997       FECES
1         SALMONELLA SP  06-23-1997
2       ANTIBIOTIC MIC      06-18-1997       FECES
***THIS REPORT CONTAINS CONFIDENTIAL INFORMATION.***
          EMERGING PATHOGENS LOCAL REPORT             MAR 8,2004   PAGE 9
          FROM STATION (Your station number is displayed here)
          PROCESSING PERIOD FROM 01-01-1995 THROUGH 12-31-2003
Reported Local Pathogens:Salmonella539

Set Id SSN       Patient Name
Set Id Patient Class Hospital Location   Facility
Set ID Test Name            Accession Date  Specimen
Set Id  Test Name                        Test Result  Verified Date/Time
1       GENTAMICIN
2       CEFAZOLIN
3       AMPICILLIN  S
4       POLYMIXIN B
5       TRIMETHOPRIM+SULFAMETHOXAZOLE  S
6       AMIKACIN
7       CEFOXITIN
8       PIPERACILLIN
9       CEFOTAXIME
***THIS REPORT CONTAINS CONFIDENTIAL INFORMATION.***
          EMERGING PATHOGENS LOCAL REPORT             MAR 8,2004   PAGE 10
          FROM STATION (Your station number is displayed here)
          PROCESSING PERIOD FROM 01-01-1995 THROUGH 12-31-2003
Reported Local Pathogens:Salmonella539

Set Id SSN       Patient Name
Set Id Patient Class Hospital Location   Facility
Set ID Test Name            Accession Date  Specimen
Set Id  Test Name                        Test Result  Verified Date/Time
10      NITROFURANTOIN
11      CEFOPERAZONE
12      MEZLOCILLIN
13      CEPHALOTHIN
14      CEFUROXIME
15      TICARCILLIN
16      CIPROFLOXACIN  S
17      AZTREONAM
18      IMIPENUM
```

```
***THIS REPORT CONTAINS CONFIDENTIAL INFORMATION.***
         EMERGING PATHOGENS LOCAL REPORT             MAR 8,2004   PAGE 11
         FROM STATION (Your station number is displayed here)
         PROCESSING PERIOD FROM 01-01-1995 THROUGH 12-31-2003
Reported Local Pathogens:Salmonella539

Set Id SSN       Patient Name
Set Id Patient Class Hospital Location   Facility
Set ID Test Name            Accession Date  Specimen
Set Id  Test Name                      Test Result  Verified Date/Time
19     CEFTAZIDIME
20     TIMENTIN
21     AMPICILLIN+SULBACTAM
22     NORFLOXACIN
*************************************************************************
6      000000029 LABPATIENT2, NINE
1      Inpatient     6 NORTH~A624~1      539
1      MICRO CULTURE       01-23-2003@0000  FECES
1        SALMONELLA SP  02-07-2003

***THIS REPORT CONTAINS CONFIDENTIAL INFORMATION.***
         EMERGING PATHOGENS LOCAL REPORT             MAR 8,2004   PAGE 12
         FROM STATION (Your station number is displayed here)
         PROCESSING PERIOD FROM 01-01-1995 THROUGH 12-31-2003
Reported Local Pathogens:Salmonella539

Set Id SSN       Patient Name
Set Id Patient Class Hospital Location   Facility
Set ID Test Name            Accession Date  Specimen
Set Id  Test Name                      Test Result  Verified Date/Time
2      ANTIBIOTIC MIC      01-23-2003@0000  FECES
1      AMPICILLIN  S
2      TRIMETHOPRIM+SULFAMETHOXAZOLE  S
3      LEVOFLOXACIN  S
*************************************************************************
7      000000210 LABPATIENT2, TEN
1      Outpatient
1      MICRO CULTURE       04-03-1996@0000  FECES
1        SALMONELLA SP  04-07-1996
```

```
***THIS REPORT CONTAINS CONFIDENTIAL INFORMATION.***
         EMERGING PATHOGENS LOCAL REPORT           MAR 8, 2004   PAGE 13
         FROM STATION (Your station number is displayed here)
         PROCESSING PERIOD FROM 01-01-1995 THROUGH 12-31-2003
Reported Local Pathogens:Salmonella539

Set Id SSN       Patient Name
Set Id Patient Class Hospital Location   Facility
Set ID Test Name            Accession Date  Specimen
Set Id  Test Name                      Test Result  Verified Date/Time
2      ANTIBIOTIC MIC      04-03-1996@0000  FECES
1      AMPICILLIN  S
2      TRIMETHOPRIM+SULFAMETHOXAZOLE  S
3      CIPROFLOXACIN  S
********************************************************************************
8      000000031 LABPATIENT3, ONE
1      Outpatient
1      MICRO CULTURE       06-27-2002@0000  FECES
1        SALMONELLA SP  07-24-2002


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         EMERGING PATHOGENS LOCAL REPORT           MAR 8, 2004   PAGE 14
         FROM STATION (Your station number is displayed here)
         PROCESSING PERIOD FROM 01-01-1995 THROUGH 12-31-2003
Reported Local Pathogens:Salmonella539
Set Id SSN       Patient Name
Set Id Patient Class Hospital Location   Facility
Set ID Test Name            Accession Date  Specimen
Set Id  Test Name                      Test Result  Verified Date/Time
2      ANTIBIOTIC MIC      06-27-2002@0000  FECES
1      AMPICILLIN  S
2      TRIMETHOPRIM+SULFAMETHOXAZOLE  S
3      LEVOFLOXACIN  S

   ENT    Enter/Edit Local Pathogens
   GEN    Lab EPI Generate Local Report/Spreadsheet
   PRT    Lab EPI Print Local Report/Spreadsheet
   DEL    Delete Local Pathogen
   DRS    Delete Local Report or Spreadsheet
```

Example: How to use the **new** Lab EPI Print Local Report/Spreadsheet [LREPI PRINT] option to **PRINT** a local **SPREADSHEET**.

```
   ENT    Enter/Edit Local Pathogens
   GEN    Lab EPI Generate Local Report/Spreadsheet
   PRT    Lab EPI Print Local Report/Spreadsheet
   DEL    Delete Local Pathogen
   DRS    Delete Local Report or Spreadsheet

  Select Local Pathogen Menu Option: prt  Lab EPI Print Local
Report/Spreadsheet<Enter>
     Print Local Report/Spreadsheet Option

     Select one of the following:

          1         REPORT
          2         SPREADSHEET

Which one do you wish to print: 2  SPREADSHEET<Enter>
1 JAN 16,2004@16:31:40 Mfortuitum 1-97 thru 12-02
2 JAN 24,2004@15:09:13 TEST SPSHT
3 FEB 4,2004@20:59:04 Myfortuitum report
4 FEB 26,2004@23:49:13 MRSA BSI Jan 00 thru Dec 02
5 FEB 29,2004@14:29:54 Sam+Ella 4 subfield results
6 MAR 8,2004@10:40:05 Sam+Ella 1995 thru 2003
Choose the number for the spreadsheet you wish to print:  (1-6): 6<Enter>


     This option will print the selected fields.
     You will need to capture this printout in a text document.
     Using a text editor, remove any extraneous lines from the beginning
     and the end of the file so that only the data to be imported remains.
     Save the edited file.  Use this file in the import function of
     your spreadsheet program.


This report will contain Confidential Information.
Do you wish to continue/proceed? NO// y YES<ENTER>
Ready to Capture? y YES<ENTER>

Set Id|SSN|Patient Name|
Set Id|Patient Class|Hospital Location|Facility|
Set ID|Test Name|Accession Date/Time|Specimen|
Set Id|Test Name|Test Result|Verified Date/Time|
```

```
**************************************************************************
1|000000024|LABPATIENT2, FOUR|
1|Outpatient|||
1|MICRO CULTURE|04-25-2002@0041|BLOOD|
1||SALMONELLA SP|05-08-2002|
2|ANTIBIOTIC MIC|04-25-2002@0041|BLOOD|
1|AMPICILLIN|R||
2|TRIMETHOPRIM+SULFAMETHOXAZOLE|S||
3|CEFOTAXIME|S||
4|LEVOFLOXACIN|S||
2|Inpatient|6 NORTH~A612~1|539|
1|MICRO CULTURE|05-01-2002@0000|FECES|
1||SALMONELLA SP|05-08-2002|
**************************************************************************
2|000000025|LABPATIENT2, FIVE|
1|Outpatient|||
1|MICRO CULTURE|12-30-2002@0000|BLOOD|
1||SALMONELLA SP|01-13-2003|
2|ANTIBIOTIC MIC|12-30-2002@0000|BLOOD|
1|AMPICILLIN|S||
2|TRIMETHOPRIM+SULFAMETHOXAZOLE|S||
3|CEFOTAXIME|S||
4|LEVOFLOXACIN|S||
2|Inpatient|6 SOUTH~A667~1|539|
1|MICRO CULTURE|12-31-2002@0000|FECES|
1||SALMONELLA SP|01-03-2003|
**************************************************************************
3|000000026|LABPATIENT2, SIX|
1|Inpatient|MICU/CCU~B608~8|539|
1|MICRO CULTURE|05-06-2002@0220|BLOOD|
1||SALMONELLA SP|05-24-2002|
2|ANTIBIOTIC MIC|05-06-2002@0220|BLOOD|
1|AMPICILLIN|S||
2|TRIMETHOPRIM+SULFAMETHOXAZOLE|S||
3|CEFOTAXIME|S||
4|LEVOFLOXACIN|S||
**************************************************************************
4|000000027|LABPATIENT2, SEVEN|
1|Outpatient|||
1|MICRO CULTURE|11-03-2000@0000|FECES|
1||SALMONELLA SP|11-22-2000|
2|ANTIBIOTIC MIC|11-03-2000@0000|FECES|
1|AMPICILLIN|S||
2|TRIMETHOPRIM+SULFAMETHOXAZOLE|S||
3|LEVOFLOXACIN|S||
2|Outpatient|||
1|MICRO CULTURE|12-29-2000@1400|FECES|
1||SALMONELLA SP|01-03-2001|
2|ANTIBIOTIC MIC|12-29-2000@1400|FECES|
1|GENTAMICIN|||
2|CEFAZOLIN|||
```

```
3|AMPICILLIN|S||
4|POLYMIXIN B|||
5|TRIMETHOPRIM+SULFAMETHOXAZOLE|S||
6|PIPERACILLIN|||
7|CEFOTAXIME|||
8|CIPROFLOXACIN|||
9|IMIPENUM|||
10|CEFTAZIDIME|||
11|TIMENTIN|||
12|AMPICILLIN+SULBACTAM|||
13|CEFOTETAN|||
14|CEFTRIAXONE|||
15|CEFUROXIME-SODIUM|||
16|CEFUROXIME-AXETIL|||
17|LEVOFLOXACIN|S||
**************************************************************************
5|000000028|LABPATIENT2, EIGHT|
1|Outpatient|||
1|MICRO CULTURE|06-18-1997|FECES|
1||SALMONELLA SP|06-23-1997|
2|ANTIBIOTIC MIC|06-18-1997|FECES|
1|GENTAMICIN|||
2|CEFAZOLIN|||
3|AMPICILLIN|S||
4|POLYMIXIN B|||
5|TRIMETHOPRIM+SULFAMETHOXAZOLE|S||
6|AMIKACIN|||
7|CEFOXITIN|||
8|PIPERACILLIN|||
9|CEFOTAXIME|||
10|NITROFURANTOIN|||
11|CEFOPERAZONE|||
12|MEZLOCILLIN|||
13|CEPHALOTHIN|||
14|CEFUROXIME|||
15|TICARCILLIN|||
16|CIPROFLOXACIN|S||
17|AZTREONAM|||
18|IMIPENUM|||
19|CEFTAZIDIME|||
20|TIMENTIN|||
21|AMPICILLIN+SULBACTAM|||
22|NORFLOXACIN|||
```

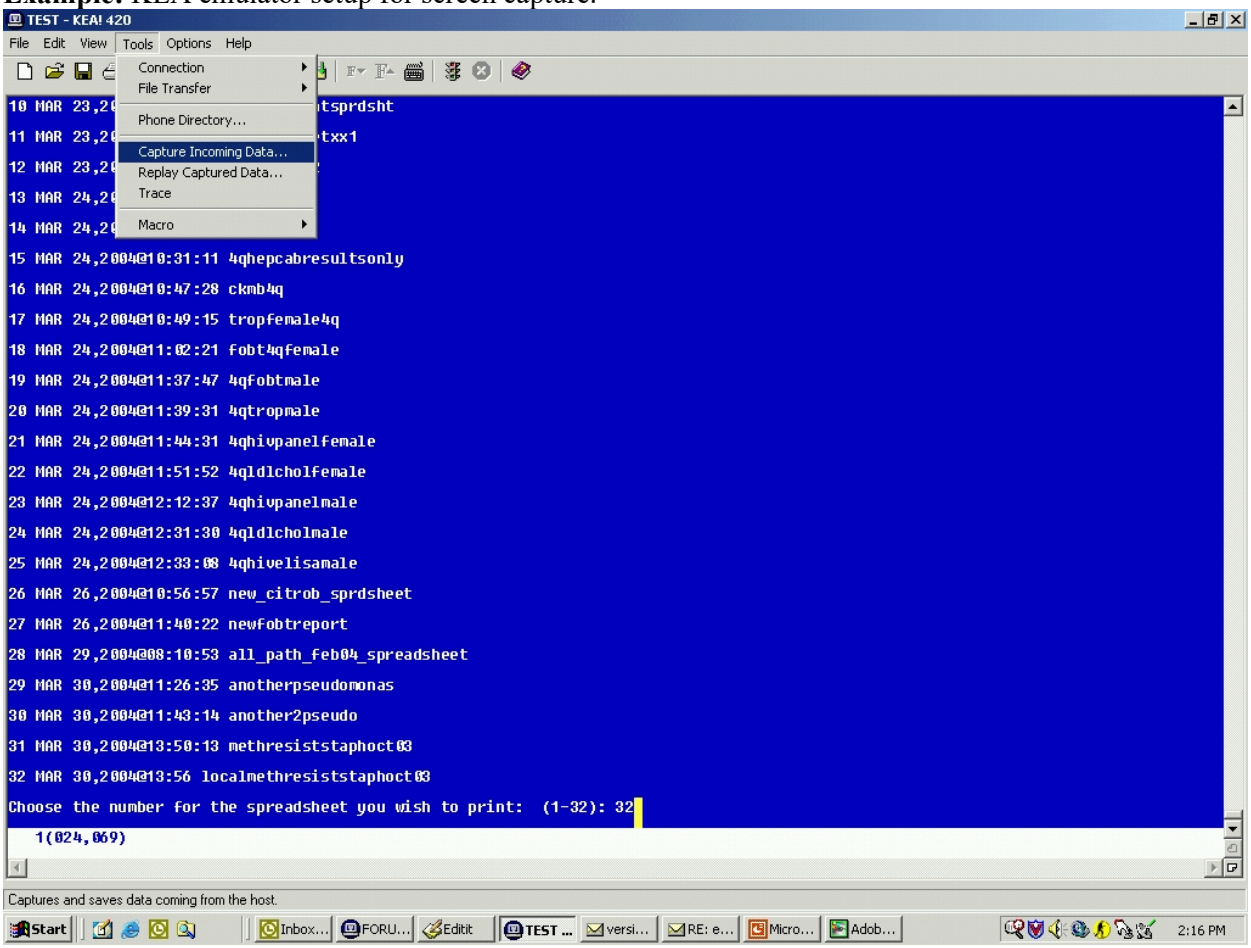
```
**************************************************************************
6|000000029|LABPATIENT2, NINE|
1|Inpatient|6 NORTH~A624~1|539|
1|MICRO CULTURE|01-23-2003@0000|FECES|
1||SALMONELLA SP|02-07-2003|
2|ANTIBIOTIC MIC|01-23-2003@0000|FECES|
1|AMPICILLIN|S||
2|TRIMETHOPRIM+SULFAMETHOXAZOLE|S||
3|LEVOFLOXACIN|S||
**************************************************************************
7|000000210|LABPATIENT2, TEN|
1|Outpatient|||
1|MICRO CULTURE|04-03-1996@0000|FECES|
1||SALMONELLA SP|04-07-1996|
2|ANTIBIOTIC MIC|04-03-1996@0000|FECES|
1|AMPICILLIN|S||
2|TRIMETHOPRIM+SULFAMETHOXAZOLE|S||
3|CIPROFLOXACIN|S||
**************************************************************************
8|000000031|LABPATIENT3, ONE|
1|Outpatient|||
1|MICRO CULTURE|06-27-2002@0000|FECES|
1||SALMONELLA SP|07-24-2002|
2|ANTIBIOTIC MIC|06-27-2002@0000|FECES|
1|AMPICILLIN|S||
2|TRIMETHOPRIM+SULFAMETHOXAZOLE|S||
3|LEVOFLOXACIN|S||
```

How to ENTER local SPREADSHEET captures to a TEXT FILE or EXCEL spreadsheet software:

1. Start the KEA Emulator. From the menu bar, click on the "Tools" menu, and select the "Capture Incoming Data" command.

NOTE: Other emulators will have similar menu options that will provide the same functionality.

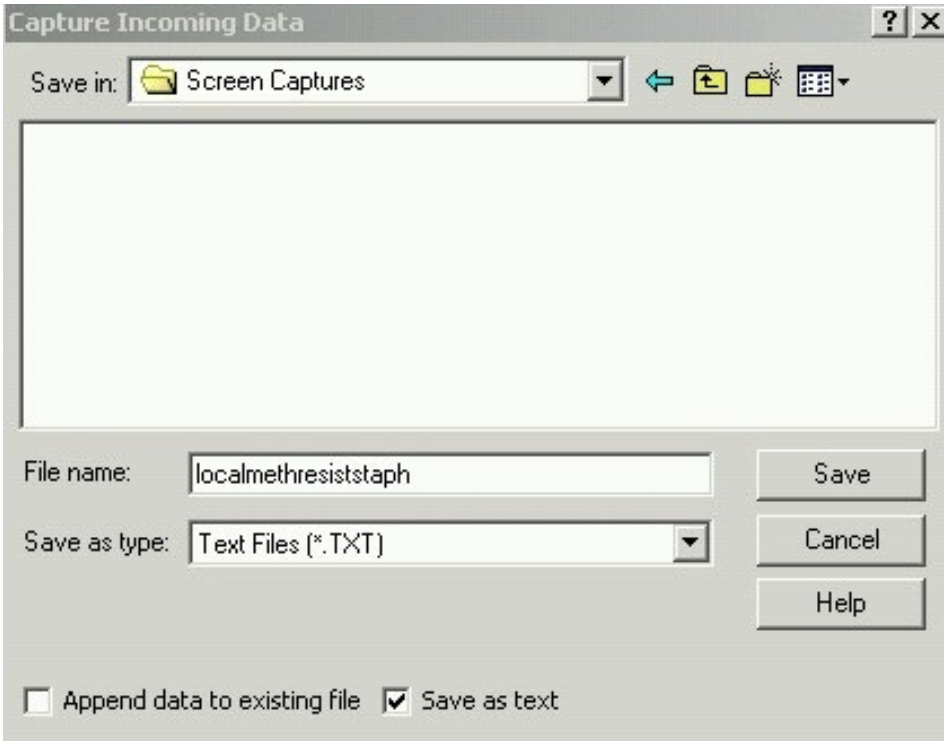
Example: KEA emulator setup for screen capture.



How to **ENTER** local SPREADSHEET captures to a TEXT FILE or EXCEL spreadsheet software continued.

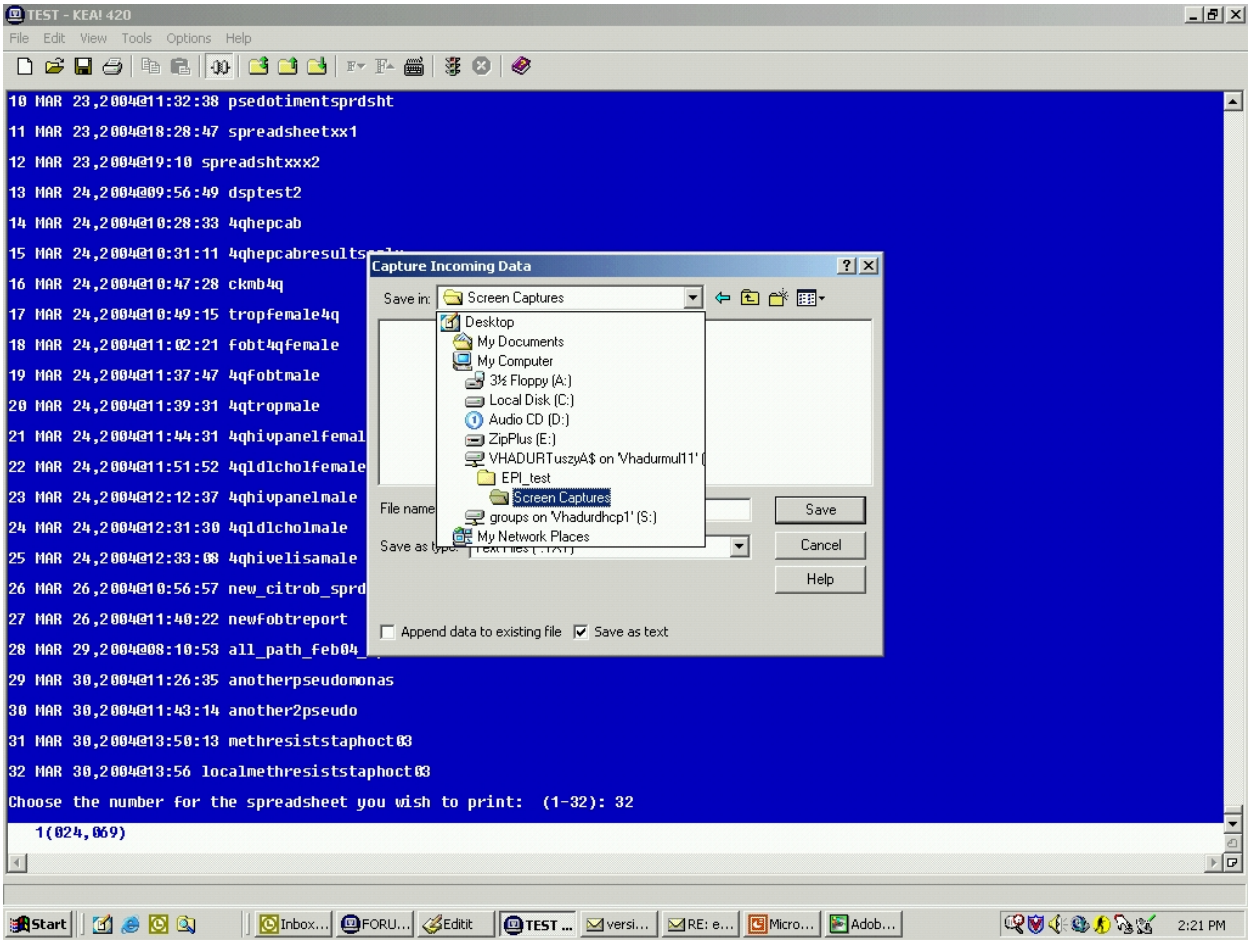
2. After indicating the preferred capture, you **must** define the location you want the capture file to be stored in (important… remember where you indicated). **Note:** It may be a good idea to create a special folder for this purpose and always route the captured data to this particular folder. Name the capture file something that will be meaningful to you later on). From the "Save as type:" command to be a Text Files (*.TXT) AND "checkmark" the "Save as text" box at the bottom, uncheck the "Append data to existing file" if it is checked.

Example: Saving local SPREADSHEET captures as a Text Files (*.TXT).



How to **ENTER** local SPREADSHEET captures to a TEXT FILE or EXCEL spreadsheet software continued:

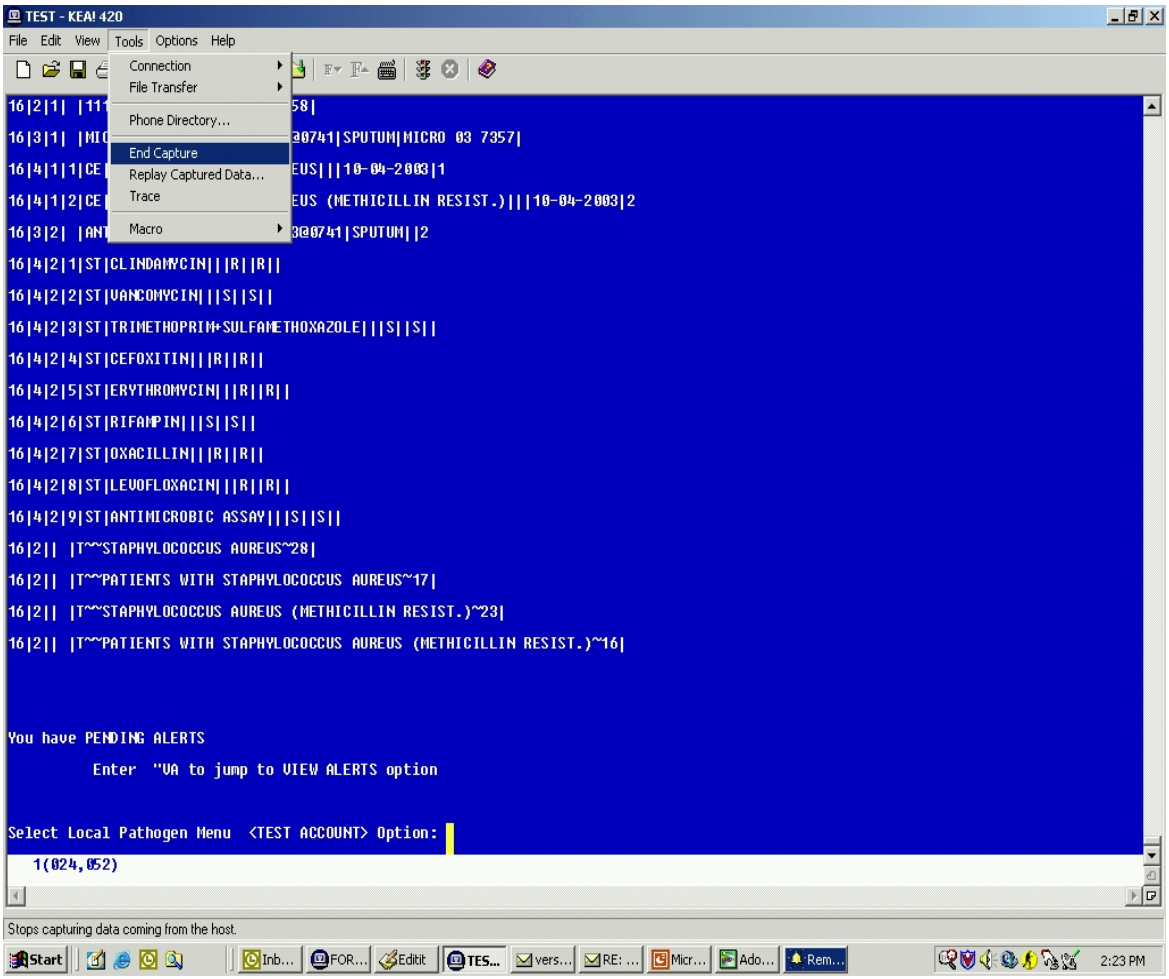
Example: Captured data folder location. **Note:** It may be helpful to see the full folder location path in order to find it again.



How to **ENTER** local SPREADSHEET captures to a TEXT FILE or EXCEL spreadsheet software continued:

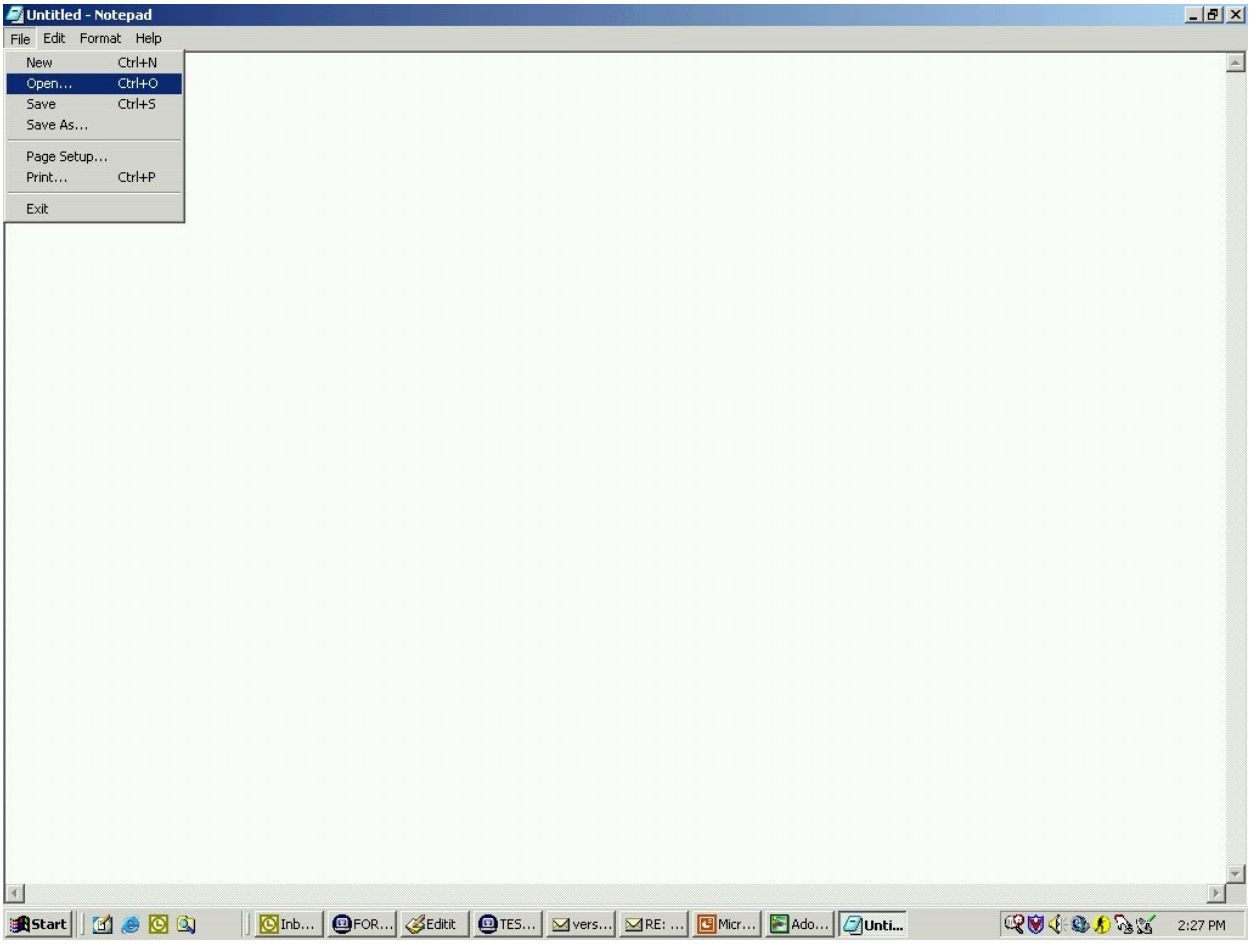
3. After the data capture has finished scrolling to the screen, from the KEA emulator menu bar, click on the "Tools" menu, and select the "End Capture" command to decrease the amount of unwanted text that will appear in the saved file.

NOTE: The data capture will need to be edited prior to opening the TEXT file in your spreadsheet program. Use the wizard to finish importing the data into a spreadsheet format.



How to **ENTER** local SPREADSHEET captures to a TEXT FILE or EXCEL spreadsheet software continued.

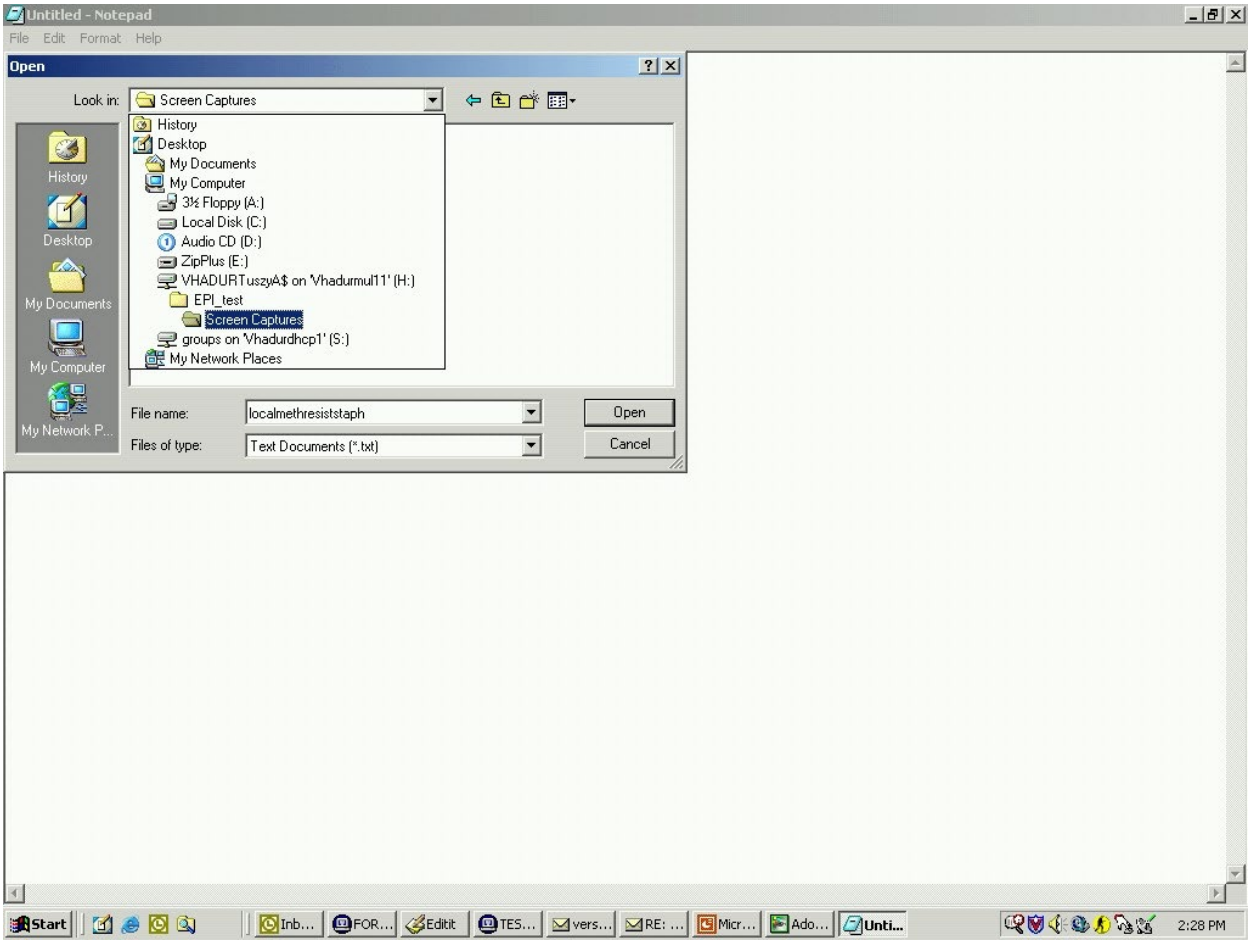
4. Select the basic Notepad program to open the saved text file folder (remember the location of the saved text file folder). Navigate to the folder via the Notepad program and then open saved text file. Do any required editing and resave the edited text file under the same file name.



How to **ENTER** local SPREADSHEET captures to a TEXT FILE or EXCEL spreadsheet software continued.

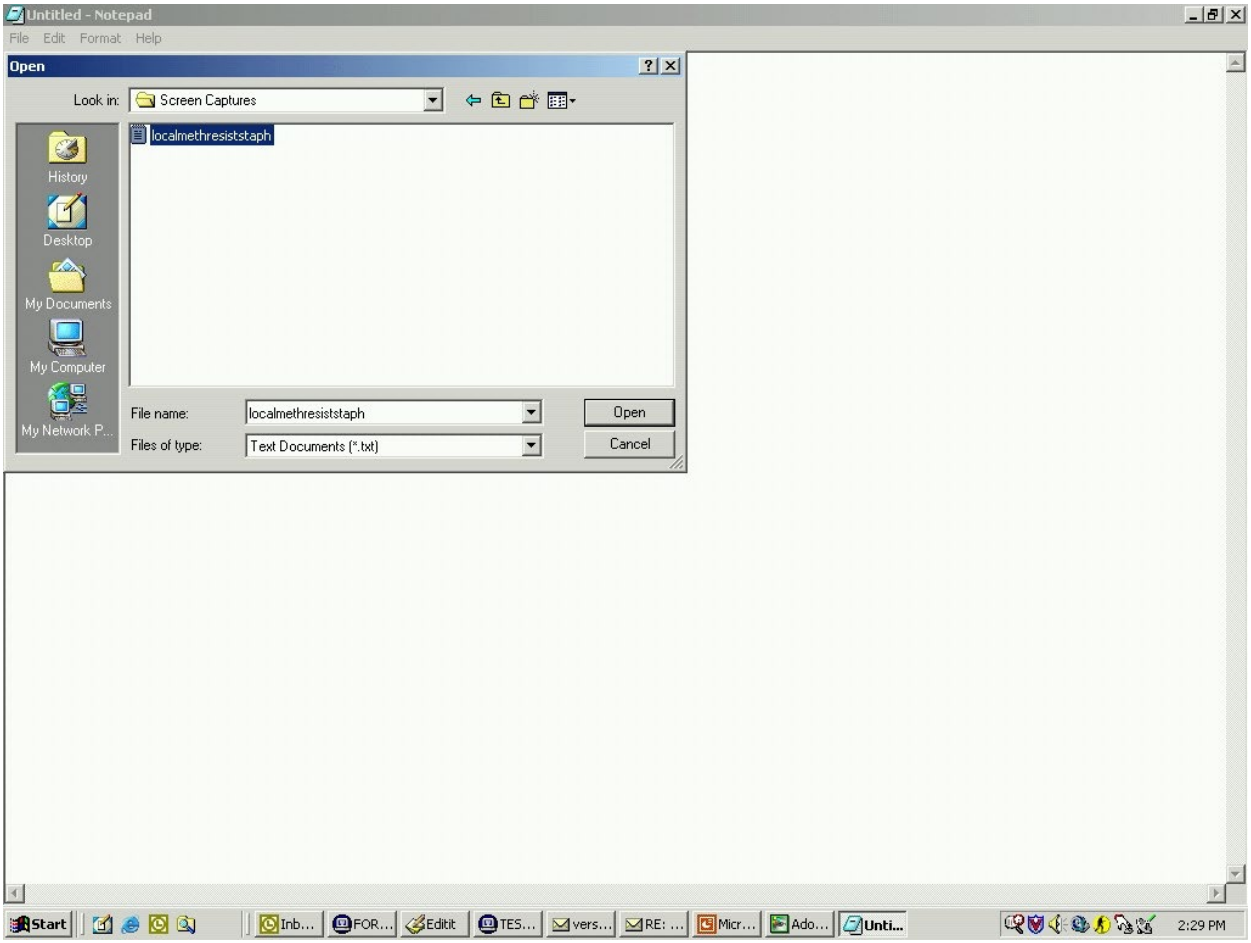
Example: This is an example of the saved text file folder location where the particular screen captures were stored in this example.

NOTE: This will be different on your system; therefore, it is a good idea to establish a known, standard downloading folder where you can easily find your downloaded text files.



How to **ENTER** local SPREADSHEET captures to a TEXT FILE or EXCEL spreadsheet software continued.

Example: A unique file name in a specific download folder

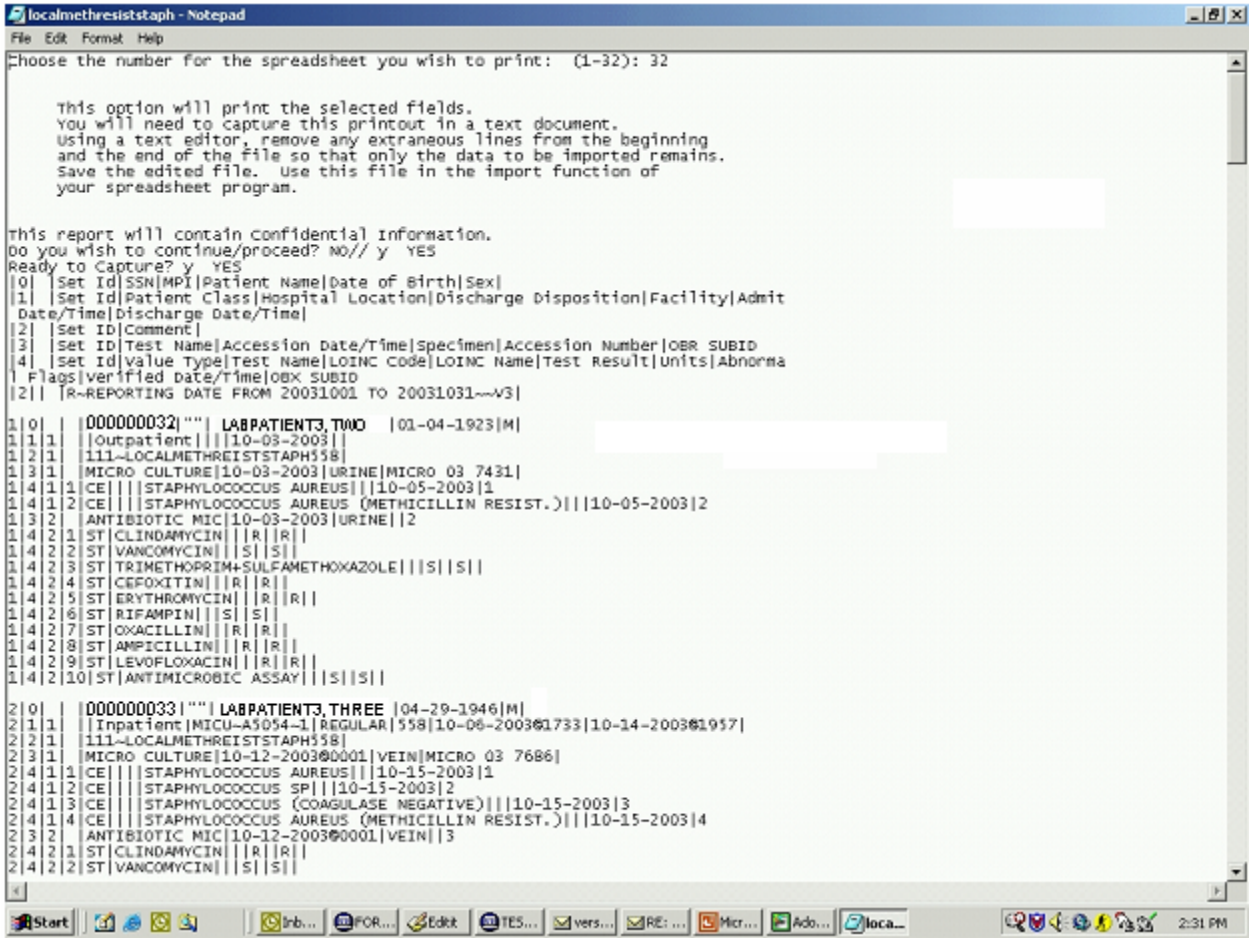


How to **ENTER** local SPREADSHEET captures to a TEXT FILE or EXCEL spreadsheet software continued.

5. The saved text file may look similar to the following example. Edit the beginning and end of the captured text so that only text with the "bar" delimiters are left.

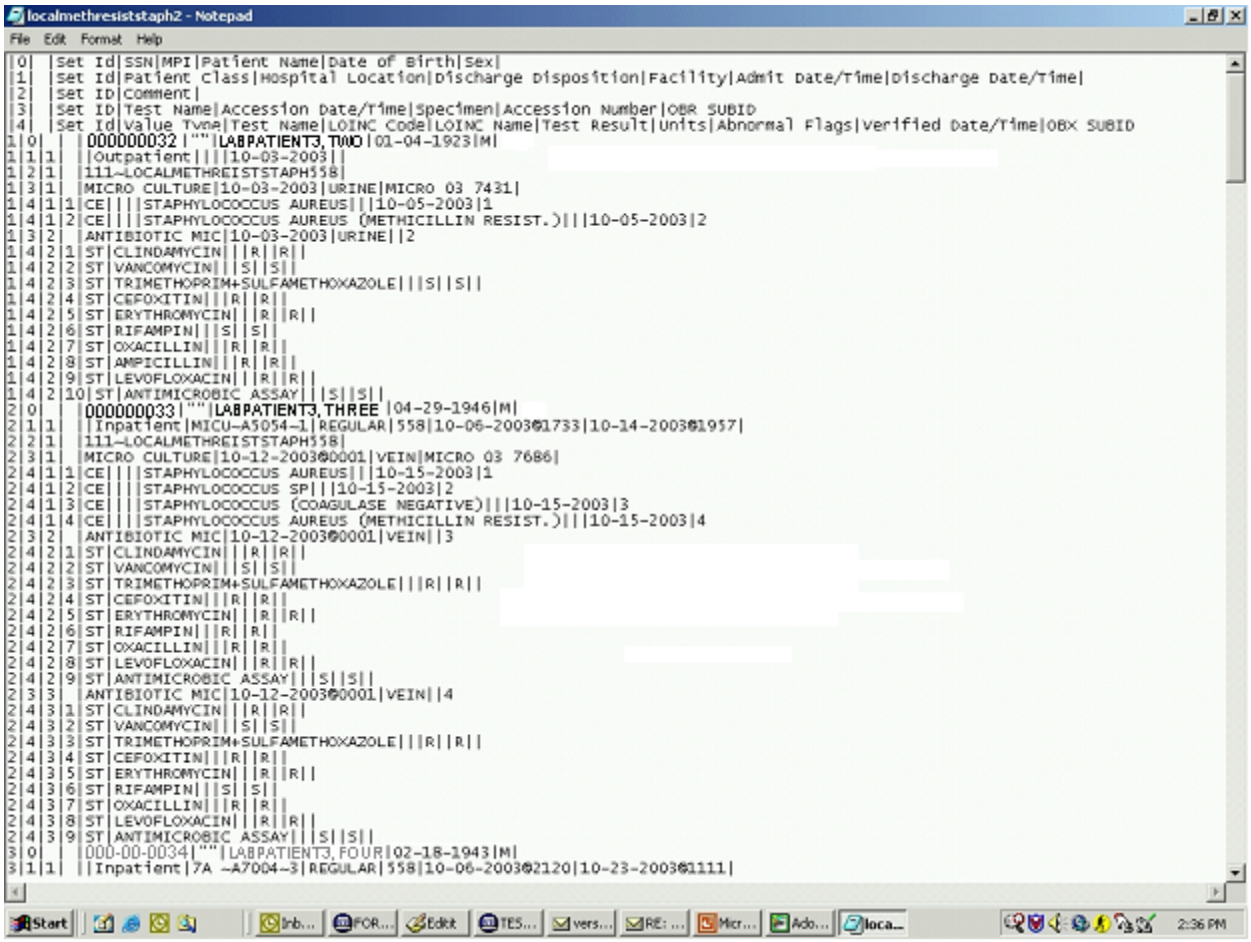
NOTE: If the text download "wrapped" (lines at 80 columns), edit the lines to "unwrap" the text. Usually this can be done via Notepad by putting the curser at the end of the first line that is wrapped and press "delete" once or twice to get the next line down that is wrapped. The text **must** appear as one continuous line for the spreadsheet import to work correctly.

Example: Saved Text File Download



How to **ENTER** local SPREADSHEET captures to a TEXT FILE or EXCEL spreadsheet software continued.

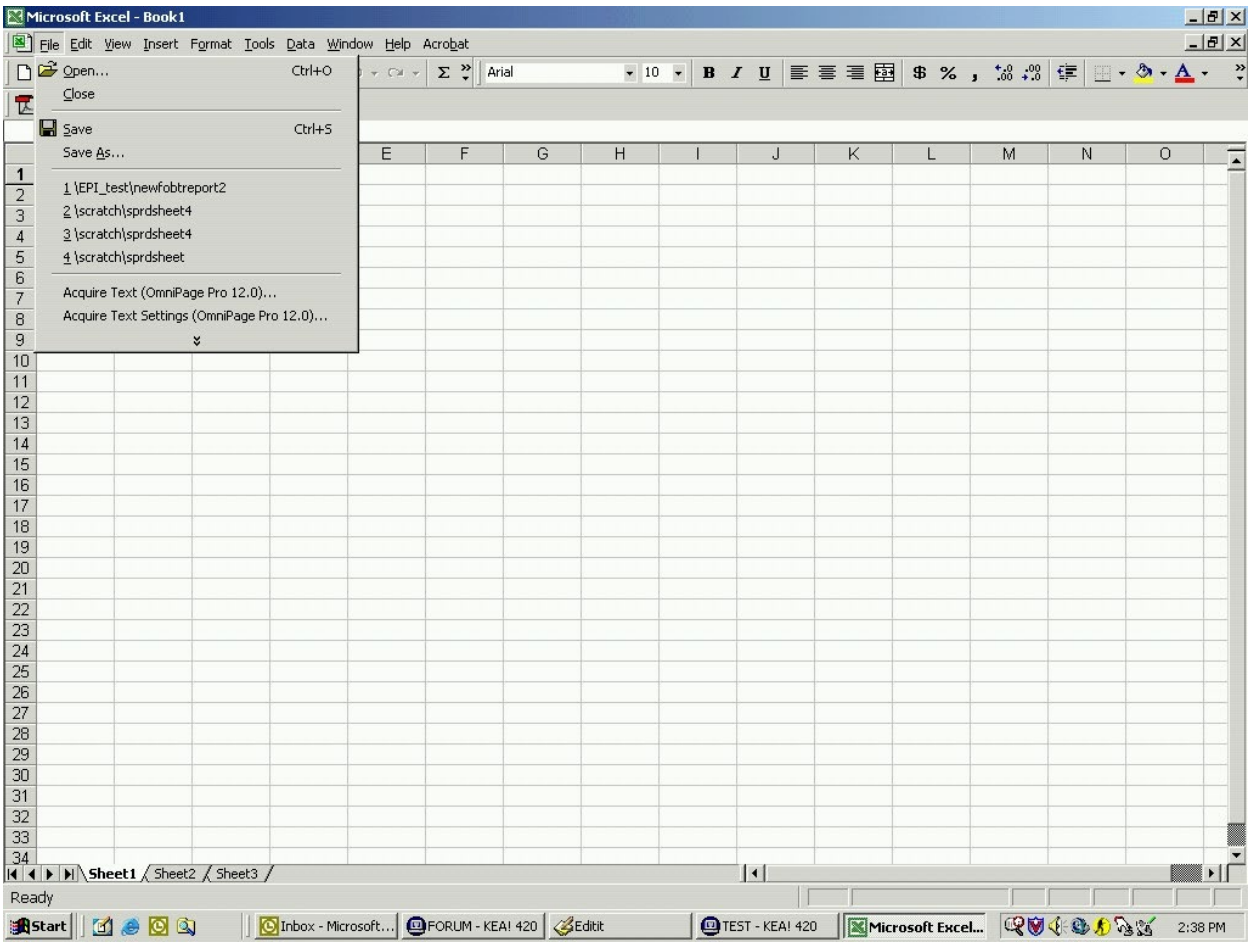
Example: This is screen capture example of how the text file should appear after being edited. This will make the text file ready to import into a spreadsheet file via the import wizard.



How to **ENTER** local SPREADSHEET captures to a TEXT FILE or EXCEL spreadsheet software continued.

6. After editing the ASCII text, click on "File", then select the "Save" command and close the text file. Then start up the spreadsheet program.

Example: Saving the ASCII text file data.



Delete Local Pathogen [LREPI DELETE LOCAL PATHOGEN] option

This **new** option allows deletion of local pathogens entries ONLY.

NOTE: National emerging pathogens entries CANNOT be deleted using the **new** Delete Local Pathogen [LREPI DELETE LOCAL PATHOGEN] option.

Example: How to use the **new** Delete Local Pathogen [LREPI DELETE LOCAL PATHOGEN] option to **DELETE** a local pathogen.

```
   ENT   Enter/Edit Local Pathogens
   GEN   Lab EPI Generate Local Report/Spreadsheet
   PRT   Lab EPI Print Local Report/Spreadsheet
   DEL   Delete Local Pathogen
   DRS   Delete Local Report or Spreadsheet

Select Local Pathogen Menu Option: DELETE Local Pathogen <ENTER>
LOCAL PATHOGEN NAME: HISTOPLASMA428<ENTER>
Do you really want to delete this pathogen? YES<ENTER>

Entry HISTOPLASMA428 deleted.
```

Delete Local Report or Spreadsheet [LREPI DELETE LOCAL REPORT] option

This option is used to delete local reports or local spreadsheets.

Example: How to use the **new** Delete Local Report or Spreadsheet [LREPI DELETE LOCAL REPORT] option to **DELETE** a local report.

```
Select Lab EPI Primary Menu Option: LO  Local Pathogen Menu<ENTER>


   ENT    Enter/Edit Local Pathogens
   GEN    Lab EPI Generate Local Report/Spreadsheet
   PRT    Lab EPI Print Local Report/Spreadsheet
   DEL    Delete Local Pathogen
   DRS    Delete Local Report or Spreadsheet

Select Local Pathogen Menu Option: DRS Delete Local Report or
Spreadsheet<Enter>
     Delete a Local Report/Spreadsheet Option

     Select one of the following: <Enter>

          1         REPORT
          2         SPREADSHEET

Which one do you wish to delete: 1 REPORT<Enter>
1 APR 14,2004@11:02:11 REPORT 1
Choose the number for the report you wish to delete: (1-1): 1<Enter>
Report deleted.


     Select one of the following:

          1         REPORT
          2         SPREADSHEET

Which one do you wish to delete: 2 SPREADSHEET<Enter>
1 APR 14,2004@11:02:11 SPSHT 1
Choose the number for the spreadsheet you wish to delete: (1-1): 1<Enter>
Spreadsheet deleted.
```

Pathogen Inquiry [LREPI PATHOGEN INQUIRY] option:

This **new** option is used to inquire into the LAB SEARCH/EXTRACT file (#69.5) parameter description fields (i.e., INACTIVE: NO, LAG DAYS: 15, RUN DATE: OCT 07, 2003, CYCLE: MONTHLY, PROTOCOL: LREPI, FOLLOW PTF: YES, REFERENCE NUMBER: 23, and ETIOLOGIES) for defined emerging pathogen.

Example: How to use the **new** Pathogen Inquiry [LREPI PATHOGEN INQUIRY] option

```
Select Lab EPI Primary Menu Option: PI <Enter> Pathogen Inquiry
Select Pathogen: ALL ENTEROCOCCI <Enter>
NAME: ALL ENTEROCOCCI                    INACTIVE: NO
 LAG DAYS: 15                           RUN DATE: OCT 07, 2003
 CYCLE: MONTHLY                         PROTOCOL: LREPI
 FOLLOW PTF: YES                        REFERENCE NUMBER: 23
ETIOLOGY: ENTEROCOCCUS
ETIOLOGY: STREP D ENTEROCOCCUS
ETIOLOGY: ENTEROCOCCUS  (STREPT. FAECALIS-GROUP D)
ETIOLOGY: STREPTOCOCCUS FAECALIS
ETIOLOGY: STREPTOCOCCUS FAECIUM

Description: The enterococci are a group of bacteria that can cause serious
disease in humans, including blood stream infections, urinary tract
infections, wound infections, endocarditis and even death. As with many other
organisms that cause disease in humans, resistance to antibiotics is emerging
in the enterococci. The presence of antibiotic resistance creates a challenge
in treatment of infections with this organism. In order to determine the
prevalence of antibiotic resistance, a baseline of occurrence of ALL
enterococci needs to be obtained. This particular EPI pathogen setting has
been created to identify ALL culture positive isolates of enterococci from
any specimen site in any patient/client receiving care within the VHA. Note:
Even specimens that have been obtained from patients (not the environment) as
part of an epidemiologic prevalence study or survey should be included if
they are present in the VistA laboratory package results from your site. The
results from this EPI pathogen setting will be coupled with the results from
Reference #1 (Vancomycin-Resistant Enterococci [VRE]) to help determine the
percentage of all isolates of enterococci that have vancomycin.
```

Lab EPI Parameter Setup [LREPI (EPI) PARAMETER SETUP] option:

The Lab EPI Parameter Setup [LREPI PARAMETER SETUP] option is used to define the search criteria associated with the National Emerging Pathogens Initiative (EPI) extract data. This option allows editing of the National EPI ONLY. **Note:** Local pathogens CANNOT be added using this option. This option has been **enhanced** by adding the **new** PREVIOUS CYCLE field. This **new** field is automatically defined as '1' for TB ONLY and CANNOT be edited (as highlighted in the example below). For all other emerging pathogens the **new** PREVIOUS CYCLE field is blank and CANNOT be EDITED. The existing PROTOCOL field has been modified and can NO longer be EDITED. The field displaying ACTIVE "YES" has been modified to display INACTIVE "NO". The following input screen example new functionality changes are highlighted.

Example: Laboratory EPI Parameters Input Screen Page 5 of 5 field changes

```
          LABORATORY EPI PARAMETERS INPUT SCREEN      Page 5 of 5
NAME: TUBERCULOSIS                                    INACTIVE: NO
_____________________________________________________________________________

Run Date: <Enter>                              Protocol: LREPI<Enter>

Run Cycle: MONTHLY<Enter>                      Lag Days: 15 <Enter>

Previous Cycle: 1<TAB>

General Description: <TAB>
_____________________________________________________________________________
Exit    Save     Refresh

COMMAND: E<Enter>                              Press <PF1>H for help   Insert

Save changes before leaving form (Y/N)? Y <Enter>
```

Lab EPI Protocol Edit [LREPI PROTOCOL EDIT] option

This option is use to edit the LAB SEARCH/EXTRACT PROTOCOL file. The option is located on the Lab EPI Primary Menu [LREPI SEARCH EXTRACT MENU].

Example: How to use the Lab EPI Protocol Edit [LREPI PROTOCOL EDIT] option

```
Protocol Parameters Setup Definition


PROTOCOL: LREPI<Enter>

Title: Emerging Pathogens Initiative (EPI)         Message Size: 32000

Report Mail Group: EPI-REPORT

Send Alert: YES

Send Alert To

DOE,Jane
```

Antimicrobial Link Update [LREPILK] option:

This option is use to link the ANTIMICROBIAL SUSCEPIBILTY file (#62.06) with the WKLD CODE file (#64). (*See the EPI Roll Up Modifications User Manual, Appendix-A section of this manual for an example on how to use this option).*

Emerging Pathogens Names and Reference Numbers

This chart lists the 23 emerging pathogens names and reference numbers:

EMERGING PATHOGENS	EMERGING PATHOGENS
All Enterococci (Reference #23) **(NEW)**	Hepatitis C Antibody Positive (Reference #2)
All *Staphylococcus aureus* (Reference #18) **(NEW)**	Legionella (Reference #7) **Note:** The **new** Legionella Urinary Antigen test has been added to the existing Legionella test criteria.
All *Streptococcus pneumoniae* (Reference #22) **(NEW)**	Leishmaniasis (Reference #14)
Candida (Reference #8)	Malaria (Reference #11)
Clostridium difficle (Reference #4)	Methicillin - resistant *Staphylococcus aureus* (MRSA) (Reference #19) **(NEW)**
Creutzfeldt-Jakob Disease (CJD) (Reference #13)	Penicillin - Resistant Pneumococcus (Reference #3)
Cryptosporidium (Reference #9)	Streptococcus-Group A (Reference #6)
Dengue (Reference #12)	Tuberculosis (Reference #5)
E. coli O157:H7 (Reference #10)	Vancomycin-Resistant Coagulase Negative *Staphylococci/Staph* epi (VRSE) (Reference #21) **(NEW)**
Hepatitis A Antibody Positive (Reference #16)	Vancomycin-Resistant Enterococcus (VRE) (Reference #1)
Hepatitis B Positive (Reference #17)	Vancomycin-Resistant *Staphylococcus aureus* (VRSA) (Reference #20) **(NEW)**
Not Positive for Hepatitis C Antibody OR Hepatitis C Antibody NEG (Reference #15)	

Lab EPI Parameter Setup [LREPI PARAMETER SETUP] option Input Screen Definitions

LABORATORY EPI PARAMETERS INPUT SCREEN PROMPTS:	LABORATORY EPI PARAMETERS INPUT SCREEN PROMPTS DEFINITIONS:
Name:	The LAB SEARCH/EXTRACT file (#69.5), Name field (#69.5.01) is **modified** to include the following 6 **new** emerging pathogens entries. • All *Staphylococcus aureus* (Reference #18) • Methicillin-Resistant *Staphylococcus aureus* (MRSA) (Reference #19) • Vancomycin-Resistant *Staphylococcus aureus* (VRSA) (Reference #20) • Vancomycin-Resistant Coagulase Negative *Staphylococci/Staph* EPI (VRSE) (Reference #21) • All *Streptococcus pneumoniae* (Reference #22) • All Enterococci (Reference #23) Answer with the EPI name or reference number
Inactive:	This prompt is **renamed** from ACTIVE to INACTIVE. This prompt is used to define if this entry is active or not. '1' or 'YES' indicates that this is an inactive entry. '0' or 'NO' indicates that this is an active entry.
Laboratory Test (s):	Consider these synonymous with, chemistry, serology, hematology, and "blood/serum" tests. Results anticipated to be found here would have had a test done under the chemistry/hematology accession areas, even if physically performed in microbiology and other areas. Select tests from the LABORATORY TEST file (#60).
Indicator:	Select the code that will determine how to match lab results. '1' FOR Use Reference Ranges '2' FOR Contains '3' FOR Greater Than '4' FOR Less Than '5' FOR Equal To **Note:** This **new** INDICATOR field (#69.55,1), located under ANTIMICROBIL SUSCEPTIBILITY sub-field (#69.55) is FOR FUTURE USE ONLY.
Value:	Positive, etc. Answer must be 1-15 characters in length. This is a Free Text field.
ICD-9:	ICD-9 standardized code used nationwide in federal and non-federal/private health care facilities. Select from the ICDM-9 DIAGNOSIS file (#80).
ICD9 Description:	Title of ICD diagnosis
ICD10 Description:	Title of ICD diagnosis
ICD-10:	ICD-10 standardized code used nationwide in federal and non-federal/private health care facilities. Select from the ICDM-10 DIAGNOSIS file (#80).

Lab EPI Parameter Setup [LREPI PARAMETER SETUP] option Input Screen Definitions (continued)

LABORATORY EPI PARAMETERS INPUT SCREEN PROMPTS:	LABORATORY EPI PARAMETERS INPUT SCREEN PROMPTS DEFINITIONS:
Selected Etiology:	Consider synonymous with organism, final microbial diagnosis/isolate. Select from the ETIOLOGY FIELD file (#61.2).
Selected SNOMED codes:	Answer with SNOMED CODES You may enter a new SNOMED CODE, if you wish. Answer must be 1-15 characters in length.
Antimicrobial Susceptibility:	Enter the Antimicrobial that will be used in screening out sensitive Etiologies (e.g., "Vancomycin" for Vancomycin Resistant Enterococcus). Select from the ANTIMICROBIAL SUSCEPTIBILITY file (#62.6).
NLT Code:	Displays the associated NLT code if linked. If no NLT Code is displayed use the Antimicrobial Link Update option.
NLT Description:	Displays the Description of the linked NLT code.
Topography Selection:	Enter a date to screen out patients born before the date entered. Examples of Valid Dates: JAN 20 1957 or 20 JAN 57 or 1/20/57 or 012057 T (for TODAY), T+1 (for TOMORROW), T+2, T+7, etc. T-1 (for YESTERDAY), T-3W (for 3 WEEKS AGO), etc.
Include:	Selection of Topography screens all others out except the ones selected. For "ALL" leave blank. Not to be used in conjunction with the exclude Topography selection. Select from the TOPOGRAPHY file (#61).
Exclude:	Select the Topography to screen out. Not to be used in conjunction with the Include Topography selection. Select from the TOPOGRAPHY file (#61).
First Encounter:	Limits the output to the first encounter for the patient. Otherwise list all encounters. Choose: '1' FOR YES '0' FOR NO
Follow PTF:	Indicates if the PTF record will be followed until a discharge has been entered. Choose: '1' FOR YES '0' FOR NO
Before Date Of Birth:	Enter a date to screen out patients born before the date entered. Examples of Valid Dates: JAN 20 1957 or 20 JAN 57 or 1/20/57 or 012057 T (for TODAY), T+1 (for TOMORROW), T+2, T+7, etc. T-1 (for YESTERDAY), T-3W (for 3 WEEKS AGO), etc.

Lab EPI Parameter Setup [LREPI PARAMETER SETUP] option Input Screen Definitions (continued)

LABORATORY EPI PARAMETERS INPUT SCREEN PROMPTS:	LABORATORY EPI PARAMETERS INPUT SCREEN PROMPTS DEFINITIONS:
After Date Of Birth:	A birthrate to screen patients (i.e., patients DOB after 1/1/1950).
Select SEX:	FOR FUTURE USE ONLY.
Run Date:	Date that the last Auto EPI processed.
Protocol:	This defines the protocol associated with the parameters. This prompt has been **modified** to be UNEDITABLE.
Run Cycle:	Enter the date that the last Auto EPI processed.
Previous Cycle:	This **new** field is displayed on input screen page 5 of 5. By entering a number here the Lab search engine knows to look at a previous cycle for updates to data. How far back it looks is based on the cycle and number entered. For example if the cycle is monthly and the previous cycle is 1, then the search engine will also search 1 month back for data. This **new** field is UNEDITABLE.
Lag Days:	Defines the Lag Days parameter as 15 for all 23 emerging pathogens. Lag Days for the six **new** EPIs has been defined as 15 with the release of the new EPI software.
General Description:	To review or edit the General Description prompt use the **<Tab>** key.

Lab EPI Parameter Setup [LREPI PARAMETER SETUP] option

The following information **must** be adhered to as recommended to ensure a successful implementation and utilization of the software:

NOTE: There may be more etiologies that fit the description/definition than just the ones that load automatically as part of the EPI Roll Up Modification software.

NOTE: It is highly recommended that the Laboratory Information Manager (LIM), a representative from the Microbiology section (director, supervisor, or technologist) and a Total Quality Improvement/Quality Improvement/Quality Assurance (TQI/QI/QA) staff (or person at the facility with similar function) be assigned the Lab EPI Primary Menu [LREPI SEARCH EXTRACT MENU]. These will be the individual(s) responsible for initially setting the Lab EPI parameters descriptions and doing periodic reviews of the parameters descriptions to assure they are current.

The Lab EPI Parameter Setup [LREPI PARAMETER SETUP] option is used to setup local parameters for the national emerging pathogens. Each emerging pathogen descriptions **must** be reviewed **prior** to setting up the Lab EPI parameters.

NOTES:

There are a number of different ways that sites have chosen to enter results into the VistA database. As long as the results are in a retrievable format (straight from the VistA database without additional manual input needed), how it is entered is **not** of significance to the Emerging Pathogen Initiative. However, two preferred methods make it easy to capture the data. Please reference the Helpful Hints section of this guide for the two preferred methods.

Site-specific spelling or alternate spelling for data entries **must** be consistent to guarantee accurate data capture.

The Lab EPI Parameter Setup [LREPI PARAMETER SETUP] option, Lag Day parameter **MUST** be pre-defined as **15** for ALL national emerging pathogens.

NOTE: If a lab test needs to be entered more than once in the parameter set up for a particular lab EPI pathogen name (e.g., because there is more than one test result that may meet the definition), the second and subsequent tests must be placed in quotes (“ ”). Even though the “ ” marks are used to enter the data, they don’t appear in the final product. This process can be done unlimited times for one set-up.

The Lab EPI Parameter Setup [LREPI PARAMETER SETUP] option input screen examples display how to setup EPI parameters (i.e., including the 6 **new** emerging pathogens. Several of the Lab EPI Parameter Setup [LREPI PARAMETER SETUP] option input screen examples display partially pre-populated entries. The ETIOLOGY FIELD file (#61.2) site-specific data entries are used to partially pre-populate the fields in the LAB SEARCH/EXTRACT file (#69.5). However, further data entries are required for site-specific data. Additional data entries can be added or deleted to meet your site-specific needs.

New Legionella Urinary Antigen Test

The **newer** Legionella Urinary Antigen test is available with this release of EPI. The LAB EPI parameter setup for the newer test is POSITIVE FOR LEGIONELLA PNEUMOPHILA. (see helpful hints for *Clostridium difficile* in Appendix B.)

LAB SEARCH/EXTRACT file (#69.5) Entries and Parameter Setup Examples

The following table (first column) contains the **6 new** emerging pathogens added to LAB SEARCH/EXTRACT file (#69.5). The (second column) contains the Lab EPI parameter setup example entries for the emerging pathogens: **Note:** The LAB EPI parameter setup entries are ONLY examples, as sites may have different names for tests. The table (second column) examples DOES NOT use the indicator mechanism of whether the result CONTAINS the POS or is EQUAL TO the POS, etc.

LAB SEARCH/EXTRACT file (#69.5) Emerging Pathogen 6 New Entries:	LAB EPI Parameter Setup Example Entries:
All Enterococci (Reference #23)	ENTEROCOCCUS STREP D ENTEROCOCCUS ENTEROCOCCUS (STREPT. FAECALIS-GROUP) ENTEROCOCCUS FAECALIS ENTEROCOCCUS DURANS ENTEROCOCCUS FAECIUM ENTEROCOCCUS AVIUM **Note:** These are just samples. There are many other named species of coagulase negative staphylococci.
All *Staphylococcus aureus* (Reference #18):	STAPHYLOCOCCUS AUREUS STAPHYLOCOCCUS AUREUS (MRSA) STAPHYLOCOCCUS AUREUS (VRSA)
All *Streptococcus pneumoniae* (Reference #22):	STREPTOCOCCUS PNEUMONIAE DIPLOCOCCUS PNEUMOCOCCUS
Methicillin - Resistant *Staphylococcus aureus* (MRSA) (Reference #19):	STAPHYLOCOCCUS AUREUS STAPHYLOC+ OCCUS AUREUS (MRSA)
Vancomycin-Resistant Coagulase Negative *Staphylococci/Staph* epi (VRSE) (Reference #21):	STAPHYLOCOCCUS (COAGULASE NEGATIVE) STAPHYLOCOCCUS (COAGULASE NEGATIVE) STAPHYLOCOCCUS EPIDERMIDIS STAPHYLOCOCCUS HAEMOLYTICUS STAPHYLOCOCCUS SAPROPHYTICUS STAPHYLOCOCCUS SALIVARIUS STAPHYLOCOCCUS SIMULANS STAPHYLOCOCCUS SP **Note:** These are just samples. There are many other named species of coagulase negative staphylococci.
Vancomycin-Resistant *Staphylococcus aureus* (VRSA) (Reference #20)	STAPHYLOCOCCUS AUREUS STAPHYLOCOCCUS AUREUS (VRSA)

All Enterococci (Reference #23)

The *enterococci* are a group of bacteria that can cause serious disease in humans, including blood stream infections, urinary tract infections, wound infections, endocarditis and even death. As with many other organisms that cause disease in humans, resistance to antibiotics is emerging in the enterococci. The presence of antibiotic resistance creates a challenge in treatment of infections with this organism. In order to determine the prevalence of antibiotic resistance, a baseline of occurrence of ALL enterococci needs to be obtained. This particular EPI pathogen setting has been created to identify ALL culture positive isolates of enterococci from any specimen site in any patient/client receiving care within the Veterans Health Administration (VHA).

NOTE: Even specimens that have been obtained from patients (not the environment) as part of an epidemiologic prevalence study or survey should be included if they are present in the VistA laboratory package results from your site.

The results from this EPI pathogen setting will be coupled with the results from Reference #1 (Vancomycin-Resistant Enterococci [VRE]) to help determine the percentage of all isolates of enterococci that have vancomycin resistance.

Example: Lab EPI Parameter Setup for All Enterococci

```
                              Lab EPI Primary Menu

ENH       Lab EPI Manual Run (Enhanced)
VR        Print Detailed Verification Report
LO        Local Pathogen Menu ...
PI        Pathogen Inquiry
UP        Lab EPI Parameter Setup
          Lab EPI Protocol Edit
LK        Antimicrobial Link Update


Select Lab EPI Primary menu Option: UP<Enter> Lab EPI Parameter Setup

Select LAB EPI NAME: ?<Enter>
 Answer with LAB EPI NAME, or REFERENCE NUMBER
 Do you want the entire 23-Entry LAB EPI List? Y  (Yes)<Enter>
Choose from:

   ALL ENTEROCOCCI
   ALL STAPHYLOCOCCUS AUREUS
   ALL STREPTOCOCCUS PNEUMONIAE
   CANDIDA
   CLOSTRIDIUM DIFFICILE
   CREUTZFELDT-JAKOB DISEASE
   CRYPTOSPORIDIUM
   DENGUE
   E. COLI 0157:H7
   HEPATITIS A ANTIBODY POS
   HEPATITIS B POS
   HEPATITIS C ANTIBODY NEG
   HEPATITIS C ANTIBODY POS
   LEGIONELLA
   LEISHMANIASIS
   MALARIA
   METH-RES STAPH AUREUS
   PEN-RES PNEUMOCOCCUS
   STREPTOCOCCUS GROUP A
   TUBERCULOSIS
   VANC-RES COAG NEG STAPH
   VANC-RES ENTEROCOCCUS
   VANC-RES STAPH AUREUS (VRSA)

Select LAB EPI NAME: ALL ENTEROCOCCI<Enter>
```

```
             LABORATORY EPI PARAMETERS INPUT SCREEN   Page 1 of 5

NAME: ALL ENTEROCOCCI                                      INACTIVE: NO
_____________________________________________________________________________

Laboratory Test(s)              Indicator                 Value
<Enter>

ICD Coding System [ICD-9 or ICD-10]? (9/10):<RET>

ICD Code             Cd Set                    ICD Description
 <Enter>
_____________________________________________________________________________
_
Exit     Save     Next Page     Refresh

Enter a command or '^' followed by a caption to jump to a specific field.

COMMAND: N<Enter>                                Press <PF1>H for help
Insert
```

```
          LABORATORY EPI PARAMETERS INPUT SCREEN        Page 2 of 5

NAME: ALL ENTEROCOCCI                                      INACTIVE: NO
_____________________________________________________________________________

Selected Etiology                            Selected Snomed Codes

ENTEROCOCCUS
STREP D ENTEROCOCCUS
ENTEROCOCCUS (STREPT. FAECALIS-GROUP)
ENTEROCOCCUS FAECALIS
ENTEROCOCCUS DURANS
ENTEROCOCCUS FAECIUM
ENTEROCOCCUS AVIUM

Note: These are just samples; there are many other named species
eneterococci. You should review these and add/delete as appropriate based on
the description definition provided in the EPI Technical and User Guide. To
enter additional etiologies please see (Appendix-A, How to add an entry using
the Lab EPI Parameter Setup [LREPI PARAMTER SETUP] option).


Antimicrobial Susceptibility     NLT Code       NLT Description
<Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

Enter a command or '^' followed by a caption to jump to a specific field.

COMMAND: N<Enter>                               Press <PF1>H for help    Insert
```

Example: How to add additional etiology/etiologies

NOTE: The following LABORATORY EPI PARAMETERS INPUT SCREEN (i. e., Page 2 of 5) is an example on how to add additional etiology/etiologies (organisms) entries for this emerging pathogen. This functionality causes the added etiology (organism) to appear and the next line will be a blinking cursor. At this point if you have additional etiologies (organisms) to add, just type them in and repeat the process. OR, if you have finished adding etiology/etiologies (organisms) entries, just press the <Enter>key to proceed with the process.

```
          LABORATORY EPI PARAMETERS INPUT SCREEN        Page 2 of 5

NAME: ALL ENTEROCOCCI                                          ACTIVE: NO
_____________________________________________________________________________

Selected Etiology                              Selected Snomed Codes

Note: To add additional etiology/etiologies for this emerging pathogen type
in the following etiology and select from the following entries.

Example: Enteroc<RET



Antimicrobial Susceptibility     NLT Code       NLT Description



1       ENTEROCOCCUS        49990P
2       ENTEROCOCCUS  (STREPT. FAECALIS-GROUP D)       6789
3       ENTEROCOCCUS AVIUM       L1E603
4       ENTEROCOCCUS CASSELIFLAVUS       L1E604
5       ENTEROCOCCUS DURANS       L1E605
6       ENTEROCOCCUS FAECALIS       L1E601
7       ENTEROCOCCUS FAECIUM       L1E602
8       ENTEROCOCCUS GALLINARUM       L1E606


Choose 1-8 or '^' to quit: 8 <Enter>
_____________________________________________________________________________
ENTEROCOCCUS GALLINARUM       L1E606
  Are you adding 'ENTEROCOCCUS GALLINARUM' as a new ETIOLOGY? No//Y <Enter>
```

```
            LABORATORY EPI PARAMETERS INPUT SCREEN       Page 3 of 5
NAME: ALL ENTEROCOCCI                                    INACTIVE: NO
_____________________________________________________________________________
_
                          Topography Selection

Include                                 Exclude
<Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh
Enter a command or '^' followed by a caption to jump to a specific field.
COMMAND: N<Enter>                              Press <PF1>H for help    Insert
```

```
              LABORATORY EPI PARAMETERS INPUT SCREEN      Page 4 of 5
NAME: ALL ENTEROCOCCI                                     INACTIVE: NO
_____________________________________________________________________________
FIRST ENCOUNTER:<Enter>                          FOLLOW PTF: YES<Enter>
BEFORE DATE OF BIRTH:<Enter>                     AFTER DATE OF BIRTH:<Enter>
Select SEX:<Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh
Enter a command or '^' followed by a caption to jump to a specific field.
COMMAND: N<Enter>                              Press <PF1>H for help    Insert
```

```
            LABORATORY EPI PARAMETERS INPUT SCREEN     Page 5 of 5
NAME: ALL ENTEROCOCCI                                  INACTIVE: NO
_____________________________________________________________________________
_
Run Date:<Enter>                              Protocol: LREPI<Enter>
Run Cycle: MONTHLY<Enter>                     Lag Days: 15<Enter>
Previous Cycle: <Enter>
General Description:<Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh
Enter a command or '^' followed by a caption to jump to a specific field.
```

```
COMMAND: E<Enter>                          Press <PF1>H for help    Insert
```

All Staphylococcus aureus (Reference #18)

Staphylococcus aureus is a bacterium that causes much disease in humans, including furunculosis, boils, acne, cellulites, pneumonia, toxic shock syndrome, and even death. It has always been a significant pathogen in the community setting, as well as in the healthcare setting where transmission can occur through contact and from the hands of healthcare personnel. The presence of antibiotic resistance creates a challenge in treatment of infections with this organism. In order to determine the prevalence of antibiotic resistance, a baseline of occurrence of ALL *Staphylococcus aureus* needs to be obtained. This particular EPI pathogen setting has been created to identify ALL culture positive isolates of *Staphylococcus aur*eus from any specimen site in any patient/client receiving care within the VHA.

NOTE: Even specimens that have been obtained from patients (not the environment) as part of an epidemiologic prevalence study or survey should be included if they are present in the VistA laboratory package results from your site.

The results from this EPI pathogen setting will be coupled with the results from Reference #19 (MRSA) and Reference #20 (VRSA) to help determine the percentage of all isolates of *Staphylococcus aureus* that have methicillin (oxacillin) resistance and vancomycin resistance.

Lab EPI Parameter setup for All Staphylococcus aureus (Reference #18)

```
                              Lab EPI Primary Menu

ENH       Lab EPI Manual Run (Enhanced)
VR        Print Detailed Verification Report
LO        Local Pathogen Menu ...
PI        Pathogen Inquiry
UP        Lab EPI Parameter Setup
          Lab EPI Protocol Edit
LK        Antimicrobial Link Update


Select Lab EPI Primary menu Option: UP<Enter> Lab EPI Parameter Setup

Select LAB EPI NAME: ?<Enter>
 Answer with LAB EPI NAME, or REFERENCE NUMBER
 Do you want the entire 23-Entry LAB EPI List? Y  (Yes)<Enter>
Choose from:

   ALL ENTEROCOCCI
   ALL STAPHYLOCOCCUS AUREUS
   ALL STREPTOCOCCUS PNEUMONIAE
   CANDIDA
   CLOSTRIDIUM DIFFICILE
   CREUTZFELDT-JAKOB DISEASE
   CRYPTOSPORIDIUM
   DENGUE
   E. COLI 0157:H7
   HEPATITIS A ANTIBODY POS
   HEPATITIS B POS
   HEPATITIS C ANTIBODY NEG
   HEPATITIS C ANTIBODY POS
   LEGIONELLA
   LEISHMANIASIS
   MALARIA
   METH-RES STAPH AUREUS
   PEN-RES PNEUMOCOCCUS
   STREPTOCOCCUS GROUP A
   TUBERCULOSIS
   VANC-RES COAG NEG STAPH
   VANC-RES ENTEROCOCCUS
   VANC-RES STAPH AUREUS (VRSA)

Select LAB EPI NAME: ALL STAPHYLOCOCCUS AUREUS<Enter>
```

```
          LABORATORY EPI PARAMETERS INPUT SCREEN      Page 1 of 5

NAME: ALL STAPHYLOCOCCUS AUREUS                        INACTIVE: NO
_____________________________________________________________________________
_
Laboratory Test(s)              Indicator                 Value
<Enter>

ICD Coding System [ICD-9 or ICD-10]? (9/10):<RET>

ICD Code            Cd Set                    ICD Description
<Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

Enter a command or '^' followed by a caption to jump to a specific field.

COMMAND: N<Enter>          Press <PF1>H for help                      Insert
```

```
           LABORATORY EPI PARAMETERS INPUT SCREEN         Page 2 of 5

NAME: ALL STAPH AUREUS                                   INACTIVE: NO
_____________________________________________________________________________

Selected Etiology                            Selected Snomed Codes
STAPHYLOCOCCUS AUREUS
STAPHYLOCOCCUS AUREUS (MRSA)
STAPHYLOCOCCUS AUREUS (VRSA)<Enter>
Note: You may enter a new etiology, if you wish.
If your facility uses a separate "selected etiology" designation to report
Staphylococcus aureus with resistance to an antibiotic (e.g. Staphylococcus
aureus (MRSA)), be sure to include this etiology in your list of names here
so that the EPI process will acquire all Staphylococcus aureus isolates.

Antimicrobial Susceptibility     NLT Code       NLT Description

<Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

Enter a command or '^' followed by a caption to jump to a specific field.

COMMAND: N<Enter>          Press <PF1>H for help                      Insert
```

```
LABORATORY EPI PARAMETERS INPUT SCREEN             Page 3 of 5

NAME: ALL STAPH AUREUS                                        INACTIVE: NO
_____________________________________________________________________________

                          Topography Selection

Include                                                 Exclude
<Enter>                                                    <Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

Enter a command or '^' followed by a caption to jump to a specific field.

COMMAND: N<Enter>          Press <PF1>H for help              Insert
```

```
LABORATORY EPI PARAMETERS INPUT SCREEN             Page 4 of 5

NAME: ALL STAPH AUREUS                            INACTIVE: NO
_____________________________________________________________________________

FIRST ENCOUNTER: <Enter>                       FOLLOW PTF: YES <Enter>

BEFORE DATE OF BIRTH: <Enter>                  AFTER DATE OF BIRTH: <Enter>

Select SEX: <Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

Enter a command or '^' followed by a caption to jump to a specific field.

COMMAND: N<Enter>                         Press <PF1>H for help    Insert
```

```
LABORATORY EPI PARAMETERS INPUT SCREEN             Page 5 of 5

NAME:  ALL STAPH AUREUS                                       INACTIVE: NO
_____________________________________________________________________________

Run Date: <Enter>                                  Protocol: LREPI<Enter>

Run Cycle: MONTHLY<Enter>                          Lag Days: 15<Enter>

Previous Cycle: <TAB>

General Description: <TAB>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

Enter a command or '^' followed by a caption to jump to a specific field.

COMMAND: S<Enter>          Press <PF1>H for help              Insert
```

All Streptococcus pneumoniae (Reference #22)

Streptococcus pneumoniae is a bacterium that causes serious disease in humans, including pneumonia, bacteremia, meningitis and even death. It is an important pathogen to monitor in that many of the more serious sequelae of infection may be ameliorated with preventive vaccination. As with many other organisms that cause disease in humans, resistance to antibiotics is emerging in this *S. pneumoniae*. The presence of antibiotic resistance creates a challenge in treatment of infections with this organism. In order to determine the prevalence of antibiotic resistance, a baseline of occurrence of ALL *Streptococcus pneumoniae* needs to be obtained. This particular EPI pathogen setting has been created to identify ALL culture positive isolates of *Streptococcus pneumoniae* from any specimen site in any patient/client receiving care within the VHA.

NOTE: Even specimens that have been obtained from patients (not the environment) as part of an epidemiologic prevalence study or survey should be included if they are present in the VistA Laboratory Package results from your site.

The results from this EPI pathogen setting will be coupled with the results from Penicillin-Resistant Pneumococcus (Reference #3) to help determine the percentage of all isolates of *Streptococcus pneumoniae* that have penicillin resistance.

Lab EPI Parameter setup for All Streptococcus pneumoniae (Reference #22)

```
                              Lab EPI Primary Menu

ENH       Lab EPI Manual Run (Enhanced)
VR        Print Detailed Verification Report
LO        Local Pathogen Menu ...
PI        Pathogen Inquiry
UP        Lab EPI Parameter Setup
          Lab EPI Protocol Edit
LK        Antimicrobial Link Update

Select Lab EPI Primary menu Option: UP<Enter> Lab EPI Parameter Setup

Select LAB EPI NAME: ?<Enter>
 Answer with LAB EPI NAME, or REFERENCE NUMBER
 Do you want the entire 23-Entry LAB EPI List? Y  (Yes)<Enter>
Choose from:

   ALL ENTEROCOCCI
   ALL STAPHYLOCOCCUS AUREUS
   ALL STREPTOCOCCUS PNEUMONIAE
   CANDIDA
   CLOSTRIDIUM DIFFICILE
   CREUTZFELDT-JAKOB DISEASE
   CRYPTOSPORIDIUM
   DENGUE
   E. COLI 0157:H7
   HEPATITIS A ANTIBODY POS
   HEPATITIS B POS
   HEPATITIS C ANTIBODY NEG
   HEPATITIS C ANTIBODY POS
   LEGIONELLA
   LEISHMANIASIS
   MALARIA
   METH-RES STAPH AUREUS
   PEN-RES PNEUMOCOCCUS
   STREPTOCOCCUS GROUP A
   TUBERCULOSIS
   VANC-RES COAG NEG STAPH
   VANC-RES ENTEROCOCCUS
   VANC-RES STAPH AUREUS (VRSA)

Select LAB EPI NAME: ALL STREPTOCOCCUS PNEUMONIAE<Enter>
```

```
            LABORATORY EPI PARAMETERS INPUT SCREEN      Page 1 of 5

NAME: ALL STREP PNEUMO                                   INACTIVE: NO
_____________________________________________________________________________
_
Laboratory Test(s)               Indicator                  Value
<Enter>

ICD Coding System [ICD-9 or ICD-10]? (9/10):<RET>

ICD Code             Cd Set                    ICD Description
<Enter>
_____________________________________________________________________________
Exit      Save      Next Page     Refresh

Enter a command or '^' followed by a caption to jump to a specific field.

COMMAND: N<Enter>                              Press <PF1>H for help    Insert
```

```
         LABORATORY EPI PARAMETERS INPUT SCREEN        Page 2 of 5

NAME: ALL STREP PNEUMO                                 INACTIVE: NO
_____________________________________________________________________________

Selected Etiology                          Selected Snomed Codes

STREPTOCOCCUS PNEUMONIAE
DIPLOCOCCUS
PNEUMOCOCCUS
<Enter>

Note:  You may enter a new etiology, if you wish.
Are you adding a new ETIOLOGY? No//<Enter>

Antimicrobial Susceptibility     NLT Code       NLT Description
<Enter>
_____________________________________________________________________________
_
Exit     Save     Next Page     Refresh

Enter a command or '^' followed by a caption to jump to a specific field.

COMMAND: N<Enter>                              Press <PF1>H for help    Insert
```

```
            LABORATORY EPI PARAMETERS INPUT SCREEN      Page 3 of 5

NAME: ALL STREP PNEUMO                                  INACTIVE: NO
_____________________________________________________________________________

                          Topography Selection

Include                                                  Exclude
<Enter>                                                 <Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

Enter a command or '^' followed by a caption to jump to a specific field.

COMMAND: N<Enter>                                 Press <PF1>H for help
Insert
```

```
LABORATORY EPI PARAMETERS INPUT SCREEN                Page 4 of 5

NAME: ALL STREP PNEUMO                                INACTIVE: NO
_____________________________________________________________________________

FIRST ENCOUNTER: <Enter>                             FOLLOW PTF: YES<Enter>

BEFORE DATE OF BIRTH: <Enter>                    AFTER DATE OF BIRTH:<Enter>

Select SEX:<Enter>
_____________________________________________________________________________
_
Exit     Save     Next Page     Refresh

Enter a command or '^' followed by a caption to jump to a specific field.

COMMAND: N<Enter>                               Press <PF1>H for help    Insert
```

```
LABORATORY EPI PARAMETERS INPUT SCREEN                Page 5 of 5

NAME:  ALL STREP PNEUMO                               INACTIVE: NO
_____________________________________________________________________________

Run Date: <Enter>                        Protocol: LREPI<Enter>

Run Cycle: MONTHLY<Enter>                      Lag Days: 15<Enter>

Previous Cycle: <TAB>

General Description: <TAB>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

Enter a command or '^' followed by a caption to jump to a specific field.
```

```
COMMAND: S<Enter>                          Press <PF1>H for help    Insert
```

Candida (Reference #8)

Fungal infections are rising in significance especially in severely ill patients. The same is true for bloodstream infections acquired in the hospital, especially those associated with intravenous lines. Fungal bloodstream infections are increasing in prevalence.

As a marker of bloodstream infections, the fungus *Candida* (and *Torulopsis*) has been chosen as an initial indicator organism. This organism may **not** be a prevalent or significant entity at your site; however, its presence is more likely to be indicative of serious or true infection than other organisms. The fungus *Candida* (and *Torulopsis)* may commonly be isolated from the blood in association with IV lines. Additionally, this yeast is more likely to be associated with nosocomial acquisition than other organisms (i.e., *Staphylococcus aureus* and coagulase negative *Staphylococcus)*, which can cause a number of community acquired syndromes **not** at all related to IV lines.

All episodes of *Candida* (*Torulopsis,* yeast) isolation from blood or a blood source (central line, IV catheter tip, etc.) are being tracked. The VistA Laboratory EPI software has provided a partial pre-populated list of (etiologies/organisms) that fit the description for *Candida* (*Torulopsis,* yeast) to choose. These (etiologies/organisms) should be used, in addition to any site specific (etiologies/organisms) that may also fit the description.

Lab EPI Parameter Setup for CANDIDA

```
                              Lab EPI Primary Menu

ENH       Lab EPI Manual Run (Enhanced)
VR        Print Detailed Verification Report
LO        Local Pathogen Menu ...
PI        Pathogen Inquiry
UP        Lab EPI Parameter Setup
          Lab EPI Protocol Edit
LK        Antimicrobial Link Update


Select Lab EPI Primary menu Option: UP<Enter> Lab EPI Parameter Setup

Select LAB EPI NAME: ?<Enter>
 Answer with LAB EPI NAME, or REFERENCE NUMBER
 Do you want the entire 23-Entry LAB EPI List? Y  (Yes)<Enter>
Choose from:

   ALL ENTEROCOCCI
   ALL STAPHYLOCOCCUS AUREUS
   ALL STREPTOCOCCUS PNEUMONIAE
   CANDIDA
   CLOSTRIDIUM DIFFICILE
   CREUTZFELDT-JAKOB DISEASE
   CRYPTOSPORIDIUM
   DENGUE
   E. COLI 0157:H7
   HEPATITIS A ANTIBODY POS
   HEPATITIS B POS
   HEPATITIS C ANTIBODY NEG
   HEPATITIS C ANTIBODY POS
   LEGIONELLA
   LEISHMANIASIS
   MALARIA
   METH-RES STAPH AUREUS
   PEN-RES PNEUMOCOCCUS
   STREPTOCOCCUS GROUP A
   TUBERCULOSIS
   VANC-RES COAG NEG STAPH
   VANC-RES ENTEROCOCCUS
   VANC-RES STAPH AUREUS (VRSA)

Select LAB EPI NAME: CANDIDA<Enter>
```

```
          LABORATORY EPI PARAMETERS INPUT SCREEN          Page 1 of 5

NAME: Candida                                             INACTIVE: NO
_____________________________________________________________________________

Laboratory Test(s)              Indicator                          Value
<Enter>

ICD Coding System [ICD-9 or ICD-10]? (9/10):<RET>

ICD Code            Cd Set                  ICD Description
<Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                    Press <PF1>H for help
Insert
```

```
          LABORATORY EPI PARAMETERS INPUT SCREEN      Page 2 of 5

NAME: CANDIDA                                             INACTIVE: NO
_____________________________________________________________________________
Selected Etiology                          Selected Snomed Codes
Examples:CANDIDA
         CANDIDA GUILLIERMONDII
         CANDIDA KRUSEI
         CANDIDA PARAPSILOSIS
         CANDIDA PSEUDOTROPICALIS
         CANDIDA STELLATOIDEA
         CANDIDA TROPICALIS
         CANDIDA, NOS
<Enter>
Note: During the post Init, the ETIOLOGY FIELD file (#61.2) was searched to
pre-populate the Etiology field (#3) in the EMERGING PATHOGENS file (#69.5).
Listed above are examples of etiology entries which may have been populated
from your site's file. Additional etiologies may be added or deleted at the
Selected Etiology prompt to meet your site specific needs.

Note: If spelling differences occur within your ETIOLOGY FIELD file (#61.2),
be consistent with your local file and spell the results here, as it is
spelled in your file (even if it is spelled differently in the example). We
are concerned more importantly with data recovery.

Antimicrobial Susceptibility      NLT Code       NLT Description
<Enter>
_____________________________________________________________________________

Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                              Press <PF1>H for help    Insert
```

```
        LABORATORY EPI PARAMETERS INPUT SCREEN        Page 3 of 5

NAME: Candida                                            INACTIVE: NO
_____________________________________________________________________________

                          Topography Selection

Include                                  Exclude
Blood<Enter>                               <Enter>
Bloodstream<Enter>
Catheter Tip<Enter>

Note: These are only suggestions from specimen source code table 007 (see
table 007 in Appendix C). Please add accordingly to your site definition.
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                              Press <PF1>H for help   Insert
```

```
        LABORATORY EPI PARAMETERS INPUT SCREEN          Page 4 of 5

NAME: Candida                                           INACTIVE: NO
_____________________________________________________________________________

FIRST ENCOUNTER:<Enter>                        Follow PTF:YES<Enter>

BEFORE DATE OF BIRTH:<Enter>                   AFTER DATE OF BIRTH:<Enter>

Select SEX:<Enter>
_____________________________________________________________________________
Exit     Save     Refresh

COMMAND: E<Enter>                               Press <PF1>H for help   Insert

Save changes before leaving form (Y/N)?Y<Enter>
```

```
         LABORATORY EPI PARAMETERS INPUT SCREEN        Page 5 of 5

NAME: Candida                                            INACTIVE: NO
_____________________________________________________________________________

Run Date:<Enter>                           Protocol: LREPI<Enter>

Run Cycle: MONTHLY<Enter>                   Lag Days: 15<Enter>

Previous Cycle:

General Description: <TAB>
_____________________________________________________________________________
Exit     Save     Refresh

COMMAND: E<Enter>                              Press <PF1>H for help  Insert
```

```
Save changes before leaving form (Y/N)?<Enter>
```

Clostridium difficile (Reference #4)

Disease associated with the presence of *Clostridium difficile* enterotoxin A can cause significant morbidity, as well as mortality. It is of importance, as its predominant acquisition seems to occur nosocomially. Presence of Clostridial toxin (either enterotoxin A or cytotoxin L) by assay (whether it be EIA, latex agglutination, cytotoxicity of cell culture ± neutralization, or culture of organism with subsequent colony testing) is the best indicator that an inflammatory diarrheal disease is due to presence of *Clostridium difficile*.

Laboratory Services are quite varied as to how they identify the presence of *Clostridium difficile*. Some labs are set up to identify *C. difficile* as the final microbiological (bacterial) etiology of a culture, even if a culture method was not used. Other labs use a final etiology of "see comment" and then enter the results in a free text format. Still others enter the text under a hematology or chemistry format where a reference range and "positive" and "negative" result values can be entered. Wherever the facility lab places the results which are used to demonstrate the presence of toxin-producing *C. difficile*, we need to be able to track them (that means it **must** occur as a retrievable "positive" or "negative" result, or as a "bacterial etiology"). Results in a "Comments" or "Free-text" section are **not** acceptable.

There are a number of different ways that sites have chosen to enter *Clostridium difficile* toxin assay results into the **V*IST*A** database. As long as the toxin assay results are in a retrievable format (straight from the **V*IST*A** database without additional manual input needed), how it is entered is **not** of significance to the Emerging Pathogen Initiative. However, there are two preferred methods that make it easy to capture the data. Please reference the Appendix-B section of this guide for the two methods.

Lab EPI Parameter Setup for CLOSTRIDIUM DIFFICILE

```
                              Lab EPI Primary Menu

ENH       Lab EPI Manual Run (Enhanced)
VR        Print Detailed Verification Report
LO        Local Pathogen Menu ...
PI        Pathogen Inquiry
UP        Lab EPI Parameter Setup
          Lab EPI Protocol Edit
LK        Antimicrobial Link Update


Select Lab EPI Primary menu Option: UP<Enter> Lab EPI Parameter Setup

Select LAB EPI NAME: ?<Enter>
 Answer with LAB EPI NAME, or REFERENCE NUMBER
 Do you want the entire 23-Entry LAB EPI List? Y  (Yes)<Enter>
Choose from:

   ALL ENTEROCOCCI
   ALL STAPHYLOCOCCUS AUREUS
   ALL STREPTOCOCCUS PNEUMONIAE
   CANDIDA
   CLOSTRIDIUM DIFFICILE
   CREUTZFELDT-JAKOB DISEASE
   CRYPTOSPORIDIUM
   DENGUE
   E. COLI 0157:H7
   HEPATITIS A ANTIBODY POS
   HEPATITIS B POS
   HEPATITIS C ANTIBODY NEG
   HEPATITIS C ANTIBODY POS
   LEGIONELLA
   LEISHMANIASIS
   MALARIA
   METH-RES STAPH AUREUS
   PEN-RES PNEUMOCOCCUS
   STREPTOCOCCUS GROUP A
   TUBERCULOSIS
   VANC-RES COAG NEG STAPH
   VANC-RES ENTEROCOCCUS
   VANC-RES STAPH AUREUS (VRSA)

Select LAB EPI NAME: CLOSTRIDIUM DIFFICILE<Enter>
```

```
          LABORATORY EPI PARAMETERS INPUT SCREEN          Page 1 of 5

NAME: CLOSTRIDIUM DIFFICILE                              INACTIVE: NO
_____________________________________________________________________________

Laboratory Test(s)                      Indicator                Value
Clostridium<Enter> difficile toxin        Contains<Enter>
Pos<Enter>

Note: This example is only a suggestion. Please add accordingly to your site
definition.

ICD Coding System [ICD-9 or ICD-10]? (9/10):<RET>

ICD Code             Cd Set                    ICD Description
<Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                              Press <PF1>H for help    Insert
```

```
          LABORATORY EPI PARAMETERS INPUT SCREEN          Page 2 of 5

NAME: CLOSTRIDIUM DIFFICILE                              INACTIVE: NO
_____________________________________________________________________________

Selected Etiology                              Selected Snomed Codes
Clostridium difficile toxin positive<Enter>

Note: This is only a suggestion. Please add accordingly to your site
definition.

Antimicrobial Susceptibility         NLT Code       NLT Description
<Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                                 Press <PF1>H for help
Insert
```

```
          LABORATORY EPI PARAMETERS INPUT SCREEN             Page 3 of 5
NAME: CLOSTRIDIUM DIFFICILE                                  INACTIVE: NO
_____________________________________________________________________________

                          Topography Selection

Include <Enter>                                      Exclude <Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh
COMMAND: N<Enter>                              Press <PF1>H for help    Insert
```

```
        LABORATORY EPI PARAMETERS INPUT SCREEN      Page 4 of 5
NAME: CLOSTRIDIUM DIFFICILE                          INACTIVE: NO
_____________________________________________________________________________

First Encounter:<Enter>                      Follow PTF: YES<Enter>

BEFORE DATE OF BIRTH:<Enter>                 AFTER DATE OF BIRTH:<Enter>

Selected SEX:<Enter>
_____________________________________________________________________________
Exit     Save     Refresh
COMMAND: E<Enter>                                    Press <PF1>H for help
```

```
           LABORATORY EPI PARAMETERS INPUT SCREEN          Page 5 of 5
NAME: CLOSTRIDIUM DIFFICILE                               INACTIVE: NO
_____________________________________________________________________________

Run Date: <Enter>                            Protocol: LREPI<Enter>

Run Cycle: MONTHLY<Enter>                    Lag Days: 15<Enter>

Previous Cycle: <TAB>

General Description: <TAB>
_____________________________________________________________________________
Exit     Save     Refresh
COMMAND: E<Enter>                              Press <PF1>H for help   Insert

Save changes before leaving form (Y/N)?Y<Enter>
```

Creutzfeldt-Jakob Disease (CJD) (Reference #13

Creutzfeldt-Jakob Disease (CJD*)* disease is a rare illness associated with prions. The DVA has chosen to follow this entity because of historic problems with certain blood products used in the private and public health care sectors. The data will be one of a number of ways used to identify changes in trends of incidence of this illness. This task is remarkably complex because of the long incubation period of CJD. There are no specific tests for diagnosis other than central nervous system histology combined with clinical presentation. As such, this entity is followed through ICD coding.

Example: Lab EPI Parameter Setup for CREUTZFELDT-JAKOB DISEASE

```
                              Lab EPI Primary Menu

ENH       Lab EPI Manual Run (Enhanced)
VR        Print Detailed Verification Report
LO        Local Pathogen Menu ...
PI        Pathogen Inquiry
UP        Lab EPI Parameter Setup
          Lab EPI Protocol Edit
LK        Antimicrobial Link Update

Select Lab EPI Primary menu Option: UP<Enter> Lab EPI Parameter Setup

Select LAB EPI NAME: ?<Enter>
 Answer with LAB EPI NAME, or REFERENCE NUMBER
 Do you want the entire 23-Entry LAB EPI List? Y  (Yes)<Enter>
Choose from:

   ALL ENTEROCOCCI
   ALL STAPHYLOCOCCUS AUREUS
   ALL STREPTOCOCCUS PNEUMONIAE
   CANDIDA
   CLOSTRIDIUM DIFFICILE
   CREUTZFELDT-JAKOB DISEASE
   CRYPTOSPORIDIUM
   DENGUE
   E. COLI 0157:H7
   HEPATITIS A ANTIBODY POS
   HEPATITIS B POS
   HEPATITIS C ANTIBODY NEG
   HEPATITIS C ANTIBODY POS
   LEGIONELLA
   LEISHMANIASIS
   MALARIA
   METH-RES STAPH AUREUS
   PEN-RES PNEUMOCOCCUS
   STREPTOCOCCUS GROUP A
   TUBERCULOSIS
   VANC-RES COAG NEG STAPH
   VANC-RES ENTEROCOCCUS
   VANC-RES STAPH AUREUS (VRSA)

Select LAB EPI NAME: CREUTZFELDT-JAKOB DISEASE<Enter>
```

```
          LABORATORY EPI PARAMETERS INPUT SCREEN         Page 1 of 5

NAME:CREUTZFELDT-JAKOB DISEASE                           INACTIVE: NO
_____________________________________________________________________________

Laboratory Test(s)                  Indicator                        Value
<Enter>

ICD Coding System [ICD-9 or ICD-10]? (9/10):<RET>

ICD Code            Cd Set                   ICD Description
046.1               ICD-9                    JAKOB-CREUTZFELDT DIS
<Enter>
_____________________________________________________________________________

Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                            Press <PF1>H for help
Insert

Press <PF1>H for help    Insert
```

```
        LABORATORY EPI PARAMETERS INPUT SCREEN       Page 2 of 5

NAME: CREUTZFELDT-JAKOB DISEASE                       INACTIVE: NO
_____________________________________________________________________________

Selected Etiology                     Selected Snomed Codes<Enter>

Antimicrobial Susceptibility     NLT Code     NLT Description
<Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                            Press <PF1>H for help
Insert
```

```
       LABORATORY EPI PARAMETERS INPUT SCREEN        Page 3 of 5
NAME: CREUTZFELDT-JAKOB DISEASE                        INACTIVE: NO
_____________________________________________________________________________

                          Topography Selection

Include                                  Exclude
<Enter>                                    <Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                            Press <PF1>H for help
Insert
```

```
         LABORATORY EPI PARAMETERS INPUT SCREEN      Page 4 of 5
NAME: CREUTZFELDT-JAKOB DISEASE                        INACTIVE: NO
_____________________________________________________________________________

First Encounter: <Enter>                        Follow PTF: YES<Enter>

BEFORE DATE OF BIRTH: <Enter>                   AFTER DATE OF BIRTH: <Enter>

Select SEX: <Enter>
_____________________________________________________________________________
Exit     Save     Refresh

COMMAND: E<Enter>                             Press <PF1>H for help    Insert
```

```
        LABORATORY EPI PARAMETERS INPUT SCREEN          Page 5 of 5
NAME: CREUTZFELDT-JAKOB DISEASE                         INACTIVE: NO
_____________________________________________________________________________

Run Date:<Enter>                              Protocol: LREPI<Enter>

Run Cycle: MONTHLY<Enter>                      Lag Days:15<Enter>

Previous Cycle: <TAB>

General Description: <TAB>
_____________________________________________________________________________
Exit     Save     Refresh

COMMAND: E<Enter>                               Press <PF1>H for help   Insert

Save changes before leaving form (Y/N)?Y<Enter>
```

Cryptosporidium (Reference #9)

The parasite *Cryptosporidium parvum* is a cause of water-borne diarrheal disease. It has gained recent prominence after evaluation of the outbreak in the greater Milwaukee area in 1993 which is estimated to have affected <400,000 persons. In addition to affecting HIV-infected persons and young children, information exists which demonstrates that the chronically ill, elderly are also a higher risk group than the general population. Microbiology laboratory data (parasitology for most laboratories) as well as ICD coding is used to track this disease, both are narrowly defined parameters.

NOTE: Microsporidiosis is a similar disease; however, the EPI does **not** currently wish to follow this disease process. Microsporidian etiologies should **not** be entered.

NOTE: If a lab test needs to be entered in the parameter set up for a particular lab EPI pathogen name (e.g. because there is more than one test result that may meet the definition), the second and subsequent tests must be placed in quotes (“ ”). Even though the “ ” marks are used to enter the data, they don't appear in the final product. This process can be done unlimited times for one set-up.

A **new** antigen test for Cryptosporidium is FDA approved. If your laboratory uses this test, but does not report the result as an etiology of just the organism name, please refer to Appendix B Helpful Hints for Clostridium difficile to review ways by which these data may be captured.

Example: Lab EPI Parameter Setup for CRYPTOSPORIDIUM

```
                              Lab EPI Primary Menu

ENH       Lab EPI Manual Run (Enhanced)
VR        Print Detailed Verification Report
LO        Local Pathogen Menu ...
PI        Pathogen Inquiry
UP        Lab EPI Parameter Setup
          Lab EPI Protocol Edit
LK        Antimicrobial Link Update


Select Lab EPI Primary menu Option: UP<Enter> Lab EPI Parameter Setup

Select LAB EPI NAME: ?<Enter>
 Answer with LAB EPI NAME, or REFERENCE NUMBER
 Do you want the entire 23-Entry LAB EPI List? Y  (Yes)<Enter>
Choose from:

   ALL ENTEROCOCCI
   ALL STAPHYLOCOCCUS AUREUS
   ALL STREPTOCOCCUS PNEUMONIAE
   CANDIDA
   CLOSTRIDIUM DIFFICILE
   CREUTZFELDT-JAKOB DISEASE
   CRYPTOSPORIDIUM
   DENGUE
   E. COLI 0157:H7
   HEPATITIS A ANTIBODY POS
   HEPATITIS B POS
   HEPATITIS C ANTIBODY NEG
   HEPATITIS C ANTIBODY POS
   LEGIONELLA
   LEISHMANIASIS
   MALARIA
   METH-RES STAPH AUREUS
   PEN-RES PNEUMOCOCCUS
   STREPTOCOCCUS GROUP A
   TUBERCULOSIS
   VANC-RES COAG NEG STAPH
   VANC-RES ENTEROCOCCUS
   VANC-RES STAPH AUREUS (VRSA)

Select LAB EPI NAME: CRYPTOSPORIDIUM<Enter>
```

```
          LABORATORY EPI PARAMETERS INPUT SCREEN       Page 1 of 5

NAME: CRYPTOSPORIDIUM                                  INACTIVE: NO
_____________________________________________________________________________

Laboratory Test(s)                      Indicator                Value
<Enter>

ICD Coding System [ICD-9 or ICD-10]? (9/10):<RET>

ICD Code             Cd Set                    ICD Description
007.8                ICD-9                     PROTOZOAL INTEST DIS N
<Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                             Press <PF1>H for help    Insert
```

```
             LABORATORY EPI PARAMETERS INPUT SCREEN      Page 2 of 5

NAME: CRYPTOSPORIDIUM                                    INACTIVE: NO
_____________________________________________________________________________

Selected Etiology                            Selected Snomed Codes
Cryptosporidium<Enter>

Note: If Cryptosporidium is reported under parasitology, add Cryptosporidium
species at the Etiology prompt.

Antimicrobial Susceptibility         NLT Code       NLT Description
<Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                               Press <PF1>H for help   Insert
```

```
         LABORATORY EPI PARAMETERS INPUT SCREEN        Page 3 of 5

NAME: CRYPTOSPORIDIUM                                   INACTIVE: NO
_____________________________________________________________________________

Topography Selection

Include                                 Exclude
<Enter>                                   <Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                               Press <PF1>H for help   Insert
```

```
          LABORATORY EPI PARAMETERS INPUT SCREEN          Page 4 of 5
NAME: CRYPTOSPORIDIUM                                     INACTIVE: NO
_____________________________________________________________________________
First Encounter:<Enter>                          Follow PTF: YES<Enter>
BEFORE DATE OF BIRTH:<Enter>                     AFTER DATE OF BIRTH:<Enter>
Select SEX:<Enter>
_____________________________________________________________________________
Exit     Save     Refresh
COMMAND: E<Enter>                                      Press <PF1>H for help
```

```
           LABORATORY EPI PARAMETERS INPUT SCREEN      Page 5 of 5
NAME: CRYPTOSPORIDIUM                                     INACTIVE: NO
_____________________________________________________________________________
Run Date:                                  Protocol: LREPI<Enter>
Run Cycle: MONTHLY<Enter>                    Lag Days: 15<Enter>
Previous Cycle: <TAB>
General Description: <TAB>
_____________________________________________________________________________
Exit    Save     Refresh
COMMAND: E<Enter>                             Press <PF1>H for help   Insert
Save changes before leaving form (Y/N)? Y<Enter>
```

Dengue (Reference #12)

The mosquito-borne disease of Dengue Hemorrhagic Fever is a rare but re-emerging infection, especially in the Caribbean. The VA has seen cases of Dengue Hemorrhagic Fever over the last several years. Most of these cases have been in Dengue endemic areas served by the VA. However, as our society becomes more mobile, and the area of Dengue endemncity expands, more cases are likely to occur. Because microbiologic culture is not routinely done and serology can be difficult to track, initially ICD coded diagnoses are used to track this entity.

Example: Lab EPI Parameter Setup for DENGUE

```
                              Lab EPI Primary Menu

ENH       Lab EPI Manual Run (Enhanced)
VR        Print Detailed Verification Report
LO        Local Pathogen Menu ...
PI        Pathogen Inquiry
UP        Lab EPI Parameter Setup
          Lab EPI Protocol Edit
LK        Antimicrobial Link Update

Select Lab EPI Primary menu Option: UP<Enter> Lab EPI Parameter Setup

Select LAB EPI NAME: ?<Enter>
 Answer with LAB EPI NAME, or REFERENCE NUMBER
 Do you want the entire 23-Entry LAB EPI List? Y  (Yes)<Enter>
Choose from:

   ALL ENTEROCOCCI
   ALL STAPHYLOCOCCUS AUREUS
   ALL STREPTOCOCCUS PNEUMONIAE
   CANDIDA
   CLOSTRIDIUM DIFFICILE
   CREUTZFELDT-JAKOB DISEASE
   CRYPTOSPORIDIUM
   DENGUE
   E. COLI 0157:H7
   HEPATITIS A ANTIBODY POS
   HEPATITIS B POS
   HEPATITIS C ANTIBODY NEG
   HEPATITIS C ANTIBODY POS
   LEGIONELLA
   LEISHMANIASIS
   MALARIA
   METH-RES STAPH AUREUS
   PEN-RES PNEUMOCOCCUS
   STREPTOCOCCUS GROUP A
   TUBERCULOSIS
   VANC-RES COAG NEG STAPH
   VANC-RES ENTEROCOCCUS
   VANC-RES STAPH AUREUS (VRSA)

Select LAB EPI NAME: DENGUE<Enter>
```

```
          LABORATORY EPI PARAMETERS INPUT SCREEN        Page 1 of 5

NAME: DENGUE                                            INACTIVE: NO
_____________________________________________________________________________

Laboratory Test(s)                  Indicator               Value
<Enter>

ICD Coding System [ICD-9 or ICD-10]? (9/10):<RET>

ICD Code            Cd Set                    ICD Description
061.                ICD-9                     DENGUE
065.4               ICD-9                     MOSQUITO-BORNE HEM FEVER
<Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                             Press <PF1>H for help    Insert
```

```
            LABORATORY EPI PARAMETERS INPUT SCREEN    Page 2 of 5

NAME: DENGUE                                            INACTIVE: NO
_____________________________________________________________________________

Etiology                           Selected Snomed Codes
<Enter>

Antimicrobial Susceptibility     NLT Code     NLT Description
<Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                              Press <PF1>H for help
Insert
```

```
          LABORATORY EPI PARAMETERS INPUT SCREEN        Page 3 of 5

NAME: DENGUE                                            INACTIVE: NO
_____________________________________________________________________________

                          Topography Selection

Include                                  Exclude
<Enter>                                    <Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                              Press <PF1>H for help
Insert
```

```
          LABORATORY EPI PARAMETERS INPUT SCREEN       Page 4 of 5
NAME: DENGUE                                              INACTIVE: NO
_____________________________________________________________________________
First Encounter: <Enter>                          Follow PTF: YES <Enter>
BEFORE DATE OF BIRTH:<Enter>                      AFTER DATE OF BIRTH:<Enter>
Select SEX:<Enter>
_____________________________________________________________________________
Exit     Save     Refresh
COMMAND: E<Enter>                                          Press <PF1>H for help
```

```
          LABORATORY EPI PARAMETERS INPUT SCREEN      Page 5 of 5
NAME: DENGUE                                           INACTIVE: NO
_____________________________________________________________________________
Run Date:<Enter>                                 Protocol: LREPI<Enter>
Run Cycle: MONTHLY<Enter>                         Lag Days: 15<Enter>
Previous Cycle: <TAB>
General Description: <TAB>
_____________________________________________________________________________
Exit    Save     Refresh
COMMAND: E<Enter>                                  Press <PF1>H for help   Insert
Save changes before leaving form (Y/N)? Y<Enter>
```

E. coli O157:H7 (Reference #10)

Escherichia coli serotype O157 (*E. coli* O157) has gained prominence as a food-borne illness with potentially life threatening complications coming from the associated Hemolytic Uremic Syndrome. Not all sites routinely culture for the presence of *E. coli* O157 in stool specimens submitted for culture. In addition, *E. coli* O157 is not a microbiologic (bacterial) etiology pre-existing in the most recent - national microbiology lab package. In order to nationally track cultures positive for this organism, each site will need to make an etiology specific for *E-coli* O157 (e.g. *Escherichia coli* O157, *E. coli* O157, *E. coli* serotype O157, etc.). Some sites have already done this and will **not** need to generate a new entry.

NOTE: Entering *Escherichia coli* or *E. coli* from the bacterial etiology and then entering "serotype O157" or "O157", under the "Comments" or "Free Text" section is **not** acceptable, as it will **not** allow the data to be retrieved nationally.

All subsequent positive cultures for this organism **must** then be entered under the new etiology.

Other serotypes of *E. coli* will also cause disease, but we will not currently track these as O157 causes by far, the majority of cases of interest for the national database.

The EPI criterion is dependent on your site. If your site already has an etiology that will select positive cultures for *E. coli* O157, then enter that etiology. However, if your site had to enter a new etiology to accommodate the EPI criteria, be sure to enter this new etiology here.

NOTE: If a lab test needs to be entered in the parameter set up for a particular lab EPI pathogen name (e.g. because there is more than one test result that may meet the definition), the second and subsequent tests must be placed in quotes (" "). Even though the " " marks are used to enter the data, they don't appear in the final product. This process can be done unlimited times for one set-up.

Example: Lab EPI Parameter Setup for E. COLI 0157:H7

```
                              Lab EPI Primary Menu

ENH       Lab EPI Manual Run (Enhanced)
VR        Print Detailed Verification Report
LO        Local Pathogen Menu ...
PI        Pathogen Inquiry
UP        Lab EPI Parameter Setup
          Lab EPI Protocol Edit
LK        Antimicrobial Link Update

Select Lab EPI Primary menu Option: UP<Enter> Lab EPI Parameter Setup

Select LAB EPI NAME: ?<Enter>
 Answer with LAB EPI NAME, or REFERENCE NUMBER
 Do you want the entire 23-Entry LAB EPI List? Y  (Yes)<Enter>
Choose from:

   ALL ENTEROCOCCI
   ALL STAPHYLOCOCCUS AUREUS
   ALL STREPTOCOCCUS PNEUMONIAE
   CANDIDA
   CLOSTRIDIUM DIFFICILE
   CREUTZFELDT-JAKOB DISEASE
   CRYPTOSPORIDIUM
   DENGUE
   E. COLI 0157:H7
   HEPATITIS A ANTIBODY POS
   HEPATITIS B POS
   HEPATITIS C ANTIBODY NEG
   HEPATITIS C ANTIBODY POS
   LEGIONELLA
   LEISHMANIASIS
   MALARIA
   METH-RES STAPH AUREUS
   PEN-RES PNEUMOCOCCUS
   STREPTOCOCCUS GROUP A
   TUBERCULOSIS
   VANC-RES COAG NEG STAPH
   VANC-RES ENTEROCOCCUS
   VANC-RES STAPH AUREUS (VRSA)

Select LAB EPI NAME: E. COLI 0157:H7<Enter>
```

```
          LABORATORY EPI PARAMETERS INPUT SCREEN         Page 1 of 5

NAME: E. COLI 0157:H7                                   INACTIVE: NO
_____________________________________________________________________________

Laboratory Test(s)                  Indicator                          Value
<Enter>

ICD Coding System [ICD-9 or ICD-10]? (9/10):<RET>

ICD Code             Cd Set                    ICD Description
<Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                                          Press <PF1>H for
help
```

```
          LABORATORY EPI PARAMETERS INPUT SCREEN         Page 2 of 5

NAME: E. COLI 0157:H7                                  INACTIVE: NO
_____________________________________________________________________________

Selected Etiology
Example: Escherichia coli O157<Enter>

Note: Entering Escherichia coli or E. coli from the bacterial etiology and
then entering "serotype O157" or "O157", under the Comments section or in
free text is not acceptable as it will not allow the data to be retrieved
nationally).

Antimicrobial Susceptibility          NLT Code       NLT Description
<Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                                       Press <PF1>H for help
```

```
           LABORATORY EPI PARAMETERS INPUT SCREEN    Page 3 of 5

NAME: E. COLI 0157:H7                                     INACTIVE: NO
_____________________________________________________________________________

                          Topography Selection

Include                                        Exclude
<Enter>                                          <Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh
```

```
COMMAND: N<Enter>                                    Press <PF1>H for help
Insert
```

```
          LABORATORY EPI PARAMETERS INPUT SCREEN        Page 4 of 5
NAME: E. COLI 0157:H7                                   INACTIVE: NO
_____________________________________________________________________________
First Encounter: <Enter>                      Follow PTF: YES<Enter>
BEFORE DATE OF BIRTH: <Enter>                 AFTER DATE OF BIRTH: <Enter>
Select SEX: <Enter>
_____________________________________________________________________________
Exit     Save     Refresh
COMMAND: E<Enter>                                      Press <PF1>H for help
```

```
          LABORATORY EPI PARAMETERS INPUT SCREEN        Page 5 of 5
NAME: E. COLI 0157:H7                                   INACTIVE: NO
_____________________________________________________________________________
Run Date: <Enter>                             Protocol: LREPI<Enter>
Run Cycle: MONTHLY<Enter>                     Lag Days: 15<Enter>
Previous Cycle: <TAB>
General Description: <TAB>
_____________________________________________________________________________
Exit    Save     Refresh
COMMAND: E<Enter>                                 Press <PF1>H for help   Insert
Save changes before leaving form (Y/N)? Y<Enter>
```

Hepatitis A Antibody Positive (Reference #16)

One of the goals of the Healthy People 2000 and 2010 initiatives of the Department of Health and Human Services is to decrease certain infectious diseases, especially those that are vaccine preventable. Acute infection with Hepatitis A is one such disease that has specific objectives present in the Healthy People objectives.

The purpose of surveillance for this disease is to record all cases as diagnosed by the laboratory. A positive laboratory test for the presence of Hepatitis A virus is needed. Usually this criterion is met by presence of antibodies to the Hepatitis A virus. In particular, the IgM antibody against hepatitis A is the test most commonly used for determining acute hepatitis A infection. There are other antibody tests available for Hepatitis A. These tests usually indicate past infection with hepatitis A (or in some circumstances may indicate evidence of previous vaccination); usually the IgG antibody against Hepatitis A, OR the Total antibody against Hepatitis A (a test that does not discriminate between IgM or IgG, but can show evidence of exposure) are the tests done for this purpose.

What we are looking for is evidence of presence of ANY antibody to Hepatitis A, whether it is recorded as “weakly positive,” “strongly positive,” “positive,” or “present.” If other phrases are used to describe a test result, one should be able to differentiate responses upon entry into the program. As an example, the words “present” and “not present” might be used to designate “positive” vs. “negative”, however, they would not allow retrieval of only the positive cases as both phrases contain the word, “present.” Also, numerical values of results (e.g. at titer value) are not readily useable. Therefore, parameters for this are to be laboratory based and should include all tests for antibodies against hepatitis A (see examples above).

Also, some institutions will use ICD-9 coding and problem lists as a means to abstract data on this disease. DO NOT use these methods for this particular program. We are only abstracting laboratory confirmed cases of antibodies against Hepatitis A.

NOTE: If a lab test needs to be entered in the parameter set up for a particular lab EPI pathogen name (e.g. because there is more than one test result that may meet the definition), the second and subsequent tests must be placed in quotes (“ ”). Even though the “ ” marks are used to enter the data, they don't appear in the final product. This process can be done unlimited times for one set-up.

Example: Lab EPI Parameter Setup for HEPATITIS A ANTIBODY POS

```
                              Lab EPI Primary Menu

ENH       Lab EPI Manual Run (Enhanced)
VR        Print Detailed Verification Report
LO        Local Pathogen Menu...
PI        Pathogen Inquiry
UP        Lab EPI Parameter Setup
          Lab EPI Protocol Edit
LK        Antimicrobial Link Update

Select Lab EPI Primary menu Option: UP<Enter> Lab EPI Parameter Setup

Select LAB EPI NAME: ?<Enter>
 Answer with LAB EPI NAME, or REFERENCE NUMBER
 Do you want the entire 23-Entry LAB EPI List? Y  (Yes)<Enter>
Choose from:

   ALL ENTEROCOCCI
   ALL STAPHYLOCOCCUS AUREUS
   ALL STREPTOCOCCUS PNEUMONIAE
   CANDIDA
   CLOSTRIDIUM DIFFICILE
   CREUTZFELDT-JAKOB DISEASE
   CRYPTOSPORIDIUM
   DENGUE
   E. COLI 0157:H7
   HEPATITIS A ANTIBODY POS
   HEPATITIS B POS
   HEPATITIS C ANTIBODY NEG
   HEPATITIS C ANTIBODY POS
   LEGIONELLA
   LEISHMANIASIS
   MALARIA
   METH-RES STAPH AUREUS
   PEN-RES PNEUMOCOCCUS
   STREPTOCOCCUS GROUP A
   TUBERCULOSIS
   VANC-RES COAG NEG STAPH
   VANC-RES ENTEROCOCCUS
   VANC-RES STAPH AUREUS (VRSA)

Select LAB EPI NAME: HEPATITIS A ANTIBODY POS<Enter>

Note: The four hepatitis pathogens (Hepatitis C Antibody Positive, Hepatitis
C Antibody Negative, Hepatitis A Antibody Positive and Hepatitis B Positive)
are tightly integrated with the Clinical Reminder data stream that the EPI
national roll-up accomplishes (see combined products VistA Laboratory EPI
Hepatitis Extract Patch LR*5.2*260, PXRM*1.5*1, PSJ*5*48 and Patch PSO*7*45)
and changes in the EPI parameters may need to have concomitant changes in the
Clinical Reminder data being passed over to the EPI national roll-up—
concurrent review (and changes, if necessary), should be undertaken in
conjunction with the local Clinical Applications Coordinator for the Clinical
```

```
Reminder package to assure that appropriate mapping of Health factors to the
national pathogens has occurred.
```

```
              LABORATORY EPI PARAMETERS INPUT SCREEN     Page 1 of 5

NAME: HEPATITIS A ANTIBODY POS                            INACTIVE: NO
_____________________________________________________________________________

Laboratory Test(s)                    Indicator                Value
HEP A ANTIBODY-TOTAL<Enter>             Equal To<Enter>
REACTIVE<Enter>
HEP A ANTIBODY(IgM)<Enter>              Contains<Enter>             POS<Enter>
HEPATITIS A AB(IGG)D/C(2/99)<Enter>     Contains<Enter>             POS<Enter>
"HEPATITIS A AB(IGG)D/C(2/99)"<Enter>   Contains<Enter>             Pos<Enter>
"HEPATITIS A AB(IGG)D/C(2/99)"<Enter>   Contains<Enter>             P<Enter>
"HEPATITIS A AB(IGG)D/C(2/99)"<Enter>   Contains<Enter>             p<Enter>
"HEP A ANTIBODY-TOTAL"<Enter>           Equal To<Enter>             R<Enter>

Note: Enter the appropriate test for your site, and how the results are
reported.

ICD Coding System [ICD-9 or ICD-10]? (9/10):<RET>

ICD Code             Cd Set                    ICD Description

<Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                              Press <PF1>H for help    Insert
```

```
            LABORATORY EPI PARAMETERS INPUT SCREEN      Page 2 of 5

NAME: HEPATITIS A ANTIBODY POS                          INACTIVE: NO
_____________________________________________________________________________

Selected Etiology                                Selected Snomed Codes
<Enter>

Antimicrobial Susceptibility          NLT Code       NLT Description
<Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                              Press <PF1>H for help    Insert
```

```
         LABORATORY EPI PARAMETERS INPUT SCREEN        Page 3 of 5

NAME: HEPATITIS A ANTIBODY POS                          INACTIVE: NO
_____________________________________________________________________________
                          Topography Selection

Include                                 Exclude
<Enter>                                   <Enter>
_____________________________________________________________________________
```

```
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                              Press <PF1>H for help    Insert
```

```
           LABORATORY EPI PARAMETERS INPUT SCREEN       Page 4 of 5
NAME: HEPATITIS A ANTIBODY POS                          INACTIVE: NO
_____________________________________________________________________________
First Encounter: <Enter>                          Follow PTF: YES<Enter>
BEFORE DATE OF BIRTH: <Enter>                   AFTER DATE OF BIRTH: <Enter>
Select SEX: <Enter>
_____________________________________________________________________________
Exit     Save     Refresh
COMMAND: E<Enter>                                       Press <PF1>H for help
```

```
        LABORATORY EPI PARAMETERS INPUT SCREEN         Page 5 of 5
NAME: HEPATITIS A ANTIBODY POS                         INACTIVE: NO
_____________________________________________________________________________
Run Date: <Enter>                              Protocol: LREPI<Enter>
Run Cycle: MONTHLY<Enter>                      Lag Days: 15<Enter>
Previous Cycle: <TAB>
General Description: <TAB>
_____________________________________________________________________________
Exit    Save     Refresh
COMMAND: E<Enter>                                       Press <PF1>H for help
Save changes before leaving form (Y/N)? Y <Enter>
```

Hepatitis B Positive (Reference #17)

One of the goals of the Healthy People 2000 and 2010 initiatives of the Department of Health and Human Services is to decrease certain infectious diseases, especially those that are vaccine preventable. Acute and chronic infection with Hepatitis B is one such disease that has specific objectives present in the Healthy People objectives.

Both acute and chronic diseases have significant morbidity and can contribute to mortality. Further, infection with hepatitis B can complicate the medical course of persons with other liver ailments. As such, surveillance for both acute and chronic disease is important. In order for the VHA to do surveillance for these diseases, we are looking for laboratory evidence of infection with hepatitis B. This laboratory evidence of infection includes the following standard serological markers:

- Presence of the Hepatitis B surface antigen
- Presence of antibodies against the Hepatitis B core antigen (in particular, the IgM antibody)
- Presence of antibodies against the Hepatitis B surface antigen
- Presence of the hepatitis B e antigen.

These are not all of the tests that can be done for hepatitis B, but they are the ones likely to pick up acute cases (new) or those chronic cases that are likely to be infectious to other persons. Please list only those tests at your facility that is in keeping with what we are looking for— acute cases or those cases likely to be infectious to others.

NOTE: There are advanced PCR based tests that can measure amount of virus in the bloodstream; these are not done at all sites and have not yet been FDA approved. As such, these PCR tests should not be used for case determination.

NOTE: If a lab test needs to be entered in the parameter set up for a particular lab EPI pathogen name (e.g. because there is more than one test result that may meet the definition), the second and subsequent tests must be placed in quotes (“ ”). Even though the “ ” marks are used to enter the data, they don't appear in the final product. This process can be done unlimited times for one set-up.

Example: Lab EPI Parameter Setup for HEPATITIS B POS

```
                              Lab EPI Primary Menu

ENH       Lab EPI Manual Run (Enhanced)
VR        Print Detailed Verification Report
LO        Local Pathogen Menu ...
PI        Pathogen Inquiry
UP        Lab EPI Parameter Setup
          Lab EPI Protocol Edit
LK        Antimicrobial Link Update

Select Lab EPI Primary menu Option: UP<Enter> Lab EPI Parameter Setup

Select LAB EPI NAME: ?<Enter>
 Answer with LAB EPI NAME, or REFERENCE NUMBER
 Do you want the entire 23-Entry LAB EPI List? Y  (Yes)<Enter>
Choose from:

   ALL ENTEROCOCCI
   ALL STAPHYLOCOCCUS AUREUS
   ALL STREPTOCOCCUS PNEUMONIAE
   CANDIDA
   CLOSTRIDIUM DIFFICILE
   CREUTZFELDT-JAKOB DISEASE
   CRYPTOSPORIDIUM
   DENGUE
   E. COLI 0157:H7
   HEPATITIS A ANTIBODY POS
   HEPATITIS B POS
   HEPATITIS C ANTIBODY NEG
   HEPATITIS C ANTIBODY POS
   LEGIONELLA
   LEISHMANIASIS
   MALARIA
   METH-RES STAPH AUREUS
   PEN-RES PNEUMOCOCCUS
   STREPTOCOCCUS GROUP A
   TUBERCULOSIS
   VANC-RES COAG NEG STAPH
   VANC-RES ENTEROCOCCUS
   VANC-RES STAPH AUREUS (VRSA)

Select LAB EPI NAME: HEPATITIS B POS<Enter>

Note: The four hepatitis pathogens (Hepatitis C Antibody Positive, Hepatitis
C Antibody Negative, Hepatitis A Antibody Positive and Hepatitis B Positive)
are tightly integrated with the Clinical Reminder data stream that the EPI
national roll-up accomplishes (see combined products VistA Laboratory EPI
Hepatitis Extract Patch LR*5.2*260, PXRM*1.5*1, PSJ*5*48 and Patch PSO*7*45)
and changes in the EPI parameters may need to have concomitant changes in the
Clinical Reminder data being passed over to the EPI national roll-up—
concurrent review (and changes, if necessary), should be undertaken in
conjunction with the local Clinical Applications Coordinator for the Clinical
```

```
Reminder package to assure that appropriate mapping of Health factors to the
national pathogens has occurred.
```

```
              LABORATORY EPI PARAMETERS INPUT SCREEN   Page 1 of 5
NAME: HEPATITIS B POS                                      INACTIVE: NO
_____________________________________________________________________________
Laboratory Test(s)                  Indicator                      Value
HEP B SURFACE Ag<Enter>               Contains<Enter>
POS<Enter>
HEP B SURFACE AB<Enter>               Contains<Enter>
POS<Enter>
HEP B CORE AB(IgM)<Enter>             Contains<Enter>
POS<Enter>
HEP Be ANTIGEN<Enter>                 Contains<Enter>
POS<Enter>
"HEP Be ANTIGEN"<Enter>               Contains<Enter>
Pos<Enter>
"HEP Be ANTIGEN"<Enter>               Contains<Enter>
p<Enter>
"HEP Be ANTIGEN"<Enter>               Contains<Enter>
P<Enter>

Note: Enter the appropriate test for your site, and how the results are
reported.

ICD Coding System [ICD-9 or ICD-10]? (9/10):<RET>

ICD Code             Cd Set                    ICD Description
<Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                              Press <PF1>H for help    Insert
```

```
            LABORATORY EPI PARAMETERS INPUT SCREEN        Page 2 of 5

NAME: HEPATITIS B POS                                      INACTIVE: NO
_____________________________________________________________________________

Selected Etiology                                Selected Snomed Codes
<Enter>

Antimicrobial Susceptibility           NLT Code       NLT Description
<Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                              Press <PF1>H for help    Insert
```

```
         LABORATORY EPI PARAMETERS INPUT SCREEN       Page 3 of 5

NAME: HEPATITIS B POS                                      INACTIVE: NO
_____________________________________________________________________________
                          Topography Selection

Include                                  Exclude
<Enter>                                    <Enter>
```

```
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                              Press <PF1>H for help    Insert
```

```
            LABORATORY EPI PARAMETERS INPUT SCREEN      Page 4 of 5
NAME: HEPATITIS B POS                                    INACTIVE: NO
_____________________________________________________________________________
First Encounter:<Enter>                          Follow PTF:YES<Enter>
BEFORE DATE OF BIRTH:<Enter>                    AFTER DATE OF BIRTH:<Enter>
Select SEX:<Enter>
_____________________________________________________________________________
Exit     Save     Refresh
COMMAND: E<Enter>                                        Press <PF1>H for help
```

```
        LABORATORY EPI PARAMETERS INPUT SCREEN         Page 5 of 5
NAME: HEPATITIS B POS                                  INACTIVE: NO
_____________________________________________________________________________
Run Date: <Enter>                              Protocol: LREPI<Enter>
Run Cycle: MONTHLY<Enter>                      Lag Days: 15<Enter>
Previous Cycle: <TAB>
General Description: <TAB>
_____________________________________________________________________________
Exit    Save     Refresh
COMMAND: E<Enter>                                Press <PF1>H for help
Save changes before leaving form (Y/N)? Y<Enter>
```

Not Positive for Hepatitis C Antibody OR Hepatitis C Antibody Neg (Reference #15)

The first version of the EPI gathered data on persons who were positive for antibody against Hepatitis C. This version will continue to gather such data. However, there are many cases, and it is important to try to find out what differences there are in those persons who are positive for Hepatitis C antibody as opposed to those who do not have Hepatitis C antibody present. Therefore, please review those results that you have designated to be place into the Hepatitis C Antibody Positive portion of the EPI. Be sure that they truly meet the definition, as noted in Lab EPI Patch LR*5.2*175 Technical and User Guide (distributed August 1998).

All the results of Hepatitis C antibody testing that are not considered "positive" should be reported in this area. Therefore, all of the hepatitis C results that your facility reports should be mapped to either the hepatitis C Antibody Positive file or the Not Positive for Hepatitis C Antibody File. Not positive terms may include "negative," "indeterminant," "indeterminate," "undetectable." As with the Hepatitis C Antibody Positive component, be sure that phrases that truly differentiate results are used (e.g. the results of "present" and "not present" are not truly differentiated by computer retrieval as both contain the word "present").

NOTE: There are PCR based tests utilized for Hepatitis C. These tests are not used at all facilities and are not yet FDA approved for identification of hepatitis C disease. As such, they should not be used for reporting purposes with this iteration of EPI.

NOTE: If a lab test needs to be entered in the parameter set up for a particular lab EPI pathogen name (e.g. because there is more than one test result that may meet the definition), the second and subsequent tests must be placed in quotes (" "). Even though the " " marks are used to enter the data, they don't appear in the final product. This process can be done unlimited times for one set-up.

Example: Lab EPI Parameter Setup for HEPATITIS C ANTIBODY NEG

```
                              Lab EPI Primary Menu

ENH       Lab EPI Manual Run (Enhanced)
VR        Print Detailed Verification Report
LO        Local Pathogen Menu ...
PI        Pathogen Inquiry
UP        Lab EPI Parameter Setup
          Lab EPI Protocol Edit
LK        Antimicrobial Link Update

Select Lab EPI Primary menu Option: UP<Enter> Lab EPI Parameter Setup

Select LAB EPI NAME: ?<Enter>
 Answer with LAB EPI NAME, or REFERENCE NUMBER
 Do you want the entire 23-Entry LAB EPI List? Y  (Yes)<Enter>
Choose from:

   ALL ENTEROCOCCI
   ALL STAPHYLOCOCCUS AUREUS
   ALL STREPTOCOCCUS PNEUMONIAE
   CANDIDA
   CLOSTRIDIUM DIFFICILE
   CREUTZFELDT-JAKOB DISEASE
   CRYPTOSPORIDIUM
   DENGUE
   E. COLI 0157:H7
   HEPATITIS A ANTIBODY POS
   HEPATITIS B POS
   HEPATITIS C ANTIBODY NEG
   HEPATITIS C ANTIBODY POS
   LEGIONELLA
   LEISHMANIASIS
   MALARIA
   METH-RES STAPH AUREUS
   PEN-RES PNEUMOCOCCUS
   STREPTOCOCCUS GROUP A
   TUBERCULOSIS
   VANC-RES COAG NEG STAPH
   VANC-RES ENTEROCOCCUS
   VANC-RES STAPH AUREUS (VRSA)

Select LAB EPI NAME: HEPATITIS C ANTIBODY NEG<Enter>

Note: The four hepatitis pathogens (Hepatitis C Antibody Positive, Hepatitis
C Antibody Negative, Hepatitis A Antibody Positive and Hepatitis B Positive)
are tightly integrated with the Clinical Reminder data stream that the EPI
national roll-up accomplishes (see combined products VistA Laboratory EPI
Hepatitis Extract Patch LR*5.2*260, PXRM*1.5*1, PSJ*5*48 and Patch PSO*7*45)
and changes in the EPI parameters may need to have concomitant changes in the
Clinical Reminder data being passed over to the EPI national roll-up—
concurrent review (and changes, if necessary), should be undertaken in
conjunction with the local Clinical Applications Coordinator for the Clinical
```

```
Reminder package to assure that appropriate mapping of Health factors to the
national pathogens has occurred.
```

```
           LABORATORY EPI PARAMETERS INPUT SCREEN      Page 1 of 5

NAME: HEPATITIS C ANTIBODY NEG                          INACTIVE: NO
_____________________________________________________________________________
Laboratory Test(s)                  Indicator              Value
HEP C ANTIBODY<Enter>                 Contains<Enter>          NEG<Enter>
"HEP C ANTIBODY"<Enter>               Contains<Enter>          SEE
COMMENTS<Enter>
"HEP C ANTIBODY"<Enter>               Contains<Enter>          *<Enter>
"HEP C ANTIBODY"<Enter>               Contains<Enter>          #<Enter>

Note: Enter the appropriate test for your site, and how the results are
reported.

ICD Coding System [ICD-9 or ICD-10]? (9/10):<RET>

ICD Code             Cd Set                    ICD Description
<Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                              Press <PF1>H for help    Insert
```

```
           LABORATORY EPI PARAMETERS INPUT SCREEN       Page 2 of 5

NAME: HEPATITIS C ANTIBODY NEG                          INACTIVE: NO
_____________________________________________________________________________

Selected Etiology                              Selected Snomed Codes
<Enter>

Antimicrobial Susceptibility          NLT Code       NLT Description
<Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                              Press <PF1>H for help
Insert
```

```
         LABORATORY EPI PARAMETERS INPUT SCREEN        Page 3 of 5

NAME: HEPATITIS C ANTIBODY Neg                          INACTIVE: NO
_____________________________________________________________________________

                          Topography Selection

Include                                  Exclude
<Enter>                                    <Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                              Press <PF1>H for help    Insert
```

```
           LABORATORY EPI PARAMETERS INPUT SCREEN      Page 4 of 5
NAME: HEPATITIS C ANTIBODY NEG                          INACTIVE: NO
_____________________________________________________________________________
First Encounter:<Enter>                          Follow PTF:YES<Enter>
BEFORE DATE OF BIRTH:<Enter>                    AFTER DATE OF BIRTH:<Enter>
Select SEX:<Enter>
_____________________________________________________________________________
Exit     Save     Refresh
COMMAND: E<Enter>                                        Press <PF1>H for help
```

```
           LABORATORY EPI PARAMETERS INPUT SCREEN      Page 5 of 5
NAME: HEPATITIS C ANTIBODY NEG                          INACTIVE: NO
_____________________________________________________________________________
Run Date:<Enter>                               Protocol: LREPI<Enter>
Run Cycle: MONTHLY<Enter>                       Lag Days: 15<Enter>
Previous Cycle: <TAB>
General Description: <TAB>
_____________________________________________________________________________
Exit    Save     Refresh
COMMAND: E<Enter>                                 Press <PF1>H for help
Save changes before leaving form (Y/N)? Y<Enter>
```

Hepatitis C Antibody Positive (Reference #2)

Hepatitis C is much more prevalent than originally thought at least in certain key patient sub-populations. As new and more sensitive assays come into use, we seem to find more evidence of this pathogen. We are looking for evidence of exposure to Hepatitis C in patients as demonstrated by Hepatitis C antibody positivity. The need for confirmatory testing or demonstration of active disease is not currently necessary in gathering data for this program. Different facilities may use different assays for this test. What we are looking for is evidence of presence of antibody to Hepatitis C, whether it be recorded as "weakly positive", "strongly positive", "positive", or "present". If other phrases are used to describe a test result, one should be able to differentiate the results upon entry into the program. As an example, the words, "present" "and "not present" would not allow retrieval of only positive cases as both phrases contain the word, "present".

NOTE: There are PCR based tests utilized for Hepatitis C. These tests are not used at all facilities and are not yet FDA approved for identification of hepatitis C disease. As such, they should not be used for reporting purposes with this iteration of EPI.

Example: Lab EPI Parameter Setup for Hepatitis C Antibody POS

```
                              Lab EPI Primary Menu

ENH       Lab EPI Manual Run (Enhanced)
VR        Print Detailed Verification Report
LO        Local Pathogen Menu ...
PI        Pathogen Inquiry
UP        Lab EPI Parameter Setup
          Lab EPI Protocol Edit
LK        Antimicrobial Link Update

Select Lab EPI Primary menu Option: UP<Enter> Lab EPI Parameter Setup

Select LAB EPI NAME: ?<Enter>
 Answer with LAB EPI NAME, or REFERENCE NUMBER
 Do you want the entire 23-Entry LAB EPI List? Y (Yes)<Enter>
Choose from:
   ALL ENTEROCOCCI
   ALL STAPHYLOCOCCUS AUREUS
   ALL STREPTOCOCCUS PNEUMONIAE
   CANDIDA
   CLOSTRIDIUM DIFFICILE
   CREUTZFELDT-JAKOB DISEASE
   CRYPTOSPORIDIUM
   DENGUE
   E. COLI 0157:H7
   HEPATITIS A ANTIBODY POS
   HEPATITIS B POS
   HEPATITIS C ANTIBODY NEG
   HEPATITIS C ANTIBODY POS
   LEGIONELLA
   LEISHMANIASIS
   MALARIA
   METH-RES STAPH AUREUS
   PEN-RES PNEUMOCOCCUS
   STREPTOCOCCUS GROUP A
   TUBERCULOSIS
   VANC-RES COAG NEG STAPH
   VANC-RES ENTEROCOCCUS
   VANC-RES STAPH AUREUS (VRSA)

Select LAB EPI NAME: HEPATITIS C ANTIBODY POS<Enter>
```

Note: The four hepatitis pathogens (Hepatitis C Antibody Positive, Hepatitis C Antibody Negative, Hepatitis A Antibody Positive and Hepatitis B Positive) are tightly integrated with the Clinical Reminder data stream that the EPI national roll-up accomplishes (see combined products VistA Laboratory EPI Hepatitis Extract Patch LR*5.2*260, PXRM*1.5*1, PSJ*5*48 and Patch PSO*7*45) and changes in the EPI parameters may need to have concomitant changes in the Clinical Reminder data being passed over to the EPI national roll-up—concurrent review (and changes, if necessary), should be undertaken in conjunction with the local Clinical Applications Coordinator for the Clinical Reminder package to assure that appropriate mapping of Health factors to the national pathogens has occurred.

```
              LABORATORY EPI PARAMETERS INPUT SCREEN     Page 1 of 5

NAME: HEPATITIS C ANTIBODY POS                           INACTIVE: NO
_____________________________________________________________________________

Laboratory Test(s)                    Indicator                  Value
HEPATITIS C ANTIBODY<Enter>            Contains<Enter>
POS<Enter>

Note: Enter the appropriate test for your site, and how the results are
reported.

ICD Coding System [ICD-9 or ICD-10]? (9/10):<RET>

ICD Code             Cd Set                   ICD Description
<Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                           Press <PF1>H for help    Insert
```

```
            LABORATORY EPI PARAMETERS INPUT SCREEN       Page 2 of 5

NAME: HEPATITIS C ANTIBODY POS                           INACTIVE: NO
_____________________________________________________________________________

Selected Etiology                              Selected Snomed Codes
<Enter>

Antimicrobial Susceptibility          NLT Code       NLT Description
<Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                           Press <PF1>H for help    Insert
```

```
         LABORATORY EPI PARAMETERS INPUT SCREEN           Page 3 of 5

NAME: HEPATITIS C ANTIBODY POS                           INACTIVE: NO
_____________________________________________________________________________

                         Topography Selection

Include                                  Exclude
<Enter>                                    <Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                                Press <PF1>H for help
Insert
```

```
            LABORATORY EPI PARAMETERS INPUT SCREEN       Page 4 of 5
NAME: HEPATITIS C ANTIBODY POS                            INACTIVE: NO
_____________________________________________________________________________
First Encounter:<Enter>                          Follow PTF:YES<Enter>
BEFORE DATE OF BIRTH:<Enter>                    AFTER DATE OF BIRTH:<Enter>
Select SEX:<Enter>
_____________________________________________________________________________
Exit     Save     Refresh
COMMAND: E<Enter>                                        Press <PF1>H for help
```

```
        LABORATORY EPI PARAMETERS INPUT SCREEN         Page 5 of 5
NAME: HEPATITIS C ANTIBODY POS                          INACTIVE: NO
_____________________________________________________________________________
Run Date:<Enter>                               Protocol: LREPI<Enter>
Run Cycle: MONTHLY<Enter>                       Lag Days: 15<Enter>
Previous Cycle: <TAB>
General Description: <TAB>
_____________________________________________________________________________
Exit    Save     Refresh
COMMAND: E<Enter>                                 Press <PF1>H for help
Save changes before leaving form (Y/N)? Y<Enter>
```

Legionella (Reference #7)

Since the American Legion Convention in Philadelphia in the 1970's, Legionnaires' disease has been an illness of keen interest to the DVA. Because diagnosis is complex, we have chosen to review for presence of *Legionella* in culture and in ICD DIAGNOSIS file (#80). We will not look at *Legionella* direct fluorescent antibody positivity because of the potential high false positivity of this test. Likewise, serology is not easy to interpret or easily extracted from the VistA database for our purposes and will **not** be included as a marker in this first iteration of the EPI program. Because it is not yet approved, the newer test of *Legionella* urinary antigen will not be used either. The Selected Etiology screen display has been partially pre-populated.

NOTE: The **new** FDA-Approved Legionella Urinary Antigen test is available; as such the ability to capture the result with this release of EPI is addressed. This newer test **must** be added for LEGIONELLA via the Lab EPI Parameter Setup [LREPI PARAMETER SETUP] option. The preferred method to capture this is to have the Etiology (result) of the accessioned microbiology be POSITIVE FOR LEGIONELLA PNEUMOPHILA (or something similar). This issue is similar to one encountered in with the Clostridium difficile pathogen and samples of how to address this are provided in Appendix B Helpful Hints.

Example: Lab EPI Parameter Setup for LEGIONELLA

```
                              Lab EPI Primary Menu

ENH       Lab EPI Manual Run (Enhanced)
VR        Print Detailed Verification Report
LO        Local Pathogen Menu ...
PI        Pathogen Inquiry
UP        Lab EPI Parameter Setup
          Lab EPI Protocol Edit
LK        Antimicrobial Link Update

Select Lab EPI Primary menu Option: UP<Enter> Lab EPI Parameter Setup

Select LAB EPI NAME: ?<Enter>
 Answer with LAB EPI NAME, or REFERENCE NUMBER
 Do you want the entire 23-Entry LAB EPI List? Y  (Yes)<Enter>
Choose from:

   ALL ENTEROCOCCI
   ALL STAPHYLOCOCCUS AUREUS
   ALL STREPTOCOCCUS PNEUMONIAE
   CANDIDA
   CLOSTRIDIUM DIFFICILE
   CREUTZFELDT-JAKOB DISEASE
   CRYPTOSPORIDIUM
   DENGUE
   E. COLI 0157:H7
   HEPATITIS A ANTIBODY POS
   HEPATITIS B POS
   HEPATITIS C ANTIBODY NEG
   HEPATITIS C ANTIBODY POS
   LEGIONELLA
   LEISHMANIASIS
   MALARIA
   METH-RES STAPH AUREUS
   PEN-RES PNEUMOCOCCUS
   STREPTOCOCCUS GROUP A
   TUBERCULOSIS
   VANC-RES COAG NEG STAPH
   VANC-RES ENTEROCOCCUS
   VANC-RES STAPH AUREUS (VRSA)

Select LAB EPI NAME: LEGIONELLA <Enter>
```

```
             LABORATORY EPI PARAMETERS INPUT SCREEN     Page 1 of 5

NAME: LEGIONELLA                                        INACTIVE: NO
_____________________________________________________________________________

Laboratory Test(s)             Indicator                  Value
<Enter>

ICD Coding System [ICD-9 or ICD-10]? (9/10):<RET>

ICD Code             Cd Set                    ICD Description
482.80               ICD-9                     LEGIONNARIE'S DISEASE
482.84               ICD-9                     LEGIONNARIE'S DISEASE
<Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                             Press <PF1>H for help    Insert
```

```
             LABORATORY EPI PARAMETERS INPUT SCREEN     Page 2 of 5

NAME: LEGIONELLA                                         INACTIVE: NO
_____________________________________________________________________________

Selected Etiology
Examples: LEGIONELLA BOZEMANII
          LEGIONELLA DUMOFFII
          LEGIONELLA GORMANII
          LEGIONELLA JORDANIS
          LEGIONELLA LONGBEACHAE
          LEGIONELLA MICDADEI
          LEGIONELLA OAKRIDGENSIS
          LEGIONELLA PNEUMOPHILIA
          LEGIONELLA SP
          LEGIONELLA WADSWORTHII
          POSITIVE FOR LEGIONELLA PNEUMOPHILA
<Enter>
Note: During the post Init, the ETIOLOGY FIELD file (#61.2) was searched to
pre-populate the Etiology field (#3) in the EMERGING PATHOGENS file (#69.5).
Listed above are examples of etiology entries which may have been populated
from your site's file. Additional etiologies may be added or deleted at the
Selected Etiology prompt to meet your site-specific needs.

Note: If spelling differences occur within your ETIOLOGY FIELD file (#61.2)
be consistent with your local file and spell the results here, as it is
spelled in your file (even if it is spelled differently in the example). We
are concerned more importantly with data recovery.

Antimicrobial Susceptibility           NLT Code       NLT Description
<Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh
```

```
COMMAND: N<Enter>                              Press <PF1>H for help    Insert
```

```
          LABORATORY EPI PARAMETERS INPUT SCREEN      Page 3 of 5
NAME: LEGIONELLA                                      INACTIVE: NO
_____________________________________________________________________________

                          Topography Selection

Include                                          Exclude
<Enter>                                            <Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                              Press <PF1>H for help    Insert
```

```
          LABORATORY EPI PARAMETERS INPUT SCREEN      Page 4 of 5
NAME: LEGIONELLA                                      INACTIVE: NO
_____________________________________________________________________________

First Encounter: <Enter>                       Follow PTF: YES<Enter>

BEFORE DATE OF BIRTH: <Enter>                  AFTER DATE OF BIRTH: <Enter>

Select SEX: <Enter>
_____________________________________________________________________________
Exit     Save     Refresh

COMMAND: E<Enter>                                    Press <PF1>H for help
```

```
          LABORATORY EPI PARAMETERS INPUT SCREEN      Page 5 of 5
NAME: E. LEGIONELLA                                    INACTIVE: NO
_____________________________________________________________________________

Run Date: <Enter>                               Protocol: LREPI<Enter>

Run Cycle: MONTHLY<Enter>                       Lag Days: 15<Enter>

Previous Cycle: <TAB>

General Description: <TAB>
_____________________________________________________________________________
Exit    Save     Refresh

COMMAND: E<Enter>                              Press <PF1>H for help     Insert

Save changes before leaving form (Y/N)? Y <Enter>
```

Leishmaniasis (Reference #14)

Leishmaniasis is a significant tropical disease that can cause serious complications. It is of interest to the Department of Veterans Affairs as Leishmania has caused illness among military personnel for many years. In addition, the Persian Gulf War occurred in an area of the world where the parasite is endemic. Because no simple, straightforward serology exists and no standard culture techniques exist, we have chosen to follow this entity through ICD diagnosis codes.

Example: Lab EPI Parameter Setup for Leishmaniasis

```
                              Lab EPI Primary Menu

ENH       Lab EPI Manual Run (Enhanced)
VR        Print Detailed Verification Report
LO        Local Pathogen Menu ...
PI        Pathogen Inquiry
UP        Lab EPI Parameter Setup
          Lab EPI Protocol Edit
LK        Antimicrobial Link Update

Select Lab EPI Primary menu Option: UP<Enter> Lab EPI Parameter Setup

Select LAB EPI NAME: ?<Enter>
 Answer with LAB EPI NAME, or REFERENCE NUMBER
 Do you want the entire 23-Entry LAB EPI List? Y  (Yes)<Enter>
Choose from:

   ALL ENTEROCOCCI
   ALL STAPHYLOCOCCUS AUREUS
   ALL STREPTOCOCCUS PNEUMONIAE
   CANDIDA
   CLOSTRIDIUM DIFFICILE
   CREUTZFELDT-JAKOB DISEASE
   CRYPTOSPORIDIUM
   DENGUE
   E. COLI 0157:H7
   HEPATITIS A ANTIBODY POS
   HEPATITIS B POS
   HEPATITIS C ANTIBODY NEG
   HEPATITIS C ANTIBODY POS
   LEGIONELLA
   LEISHMANIASIS
   MALARIA
   METH-RES STAPH AUREUS
   PEN-RES PNEUMOCOCCUS
   STREPTOCOCCUS GROUP A
   TUBERCULOSIS
   VANC-RES COAG NEG STAPH
   VANC-RES ENTEROCOCCUS
   VANC-RES STAPH AUREUS (VRSA)

Select LAB EPI NAME: LEISHMANIASIS <Enter>
```

```
            LABORATORY EPI PARAMETERS INPUT SCREEN      Page 1 of 5

NAME: LEISHMANIASIS                                     INACTIVE: NO
_____________________________________________________________________________

Laboratory Test(s)                  Indicator                   Value
<Enter>

ICD Coding System [ICD-9 or ICD-10]? (9/10):<RET>

ICD Code             Cd Set                    ICD Description
085.0                ICD-9                     VISCERAL LEISHMANIASIS
085.1                ICD-9                     CUTAN LEISHMANIAS URBAN
085.2                ICD-9                     CUTAN LEISHMANIAS ASIAN
085.3                ICD-9                     CUTAN LEISHMANIAS ETHIOP
085.4                ICD-9                     CUTAN LEISHMANIAS AMER
085.5                ICD-9                     MUCOCUTAN LEISHMANIASIS
085.9                ICD-9                     LEISHMANIASIS NOS
<Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                           Press <PF1>H for help    Insert
```

```
            LABORATORY EPI PARAMETERS INPUT SCREEN    Page 2 of 5

NAME: LEISHMANIASIS                                       INACTIVE: NO
_____________________________________________________________________________

Selected Etiology                                  Selected Snomed Codes
<Enter>

Antimicrobial Susceptibility          NLT Code       NLT Description
<Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                           Press <PF1>H for help    Insert
```

```
        LABORATORY EPI PARAMETERS INPUT SCREEN        Page 3 of 5

NAME: LEISHMANIASIS                                    INACTIVE: NO
_____________________________________________________________________________

                         Topography Selection

Include                                 Exclude
<Enter>                                   <Enter>

Exit     Save     Next Page     Refresh
```

```
COMMAND: N<Enter>                                  Press <PF1>H for help
Insert
```

```
          LABORATORY EPI PARAMETERS INPUT SCREEN     Page 4 of 5
NAME: LEISHMANIASIS                                  INACTIVE: NO
_____________________________________________________________________________
First Encounter: <Enter>                          FOLLOW PTF:YES<Enter>
BEFORE DATE OF BIRTH:<Enter>                   AFTER DATE OF BIRTH:<Enter>
Select SEX: RET>
_____________________________________________________________________________
Exit     Save     Refresh
COMMAND: E<Enter>                                    Press <PF1>H for help
```

```
          LABORATORY EPI PARAMETERS INPUT SCREEN       Page 5 of 5
NAME: E. LEISHMANIASIS                                    INACTIVE: NO
_____________________________________________________________________________
Run Date: <Enter>                              Protocol: LREPI<Enter>
Run Cycle: MONTHLY<Enter>                      Lag Days: 15<Enter>
Previous Cycle: <TAB>
General Description: <TAB>
_____________________________________________________________________________
Exit    Save     Refresh
COMMAND: E<Enter>                           Press <PF1>H for help    Insert
Save changes before leaving form (Y/N)? Y<Enter>
```

Malaria (Reference #11)

The plasmodial parasite is responsible for the blood-borne disease of *malaria*. *Malaria* can cause acute as well as chronic, relapsing disease. Occasionally, U.S. troops are deployed in malaria endemic areas. This placement could potentially put troops at risk for acquiring this disease. For the Emerging Pathogens Initiative program, we are interested in tracking patients with malaria, acute or chronic, relapsing, and in either inpatient or outpatient status. No standardized serologic test allows for easy identification. Since not all sites consistently code and record malarial parasites seen histologically or on blood smears (not all of these interpretations are done through the Pathology and Laboratory Service), we have currently decided to track malaria based on ICD coding.

Example: Lab EPI Parameter Setup for Malaria

```
                              Lab EPI Primary Menu

ENH       Lab EPI Manual Run (Enhanced)
VR        Print Detailed Verification Report
LO        Local Pathogen Menu ...
PI        Pathogen Inquiry
UP        Lab EPI Parameter Setup
          Lab EPI Protocol Edit
LK        Antimicrobial Link Update

Select Lab EPI Primary menu Option: UP<Enter> Lab EPI Parameter Setup

Select LAB EPI NAME: ?<Enter>
 Answer with LAB EPI NAME, or REFERENCE NUMBER
 Do you want the entire 23-Entry LAB EPI List? Y  (Yes)<Enter>
Choose from:

   ALL ENTEROCOCCI
   ALL STAPHYLOCOCCUS AUREUS
   ALL STREPTOCOCCUS PNEUMONIAE
   CANDIDA
   CLOSTRIDIUM DIFFICILE
   CREUTZFELDT-JAKOB DISEASE
   CRYPTOSPORIDIUM
   DENGUE
   E. COLI 0157:H7
   HEPATITIS A ANTIBODY POS
   HEPATITIS B POS
   HEPATITIS C ANTIBODY NEG
   HEPATITIS C ANTIBODY POS
   LEGIONELLA
   LEISHMANIASIS
   MALARIA
   METH-RES STAPH AUREUS
   PEN-RES PNEUMOCOCCUS
   STREPTOCOCCUS GROUP A
   TUBERCULOSIS
   VANC-RES COAG NEG STAPH
   VANC-RES ENTEROCOCCUS
   VANC-RES STAPH AUREUS (VRSA)
```

```
Select LAB EPI NAME: MALARIA <Enter>
```

```
     LABORATORY EPI PARAMETERS INPUT SCREEN          Page 1 of 5

NAME: MALARIA                                          INACTIVE: NO
_____________________________________________________________________________

Laboratory Test(s)                  Indicator                  Value
<Enter>

ICD Coding System [ICD-9 or ICD-10]? (9/10):<RET>

ICD Code             Cd Set                      ICD Description084.0
ICD-9                     FALCIPARUM MALARIA
084.1                ICD-9                       VIVAX MALARIA
084.2                ICD-9                       QUARTAN MALARIA
084.3                ICD-9                       OVALE MALARIA
084.4                ICD-9                       MALARIA NEC
084.5                ICD-9                       MIXED MALARIA
084.6                ICD-9                       MALARIA NOS
084.7                ICD-9                       INDUCED MALARIA
084.8                ICD-9                       BLACKWATER FEVER
084.9                ICD-9                       MALARIA COMPLICATED NEC
<Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                              Press <PF1>H for help   Insert
```

```
        LABORATORY EPI PARAMETERS INPUT SCREEN      Page 2 of 5

NAME: MALARIA                                              INACTIVE: NO
_____________________________________________________________________________

Selected Etiology                              Selected Snomed Codes
<Enter>

Antimicrobial Susceptibility          NLT Code       NLT Description
<Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                              Press <PF1>H for help
Insert
```

```
      LABORATORY EPI PARAMETERS INPUT SCREEN        Page 3 of 5

NAME: MALARIA                                        INACTIVE: NO
_____________________________________________________________________________
                          Topography Selection

Include                                 Exclude
<Enter>                                   <Enter>
```

```
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                                Press <PF1>H for help Insert
```

```
          LABORATORY EPI PARAMETERS INPUT SCREEN        Page 4 of 5
NAME: MALARIA                                           INACTIVE: NO
_____________________________________________________________________________
First Encounter: <Enter>                          FOLLOW PTF: YES<Enter>
BEFORE DATE OF BIRTH: <Enter>                   AFTER DATE OF BIRTH: <Enter>
Selected SEX: <Enter>
Exit     Save     Refresh
COMMAND: E<Enter>                                      Press <PF1>H for help
```

```
           LABORATORY EPI PARAMETERS INPUT SCREEN        Page 5 of 5
NAME: MALARIA                                           INACTIVE: NO
_____________________________________________________________________________
Run Date: <Enter>                          Protocol: LREPI<Enter>
Run Cycle: MONTHLY<Enter>                  Lag Days: 15<Enter>
Previous Cycle: <TAB>
General Description: <TAB>
_____________________________________________________________________________
Exit    Save     Refresh
COMMAND: E<Enter>                                      Press <PF1>H for help
Save changes before leaving form (Y/N)? Y<Enter>
```

Methicillin-Resistant Staphylococcus aureus (MRSA) (Reference #19)

Methicillin (or oxacillin)-resistant *Staphylococcus aureus* (MRSA) is a pathogen of continuing importance for healthcare facilities. It is also an emerging pathogen from community-acquired sources. It is an organism that can be transmitted easily within facilities and in the community. It can produce a spectrum of illness from asymptomatic colonization to severe, life-threatening disease in those patients who acquire it. Whether this organism is causing disease or not, it can contribute to spread within a healthcare facility. The purpose of this pathogen on the EPI list is to capture all cultures that have MRSA present (whether the patient has disease or is just colonized). This should capture all methicillin non-Susceptible isolates of *Staphylococcus aureus*.

NOTE: This includes all positive cultures for MRSA, both clinical cultures and those done as part of epidemiologic prevalence studies or surveys (such as nasal and rectal swabs) at your facility.

Any *Staphylococcus aureu*s isolate that is resistant to methicillin (or oxacillin) should be captured for this. Laboratories may use different methods to capture these data. An appropriate National Committee on Clinical Laboratory Standards (NCCLS) testing schema used and captured in VistA should be adequate.

Example: Lab EPI Parameter Setup for METHICILLIN-RESISTANT STAPHYLOCOCCUS AUREUS (MRSA)

```
                              Lab EPI Primary Menu

ENH       Lab EPI Manual Run (Enhanced)
VR        Print Detailed Verification Report
LO        Local Pathogen Menu ...
PI        Pathogen Inquiry
UP        Lab EPI Parameter Setup
          Lab EPI Protocol Edit
LK        Antimicrobial Link Update

Select Lab EPI Primary menu Option: UP<Enter> Lab EPI Parameter Setup

Select LAB EPI NAME: ?<Enter>
 Answer with LAB EPI NAME, or REFERENCE NUMBER
 Do you want the entire 23-Entry LAB EPI List? Y  (Yes) <Enter>
Choose from:

   ALL ENTEROCOCCI
   ALL STAPHYLOCOCCUS AUREUS
   ALL STREPTOCOCCUS PNEUMONIAE
   CANDIDA
   CLOSTRIDIUM DIFFICILE
   CREUTZFELDT-JAKOB DISEASE
   CRYPTOSPORIDIUM
   DENGUE
   E. COLI 0157:H7
   HEPATITIS A ANTIBODY POS
   HEPATITIS B POS
   HEPATITIS C ANTIBODY NEG
   HEPATITIS C ANTIBODY POS
   LEGIONELLA
   LEISHMANIASIS
   MALARIA
   METH-RES STAPH AUREUS
   PEN-RES PNEUMOCOCCUS
   STREPTOCOCCUS GROUP A
   TUBERCULOSIS
   VANC-RES COAG NEG STAPH
   VANC-RES ENTEROCOCCUS
   VANC-RES STAPH AUREUS (VRSA)

Select LAB EPI NAME: METH-RES STAPH AUREUS <Enter>
```

```
              LABORATORY EPI PARAMETERS INPUT SCREEN     Page 1 of 5

NAME: METH-RES STAPH AUREUS                               INACTIVE: NO
_____________________________________________________________________________
_
 Laboratory Test(s)               Indicator                  Value
<Enter>

ICD Coding System [ICD-9 or ICD-10]? (9/10):<RET>

ICD Code             Cd Set                    ICD Description
<Enter>
_____________________________________________________________________________
_
Exit     Save     Next Page     Refresh

Enter a command or '^' followed by a caption to jump to a specific field.

COMMAND: N<Enter>                          Press <PF1>H for help    Insert
```

```
LABORATORY EPI PARAMETERS INPUT SCREEN                Page 2 of 5

NAME: METH-RES STAPH AUREUS                            INACTIVE: NO
_____________________________________________________________________________
_
Selected Etiology                            Selected Snomed Codes
STAPHYLOCOCCUS AUREUS
STAPHYLOC+
OCCUS AUREUS (MRSA STAPHYLOCOCCUS AUREUS
NOTE: In addition to Staphylococcus aureus as an etiology, some laboratories
may specifically indicate MRSA as a separate etiology. If that is the case
with your laboratory, please be sure to include that naming convention in the
EPI parameter for "Selected Etiology" also.

Note:  You may enter a new etiology, if you wish
STAPHYLOCOCCUS AUREUS (MRSA)<Enter>

Are you adding a new ETIOLOGY? No// Y<Enter>

Antimicrobial Susceptibility     NLT Code       NLT Description

OXACILLIN<Enter> NOTE: For this, place the antibiotic (oxacillin,
methicillin, or nafcillin) that your lab utilizes to determine methicillin-
resistance.
Are you adding a new ANTIMICROBIAL SUSCEPTIBILITY? No// Y<Enter>

OXACILLIN                        81844.0000     Oxacillin
NAFCILLIN                        81808.0000     Nafcillin
_____________________________________________________________________________
_
Exit     Save     Next Page     Refresh
```

```
Enter a command or '^' followed by a caption to jump to a specific field.

COMMAND: N<Enter>                          Press <PF1>H for help    Insert
```

```
      LABORATORY EPI PARAMETERS INPUT SCREEN             Page 3 of 5
NAME: METH-RES STAPH AUREUS                              INACTIVE: NO
_____________________________________________________________________________

                          Topography Selection
Include                                                 Exclude
<Enter>                                                   <Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh
Enter a command or '^' followed by a caption to jump to a specific field.
COMMAND: N<Enter>                        Press <PF1>H for help    Insert
```

```
          LABORATORY EPI PARAMETERS INPUT SCREEN        Page 4 of 5
NAME: METH-RES STAPH AUREUS                              INACTIVE: NO
_____________________________________________________________________________
FIRST ENCOUNTER: <Enter>                                 FOLLOW PTF: YES <Enter>
BEFORE DATE OF BIRTH: <Enter>                      AFTER DATE OF BIRTH: <Enter>
Select SEX: <Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh
Enter a command or '^' followed by a caption to jump to a specific field.
COMMAND: N<Enter>                              Press <PF1>H for help    Insert
```

```
LABORATORY EPI PARAMETERS INPUT SCREEN              Page 5 of 5
NAME:  METH-RES STAPH AUREUS                         INACTIVE: NO
_____________________________________________________________________________
Run Date: <Enter>                                  Protocol: LREPI<Enter>
Run Cycle: MONTHLY<Enter>                        Lag Days: 15<Enter>
Previous Cycle: <TAB>
General Description: <TAB>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh
Enter a command or '^' followed by a caption to jump to a specific field.
```

```
COMMAND: S<Enter>                          Press <PF1>H for help    Insert
```

Penicillin - Resistant Pneumococcus (Reference #3)

The emergence of antibiotic resistance in microbial agents is of great interest and concern for health care. Penicillin (PCN) was once the mainstay of therapy for Streptococcus pneumoniae infections but resistance to this agent is becoming more prominent. Different therapeutic strategies need to be developed once the prevalence of PCN-resistant S. pneumoniae reaches a critical threshold in a community. In order to monitor this, we are looking for the presence of any resistance in the pneumococci (either "moderate/intermediate" or "frank/high" level resistance). As such, any S. pneumoniae, which is not fully susceptible to PCN on PCN susceptibility testing, should be recorded.

Example: Lab EPI Parameter Setup for Penicillin - Resistant Pneumococcus

```
                              Lab EPI Primary Menu

ENH       Lab EPI Manual Run (Enhanced)
VR        Print Detailed Verification Report
LO        Local Pathogen Menu ...
PI        Pathogen Inquiry
UP        Lab EPI Parameter Setup
          Lab EPI Protocol Edit
LK        Antimicrobial Link Update

Select Lab EPI Primary menu Option: UP<Enter> Lab EPI Parameter Setup

Select LAB EPI NAME: ?<Enter>
 Answer with LAB EPI NAME, or REFERENCE NUMBER
 Do you want the entire 23-Entry LAB EPI List? Y  (Yes) <Enter>
Choose from:

   ALL ENTEROCOCCI
   ALL STAPHYLOCOCCUS AUREUS
   ALL STREPTOCOCCUS PNEUMONIAE
   CANDIDA
   CLOSTRIDIUM DIFFICILE
   CREUTZFELDT-JAKOB DISEASE
   CRYPTOSPORIDIUM
   DENGUE
   E. COLI 0157:H7
   HEPATITIS A ANTIBODY POS
   HEPATITIS B POS
   HEPATITIS C ANTIBODY NEG
   HEPATITIS C ANTIBODY POS
   LEGIONELLA
   LEISHMANIASIS
   MALARIA
   METH-RES STAPH AUREUS
   PEN-RES PNEUMOCOCCUS
   STREPTOCOCCUS GROUP A
   TUBERCULOSIS
   VANC-RES COAG NEG STAPH
   VANC-RES ENTEROCOCCUS
   VANC-RES STAPH AUREUS (VRSA)
```

```
Select LAB EPI NAME: PEN-RES PNEUMOCOCCUS<Enter>
```

```
          LABORATORY EPI PARAMETERS INPUT SCREEN    Page 1 of 5

NAME: PEN-RES PNEUMOCOCCUS                          INACTIVE: NO
_____________________________________________________________________________

Laboratory Test(s)                  Indicator                       Value
<Enter>

ICD Coding System [ICD-9 or ICD-10]? (9/10):<RET>

ICD Code            Cd Set                  ICD Description
<Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: <Enter>                              Press <PF1>H for help    Insert
```

```
          LABORATORY EPI PARAMETERS INPUT SCREEN          Page 2 of 5

NAME: PEN-RES PNEUMOCOCCUS                               INACTIVE: NO
_____________________________________________________________________________

Selected Etiology                                 Selected Snomed Codes

NOTE: You may enter a new ETIOLOGY, if you wish.
STREPTOCOCCUS PNEUMONIAE        12
  Are you adding 'STREPTOCOCCUS PNEUMONIAE' as
    a new ETIOLOGY (the 1ST for this EMERGING PATHOGENS)?Y<Enter>

Antimicrobial Susceptibility      NLT Code       NLT Description
Penicillin<Enter>
Are you adding ' Penicillin ' as a new Antimicrobial Susceptibility (the 1ST
for this EMERGING PATHOGENS)?Y <Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: <Enter>                              Press <PF1>H for help    Insert
```

```
      LABORATORY EPI PARAMETERS INPUT SCREEN          Page 3 of 5

NAME: PEN-RES PNEUMOCOCCUS                          INACTIVE: NO
_____________________________________________________________________________

                        Topography Selection

Include                                        Exclude
<Enter>                                          <Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh
```

```
COMMAND: N<Enter>                          Press <PF1>H for help    Insert
```

```
          LABORATORY EPI PARAMETERS INPUT SCREEN    Page 4 of 5
NAME: PEN-RES PNEUMOCOCCUS                                INACTIVE: NO
_____________________________________________________________________________

First Encounter:<Enter>                          FOLLOW PTF:YES<Enter>

BEFORE DATE OF BIRTH:<Enter>                    AFTER DATE OF BIRTH:<Enter>

Selected SEX:<Enter>

Exit     Save     Refresh

COMMAND: E<Enter>                                  Press <PF1>H for help
```

```
           LABORATORY EPI PARAMETERS INPUT SCREEN    Page 5 of 5
NAME: PEN-RES PNEUMOCOCCUS                                INACTIVE: NO
_____________________________________________________________________________

Run Date: <Enter>                          Protocol: LREPI<Enter>

Run Cycle: MONTHLY<Enter>                  Lag Days: 15<Enter>

Previous Cycle: <TAB>

General Description: <TAB>
_____________________________________________________________________________
EExit    Save     Refresh

COMMAND: E<Enter>                         Press <PF1>H for help      Insert

Save changes before leaving form (Y/N)? Y <Enter>
```

Streptococcus-Group A (Reference #6)

Streptococcus-Group A can be associated with or cause significant disease such as severe fasciitis and streptococcal toxic shock syndrome. We are especially interested to find out how much severe/deep seated disease the VA is experiencing, but other disease entities are of interest also. To this end, we are looking for all episodes of culture positivity for *Streptococcus*-Group A, regardless of site and regardless of inpatient or outpatient status of the person from whom the specimen is obtained. We are aware that some sites may use rapid screenings for *Streptococcus*-Group A, especially from pharyngeal sources. These rapid screens may be difficult to capture, so we are not asking for them on this first iteration of the EPI program. However, if you do capture them in a retrievable format they should be included (see Helpful Hints for *Clostridium difficile* in Appendix B for suggestions on how capture may be possible).

Example: Lab EPI Parameter Setup for Streptococcus-Group A

```
                              Lab EPI Primary Menu

ENH       Lab EPI Manual Run (Enhanced)
VR        Print Detailed Verification Report
LO        Local Pathogen Menu ...
PI        Pathogen Inquiry
UP        Lab EPI Parameter Setup
          Lab EPI Protocol Edit
LK        Antimicrobial Link Update

Select Lab EPI Primary menu Option: UP<Enter> Lab EPI Parameter Setup

Select LAB EPI NAME: ?<Enter>
 Answer with LAB EPI NAME, or REFERENCE NUMBER
 Do you want the entire 23-Entry LAB EPI List? Y  (Yes) <Enter>
Choose from:

   ALL ENTEROCOCCI
   ALL STAPHYLOCOCCUS AUREUS
   ALL STREPTOCOCCUS PNEUMONIAE
   CANDIDA
   CLOSTRIDIUM DIFFICILE
   CREUTZFELDT-JAKOB DISEASE
   CRYPTOSPORIDIUM
   DENGUE
   E. COLI 0157:H7
   HEPATITIS A ANTIBODY POS
   HEPATITIS B POS
   HEPATITIS C ANTIBODY NEG
   HEPATITIS C ANTIBODY POS
   LEGIONELLA
   LEISHMANIASIS
   MALARIA
   METH-RES STAPH AUREUS
   PEN-RES PNEUMOCOCCUS
   STREPTOCOCCUS GROUP A
   TUBERCULOSIS
   VANC-RES COAG NEG STAPH
   VANC-RES ENTEROCOCCUS
   VANC-RES STAPH AUREUS (VRSA)
```

```
Select LAB EPI NAME: STREPTOCOCCUS-GROUP A <Enter>
```

```
        LABORATORY EPI PARAMETERS INPUT SCREEN         Page 1 of 5

NAME: STREPTOCOCCUS-GROUP A                            INACTIVE: NO
_____________________________________________________________________________

Laboratory Test(s)                  Indicator                  Value
<Enter>

ICD Coding System [ICD-9 or ICD-10]? (9/10):<RET>

ICD Code             Cd Set                    ICD Description
<Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                              Press <PF1>H for help    Insert
```

```
          LABORATORY EPI PARAMETERS INPUT SCREEN         Page 2 of 5

NAME: STREPTOCOCCUS-GROUP A                              INACTIVE: NO
_____________________________________________________________________________

Selected Etiology                                  Selected Snomed Codes
STREPTOCOCCUS-GROUP A<Enter>

Antimicrobial Susceptibility           NLT Code       NLT Description
<Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                              Press <PF1>H for help    Insert
```

```
          LABORATORY EPI PARAMETERS INPUT SCREEN        Page 3 of 5

NAME: STREPTOCOCCUS-GROUP A                              INACTIVE: NO
_____________________________________________________________________________
                          Topography Selection

Include                                        Exclude
<Enter>                                          <Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                                Press <PF1>H for help
Insert
```

```
         LABORATORY EPI PARAMETERS INPUT SCREEN        Page 4 of 5
NAME: STREPTOCOCCUS-GROUP A                             INACTIVE: NO
_____________________________________________________________________________
First Encounter: <Enter>                          FOLLOW PTF: YES<Enter>
BEFORE DATE OF BIRTH: <Enter>                     AFTER DATE OF BIRTH: <Enter>
Select SEX: <Enter>
_____________________________________________________________________________
Exit     Save     Refresh
COMMAND: E<Enter>                                       Press <PF1>H for help
```

```
           LABORATORY EPI PARAMETERS INPUT SCREEN    Page 5 of 5
NAME: STREPTOCOCCUS-GROUP A                               INACTIVE: NO
_____________________________________________________________________________
Run Date:<Enter>                                 Protocol: LREPI<Enter>
Run Cycle: MONTHLY<Enter>                         Lag Days: 15<Enter>
Previous Cycle: <TAB>
General Description: <TAB>
_____________________________________________________________________________
Exit    Save     Refresh
COMMAND: E<Enter>                                 Press <PF1>H for help     Insert
Save changes before leaving form (Y/N)? Y <Enter>
```

Tuberculosis (TB) (Reference #5)

Mycobacterium tuberculosis infection is an important public health concern. Recent increases in incidence of disease, and occurrence of multiply-drug resistant strains in outbreak situations along with the increased susceptibility of HIV-infected persons for this disease has generated renewed interest in this entity. Since the national data show that 80-85% of all reported active tuberculosis cases are culture positive (with acid fast bacilli smear-only positive cases increasing the reporting by 2-5% more) we have decided to use culture positivity for *Mycobacterium tuberculosis* to track tuberculosis infections in the current iteration of the EPI software application. Information regarding susceptibility will be tracked as well.

For the national EPI program, there will be no need to enter specific antimycobacterial agents to be tracked; it will be done automatically. ICD coding is complex and confusing for many cases of tuberculosis and therefore will **not** be used.

NOTE: The **new** PREVIOUS CYCLE field displayed on screen Page 1 of 5 is automatically defined as '1' for TB ONLY and CAN NOT be EDIT.

Example: Lab EPI Parameter Setup for Tuberculosis (TB)

```
                              Lab EPI Primary Menu

ENH       Lab EPI Manual Run (Enhanced)
VR        Print Detailed Verification Report
LO        Local Pathogen Menu ...
PI        Pathogen Inquiry
UP        Lab EPI Parameter Setup
          Lab EPI Protocol Edit
LK        Antimicrobial Link Update

Select Lab EPI Primary menu Option: UP<Enter> Lab EPI Parameter Setup

Select LAB EPI NAME: ?<Enter>
 Answer with LAB EPI NAME, or REFERENCE NUMBER
 Do you want the entire 23-Entry LAB EPI List? Y (Yes)<Enter>
Choose from:

   ALL ENTEROCOCCI
   ALL STAPHYLOCOCCUS AUREUS
   ALL STREPTOCOCCUS PNEUMONIAE
   CANDIDA
   CLOSTRIDIUM DIFFICILE
   CREUTZFELDT-JAKOB DISEASE
   CRYPTOSPORIDIUM
   DENGUE
   E. COLI 0157:H7
   HEPATITIS A ANTIBODY POS
   HEPATITIS B POS
   HEPATITIS C ANTIBODY NEG
   HEPATITIS C ANTIBODY POS
   LEGIONELLA
   LEISHMANIASIS
   MALARIA
   METH-RES STAPH AUREUS
   PEN-RES PNEUMOCOCCUS
   STREPTOCOCCUS GROUP A
   TUBERCULOSIS
   VANC-RES COAG NEG STAPH
   VANC-RES ENTEROCOCCUS
   VANC-RES STAPH AUREUS (VRSA)

Select LAB EPI NAME: TUBERCULOSIS <Enter>
```

```
     LABORATORY EPI PARAMETERS INPUT SCREEN           Page 1 of 5

NAME: TUBERCULOSIS                                    INACTIVE: NO
_____________________________________________________________________________

Laboratory Test(s)                    Indicator                  Value
<Enter>

ICD Coding System [ICD-9 or ICD-10]? (9/10):<RET>

ICD Code             Cd Set                    ICD Description
<Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                              Press <PF1>H for help    Insert
```

```
        LABORATORY EPI PARAMETERS INPUT SCREEN        Page 2 of 5

NAME:TUBERCULOSIS                                    INACTIVE: NO
_____________________________________________________________________________

Selected Etiology                              Selected Snomed Codes
Mycobacterium tuberculosis<Enter>


Antimicrobial Susceptibility       NLT Code       NLT Description
<Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                                Press <PF1>H for help
Insert
```

```
           LABORATORY EPI PARAMETERS INPUT SCREEN        Page 3 of 5

NAME: TUBERCULOSIS                                    INACTIVE: NO
_____________________________________________________________________________

                          Topography Selection

Include                                          Exclude
<Enter>                                            <Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                                  Press <PF1>H for help   Insert
```

```
         LABORATORY EPI PARAMETERS INPUT SCREEN       Page 4 of 5
NAME: TUBERCULOSIS                                    INACTIVE: NO
_____________________________________________________________________________
First Encounter:<Enter>                          FOLLOW PTF:YES<Enter>
BEFORE DATE OF BIRTH:<Enter>                    AFTER DATE OF BIRTH:<Enter>
Select SEX:<Enter>
_____________________________________________________________________________
Exit     Save     Refresh
COMMAND: E<Enter>                                     Press <PF1>H for help
```

```
           LABORATORY EPI PARAMETERS INPUT SCREEN      Page 5 of 5
NAME: TUBERCULOSIS                                    INACTIVE: NO
_____________________________________________________________________________
Run Date: <Enter>                               Protocol: LREPI<Enter>
Run Cycle: MONTHLY<Enter>                       Lag Days: 15 <Enter>
Previous Cycle: 1<TAB>
General Description: <TAB>
_____________________________________________________________________________
Exit    Save     Refresh
COMMAND: E<Enter>                               Press <PF1>H for help   Insert
Save changes before leaving form (Y/N)? Y <Enter>
```

Vancomycin-Resistant Coagulase Negative Staphylcocci/Staph epi (VRSE) (Reference #21)

Staphylococci are significant contributors to disease in humans. *Staphylococcus aureus* is the most virulent of the staphylococci, but the non-*aureus* staphylococci can also cause disease. As a general group, these non-*aureus staphylococci* are referred to as coagulase negative staphylococci; some refer to this group of organisms as *Staphylococcus epidermidis* because the staphylococcal species *S. epidermidis* is one of the more common members of this group to cause disease. However, to be accurate, the group of organisms called coagulase negative staphylococci includes many different species, even if the generic terminology of *Staphylococcus epidermidis* (a.k.a. *Staph epi*) has been applied.

The coagulase negative staphylococci are important emerging pathogens in that they contribute to many infections acquired while in a healthcare facility. As a general rule, the coagulase negative staphylococci have lesser virulence than *Staphylococcus aureus*, but they can still cause serious, life-threatening disease in certain settings. As with other organisms, antibiotic resistance is occurring among the coagulase negative staphylococci. There is concern in particular for resistance to vancomycin among this group of organisms, as it is currently the only antibiotic that has consistently shown activity against infections caused by this group of organisms; however, decreased susceptibility and even resistance to vancomycin has been identified in rare cases.

The purpose of this EPI pathogen entry is to capture all isolates from all specimens that contain a coagulase negative staphylococcus that is not Susceptible to vancomycin (whether your facility calls it coagulase negative staphylococcus, *Staphylococcus epidermidis*, *Staphylococcus saprophyticus* or the myriad of other staphylococcal species that comprise this group).

Example: Lab EPI Parameter Setup for Vancomycin-Resistant Coagulase Negative Staphylococci/Staph epi (VRSE) (Reference #21)

```
                              Lab EPI Primary Menu

ENH       Lab EPI Manual Run (Enhanced)
VR        Print Detailed Verification Report
LO        Local Pathogen Menu ...
PI        Pathogen Inquiry
UP        Lab EPI Parameter Setup
          Lab EPI Protocol Edit
LK        Antimicrobial Link Update

Select Lab EPI Primary menu Option: UP<Enter> Lab EPI Parameter Setup

Select LAB EPI NAME: ?<Enter>
 Answer with LAB EPI NAME, or REFERENCE NUMBER
 Do you want the entire 23-Entry LAB EPI List? Y  (Yes) <Enter>
Choose from:

   ALL ENTEROCOCCI
   ALL STAPHYLOCOCCUS AUREUS
   ALL STREPTOCOCCUS PNEUMONIAE
   CANDIDA
   CLOSTRIDIUM DIFFICILE
   CREUTZFELDT-JAKOB DISEASE
   CRYPTOSPORIDIUM
   DENGUE
   E. COLI 0157:H7
   HEPATITIS A ANTIBODY POS
   HEPATITIS B POS
   HEPATITIS C ANTIBODY NEG
   HEPATITIS C ANTIBODY POS
   LEGIONELLA
   LEISHMANIASIS
   MALARIA
   METH-RES STAPH AUREUS
   PEN-RES PNEUMOCOCCUS
   STREPTOCOCCUS GROUP A
   TUBERCULOSIS
   VANC-RES COAG NEG STAPH
   VANC-RES ENTEROCOCCUS
   VANC-RES STAPH AUREUS (VRSA)

Select LAB EPI NAME: VANC-RES COAG NEG STAPH <Enter>
```

```
              LABORATORY EPI PARAMETERS INPUT SCREEN        Page 1 of 5

NAME: VANC-RES COAG NEG STAPH                                INACTIVE: NO
_____________________________________________________________________________

Laboratory Test(s)               Indicator                  Value
<Enter>

ICD Coding System [ICD-9 or ICD-10]? (9/10):<RET>

ICD Code             Cd Set                     ICD Description
<Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

Enter a command or '^' followed by a caption to jump to a specific field.

COMMAND: N<Enter>                           Press <PF1>H for help    Insert
```

```
            LABORATORY EPI PARAMETERS INPUT SCREEN         Page 2 of 5

NAME: VANC-RES COAG NEG STAPH                                INACTIVE: NO
_____________________________________________________________________________
Selected Etiology                              Selected Snomed Codes
STAPHYLOCOCCUS (COAGULASE NEGATIVE)
STAPHYLOCOCCUS (COAGULASE NEGATIVE)
STAPHYLOCOCCUS EPIDERMIDIS
STAPHYLOCOCCUS HAEMOLYTICUS
STAPHYLOCOCCUS SAPROPHYTICUS
STAPHYLOCOCCUS SALIVARIUS
STAPHYLOCOCCUS SIMULANS
STAPHYLOCOCCUS SP
Note: These are just samples. There are many other named species of coagulase
negative staphylococci. Do not include the Staphylococcus aureus, etc.)
Note:  You may enter a new etiology, is you wish
STAPHYLOCOCCUS SP<Enter>
Are you adding a new ETIOLOGY? No// Y<Enter>

Antimicrobial Susceptibility     NLT Code       NLT Description
VANCOMYCIN<Enter>
Are you adding a new ANTIMICROBIAL SUSCEPTIBILITY? No// Y<Enter>

VANCMCN                          81485.0000     Vancomycin
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

Enter a command or '^' followed by a caption to jump to a specific field.

COMMAND: N<Enter>                           Press <PF1>H for help    Insert
```

```
          LABORATORY EPI PARAMETERS INPUT SCREEN       Page 3 of 5
NAME: VANC-RES COAG NEG STAPH                          INACTIVE: NO
_____________________________________________________________________________

                          Topography Selection

Include                                                 Exclude
<Enter>                                                 <Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

Enter a command or '^' followed by a caption to jump to a specific field.

COMMAND: N<Enter>                          Press <PF1>H for help    Insert
```

```
             LABORATORY EPI PARAMETERS INPUT SCREEN   Page 4 of 5
NAME: VANC-RES COAG NEG STAPH                          INACTIVE: NO
_____________________________________________________________________________

FIRST ENCOUNTER:  <Enter>                          FOLLOW PTF: YES <Enter>

BEFORE DATE OF BIRTH:  <Enter>                  AFTER DATE OF BIRTH: <Enter>

Select SEX: <Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

Enter a command or '^' followed by a caption to jump to a specific field.

COMMAND: N<Enter>                          Press <PF1>H for help    Insert
```

```
             LABORATORY EPI PARAMETERS INPUT SCREEN     Page 5 of 5
NAME:  VANC-RES COAG NEG STAPH                         INACTIVE: NO
_____________________________________________________________________________

Run Date: <Enter>                          Protocol: LREPI<Enter>

Run Cycle: MONTHLY<Enter>                  Lag Days: 15<Enter>

Previous Cycle: <TAB>

General Description: <TAB>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

Enter a command or '^' followed by a caption to jump to a specific field.
```

Vancomycin-Resistant Enterococcus (VRE) (Reference #1)

Vancomycin-Resistant Enterococcus (VRE) is a pathogen of increasing importance. Not only can it cause significant disease, but also it can be spread within facilities. It is important to capture all positive cultures for VRE (not just disease). As such, all positive cultures for VRE will be reported.

In addition to *Enterococcus sp*. as an etiology, some laboratories may specifically indicate VRE as a separate etiology. If that is the case with your laboratory, please be sure to include that naming convention in your EPI parameter for "Selected Etiology" also.

NOTE: This includes cultures positive for prevalence and surveillance review, including specimens of stool and rectal swabs.

Vancomycin-resistant *Enterococcus faecalis* and *E. faecium* are most common, but we wish to look at all vancomycin resistant enterococci whether speciated or not. Therefore, it is important to be sure to list all the places in the Micro Lab package where *Enterococcus* are found, either as *Enterococcus*, *E. (sp.),* Group D-*Streptococcus*, *E. faecalis*, *E. faecium*, *E. durans*, *E. gallinarum*, *E. casseliflavus*, etc.

NOTE: Only a partial pre-populated Etiology list is shown in the screen display example at the Selected Etiology prompt. Please be sure to review the entire Etiology list. If you have other etiology results at your site, they can be added to this Etiology list. Again, if alternate spellings are present in your site's ETIOLOGY FIELD file (#61.2), be certain those spellings assure capture of all data points possible.

Example: Lab EPI Parameter Setup for Vancomycin-Resistant Enterococcus (VRE) (Reference #1)

```
                              Lab EPI Primary Menu

ENH       Lab EPI Manual Run (Enhanced)
VR        Print Detailed Verification Report
LO        Local Pathogen Menu ...
PI        Pathogen Inquiry
UP        Lab EPI Parameter Setup
          Lab EPI Protocol Edit
LK        Antimicrobial Link Update

Select Lab EPI Primary menu Option: UP<Enter> Lab EPI Parameter Setup

Select LAB EPI NAME: ?<Enter>
 Answer with LAB EPI NAME, or REFERENCE NUMBER
 Do you want the entire 23-Entry LAB EPI List? Y  (Yes) <Enter>
Choose from:

   ALL ENTEROCOCCI
   ALL STAPHYLOCOCCUS AUREUS
   ALL STREPTOCOCCUS PNEUMONIAE
   CANDIDA
   CLOSTRIDIUM DIFFICILE
   CREUTZFELDT-JAKOB DISEASE
   CRYPTOSPORIDIUM
   DENGUE
   E. COLI 0157:H7
   HEPATITIS A ANTIBODY POS
   HEPATITIS B POS
   HEPATITIS C ANTIBODY NEG
   HEPATITIS C ANTIBODY POS
   LEGIONELLA
   LEISHMANIASIS
   MALARIA
   METH-RES STAPH AUREUS
   PEN-RES PNEUMOCOCCUS
   STREPTOCOCCUS GROUP A
   TUBERCULOSIS
   VANC-RES COAG NEG STAPH
   VANC-RES ENTEROCOCCUS
   VANC-RES STAPH AUREUS (VRSA)

Select LAB EPI NAME: VANC-RES ENTEROCOCCUS <Enter>
```

```
         LABORATORY EPI PARAMETERS INPUT SCREEN         Page 1 of 5

NAME: VANC-RES ENTEROCOCCUS                             INACTIVE: NO
_____________________________________________________________________________

Laboratory Test(s)             Indicator                          Value
<Enter>
ICD Coding System [ICD-9 or ICD-10]? (9/10):<RET>

ICD Code             Cd Set                    ICD Description
<Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                             Press <PF1>H for help    Insert
```

```
           LABORATORY EPI PARAMETERS INPUT SCREEN       Page 2 of 5

NAME: VANC-RES ENTEROCOCCUS                             INACTIVE: NO
_____________________________________________________________________________
Selected Etiology                              Selected Snomed Codes
Examples:Enterococcus
         Enterococcus  (Strept. faecalis-Group D)
         Streptococcus faecalis      Enterococcus durans
         Streptococcus faecium       Streptococcus sp. Group D
         Enterococcus avium
         Enterococcus avium - (Group D)
         Enterococcus casseliflavus
         Enterococcus faecalis
         Enterococcus gallinarum
         Enterococcus malodoratus    Enterococcus
         Enterococcus hirae          solitarius
         Enterococcus mundtii        Enterococcus
         Enterococcus raffinosus     pseudoavium
         Enterococcus sp.            Enterococcus faecium
         Enterococcus species        Enterococcus durans
         Enterococcus (VRE)
<Enter>
Note: During the post Init, the ETIOLOGY FIELD file (#61.2) was searched to
pre-populate the Etiology field (#3) in the EMERGING PATHOGENS file (#69.5).
Listed above are examples of etiology entries which may have been populated
from your site's file. Additional etiologies may be added or deleted at the
Selected Etiology prompt to meet your site specific needs.

Note: If spelling differences occur within your ETIOLOGY FIELD file (#61.2)
be consistent with your local file and spell the results here, as it is
spelled in your file (even if it is spelled differently in the example). We
are concerned more importantly with data recovery.

Antimicrobial Susceptibility      NLT Code       NLT Description
VANCOMYCIN<Enter>
_____________________________________________________________________________
```

```
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                              Press <PF1>H for help    Insert
```

```
         LABORATORY EPI PARAMETERS INPUT SCREEN       Page 3 of 5

NAME: VANC-RES ENTEROCOCCUS                           INACTIVE: NO
_____________________________________________________________________________

                          Topography Selection

Include                                  Exclude
<Enter>                                   <Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh

COMMAND: N<Enter>                              Press <PF1>H for help    Insert
```

```
       LABORATORY EPI PARAMETERS INPUT SCREEN           Page 4 of 5

NAME: VANC-RES ENTEROCOCCUS                             INACTIVE: NO
_____________________________________________________________________________

First Encounter:<Enter>                          FOLLOW PTF:YES<Enter>

BEFORE DATE OF BIRTH:<Enter>                     AFTER DATE OF BIRTH:<Enter>

Select SEX:<Enter>
_____________________________________________________________________________
Exit     Save     Refresh

COMMAND: E<Enter>                          Press <PF1>H for help    Insert

Save changes before leaving form (Y/N)?Y<Enter>
```

```
           LABORATORY EPI PARAMETERS INPUT SCREEN    Page 5 of 5

NAME: VANC-RES ENTEROCOCCUS                                INACTIVE: NO
_____________________________________________________________________________

Run Date: <Enter>                          Protocol: LREPI<Enter>

Run Cycle: MONTHLY<Enter>                  Lag Days: 15<Enter>

Previous Cycle: <TAB>

General Description: <TAB>
_____________________________________________________________________________
Exit    Save     Refresh

COMMAND: E<Enter>                               Press <PF1>H for help
Insert

Save changes before leaving form (Y/N)?Y<Enter>
```

Vancomycin-Resistant Staphylococcus Aureus (VRSA) (Reference #20)

Vancomycin-resistant *Staphylococcus aureus* (VRSA) is a rare but emerging pathogen for healthcare facilities. It is of concern because the resistance to this antibiotic can be combined with resistance to other antibiotics; it is this multiple resistance that will make infection with this organism difficult to treat. Staphylococci can be transmitted easily within facilities; the easy transmission is of concern for this organism should it occur in a patient. The staphylococci can produce a spectrum of illness from asymptomatic colonization to severe, life-threatening disease in those patients who acquire them. Whether this organism is causing disease or not, it can contribute to spread within a healthcare facility. The purpose of this pathogen on the EPI list is to capture all cultures that have VRSA present (whether the patient has disease or is just colonized). This should capture all vancomycin non-Susceptible strains of *Staphylococcus aureus*, whether the susceptibility interpretation is Intermediate or Resistant.

NOTE: This includes all positive cultures for VRSA, both clinical cultures and those done as part of epidemiologic prevalence studies or surveys (such as nasal and rectal swabs) at your facility.

Any *Staphylococcus aureu*s isolate that is resistant to vancomycin should be captured for this. Laboratories may use different methods to capture these data. An appropriate National Committee on Clinical Laboratory Standards (NCCLS) testing schema used and captured in VistA should be adequate.

Example: Lab EPI Parameter Setup for Vancomycin-Resistant Staphylococcus *aureus* (VRSA) (Reference #20)

```
Lab EPI Primary Menu

ENH       Lab EPI Manual Run (Enhanced)
VR        Print Detailed Verification Report
LO        Local Pathogen Menu ...
PI        Pathogen Inquiry
UP        Lab EPI Parameter Setup
          Lab EPI Protocol Edit
LK        Antimicrobial Link Update

Select Lab EPI Primary menu Option: UP<Enter> Lab EPI Parameter Setup

Select LAB EPI NAME: ?<Enter>
 Answer with LAB EPI NAME, or REFERENCE NUMBER
 Do you want the entire 23-Entry LAB EPI List? Y  (Yes) <Enter>
Choose from:

   ALL ENTEROCOCCI
   ALL STAPHYLOCOCCUS AUREUS
   ALL STREPTOCOCCUS PNEUMONIAE
   CANDIDA
   CLOSTRIDIUM DIFFICILE
   CREUTZFELDT-JAKOB DISEASE
   CRYPTOSPORIDIUM
   DENGUE
   E. COLI 0157:H7
   HEPATITIS A ANTIBODY POS
   HEPATITIS B POS
   HEPATITIS C ANTIBODY NEG
   HEPATITIS C ANTIBODY POS
   LEGIONELLA
   LEISHMANIASIS
   MALARIA
   METH-RES STAPH AUREUS
   PEN-RES PNEUMOCOCCUS
   STREPTOCOCCUS GROUP A
   TUBERCULOSIS
   VANC-RES COAG NEG STAPH
   VANC-RES ENTEROCOCCUS
   VANC-RES STAPH AUREUS (VRSA)

Select LAB EPI NAME: VANC-RES STAPH AUREUS (VRSA)<Enter>
```

```
              LABORATORY EPI PARAMETERS INPUT SCREEN       Page 1 of 5

NAME: VANC-RES STAPH AUREUS (VRSA)                          INACTIVE: NO
_____________________________________________________________________________
_
 Laboratory Test(s)               Indicator                  Value
<Enter>

ICD Coding System [ICD-9 or ICD-10]? (9/10):<RET>

ICD Code             Cd Set                    ICD Description
<Enter>
_____________________________________________________________________________
_
Exit     Save     Next Page     Refresh

Enter a command or '^' followed by a caption to jump to a specific field.

COMMAND: N<Enter>                            Press <PF1>H for help    Insert
```

```
          LABORATORY EPI PARAMETERS INPUT SCREEN          Page 2 of 5

NAME: VANC-RES STAPH AUREUS (VRSA)                INACTIVE: NO
_____________________________________________________________________________

Selected Etiology                              Selected Snomed Codes
```

STAPHYLOCOCCUS AUREUS
STAPHYLOCOCCUS AUREUS (MRSA)
STAPHYLOCOCCUS AUREUS (VRSA)

NOTE: In addition to Staphylococcus aureus as an etiology, some laboratories may specifically indicate VRSA as a separate etiology. If that is the case with your laboratory, please be sure to include that naming convention in your EPI parameter for "Selected Etiology" also.

```
Note:  You may enter a new etiology, is you wish
STAPHYLOCOCCUS AUREUS (VRSA)<Enter>

Are you adding a new ETIOLOGY? No// Y<Enter>

Antimicrobial Susceptibility     NLT Code       NLT Description

 VANCOMYCIN<Enter>

Are you adding a new ANTIMICROBIAL SUSCEPTIBILITY? No// Y<Enter>

VANCMCN                         81485.0000     Vancomycin
_____________________________________________________________________________
Exit     Save     Next Page     Refresh
```

```
Enter a command or '^' followed by a caption to jump to a specific field.

COMMAND: N<Enter>                              Press <PF1>H for help    Insert
```

```
          LABORATORY EPI PARAMETERS INPUT SCREEN          Page 3 of 5
NAME: VANC-RES STAPH AUREUS                                INACTIVE: NO
_____________________________________________________________________________

                          Topography Selection

Include                                                    Exclude
<Enter>                                                    <Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh
Enter a command or '^' followed by a caption to jump to a specific field.
COMMAND: N<Enter>                                Press <PF1>H for help    Insert
```

```
          LABORATORY EPI PARAMETERS INPUT SCREEN          Page 4 of 5
NAME: VANC-RES STAPH AUREUS                                INACTIVE: NO
_____________________________________________________________________________
FIRST ENCOUNTER:  <Enter>                          FOLLOW PTF: YES <Enter>
BEFORE DATE OF BIRTH: <Enter>                  AFTER DATE OF BIRTH: <Enter>
Select SEX: <Enter>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh
Enter a command or '^' followed by a caption to jump to a specific field.
COMMAND: N<Enter>                                Press <PF1>H for help    Insert
```

```
          LABORATORY EPI PARAMETERS INPUT SCREEN          Page 5 of 5
NAME:  VANC-RES STAPH AUREUS                               INACTIVE: NO
_____________________________________________________________________________
Run Date: <Enter>                                Protocol: LREPI<Enter>
Run Cycle: MONTHLY<Enter>                         Lag Days: 15<Enter>
Previous Cycle: <TAB>
General Description: <TAB>
_____________________________________________________________________________
Exit     Save     Next Page     Refresh
Enter a command or '^' followed by a caption to jump to a specific field.
```

```
COMMAND: S<Enter>                          Press <PF1>H for help    Insert
```

Conclusion

Once you have finished entering the information as directed by the National Infectious Diseases Program Office, these fields should **not** be changed again except for the following conditions:

1. As requested nationally via the Veterans Affairs Central Office (VACO) Infectious Disease Program Office to update, modify, add, or delete data from the existing files used by the Laboratory EPI software or an addition of a new entity to be tracked.

2. The yearly review must ensure that the entry is acceptable and to update the EPI files with any changes in etiology, lab tests or results parameters that may have occurred locally at the site during the previous year.

3. If your laboratory alters its accessioning or results procedures for one or more other parameters for one of the national EPI pathogens. An update should occur to the EPI to reflect these changes as appropriate.

Annually the EPI national program materials should be reviewed by the VAMCs and updated. It is suggested that this review occur in February of each year. If no changes have occurred in lab practices, etiologies, sites, or results parameters leave the information as is until the next review period. If changes did occur, then enter them as appropriate in order to capture the data requested for each EPI national entity (disease/organism) to be tracked.

As entities (diseases/organisms) are no longer to be tracked nationally ("dropped from the list"), or a new entity is to be tracked ("added to the list"), revision will be forwarded to the sites to assist in updating your site files.

NOTE: Remember that if the parameter setup needs to be changed for any of the four hepatitis entities, that a concomitant change needs to be made in the corresponding Clinical Reminder logic.

APPENDIX - A
EDITING/PRINTING FILES, LINKING DATA, and EDITING INPUT SCREENS

Appendix – A
Editing/Printing Files, Linking Data, and Editing Input Screens

This section contains instructions and examples for editing/adding entries the TOPOGRAPHY file (#61), printing LAB SEARCH/EXTRACT file (#69.5) site definitions, linking the ANTIMICROBIAL SUSCEPTIBILITY file (#62.06) data entries to the WKLD CODE file (#64) data entries, and deleting entries from the Laboratory EPI Parameters Input Screen.

NOTE: To request additional LOINC, Workload, and Suffixes codes access the VistA Laboratory website, National Lab Tests (NLT) Documentation Set and LOINC Request Forms link:

REDACTED

Editing/Printing Files, Screens, Linking Data, Request Form

Editing TOPOGRAPHY file (#61):

Specific HL7 codes **must** be added to the TOPOGRAPHY file (#61). The HL7 Code field (#08) in this file is used to add the entries. Specific HL7 codes that **must** be added to TOPOGRAPHY file (#61) is located in the HL7 section of this guide, Table 0070 (Specimen Source Codes). The following is an example of how to add the specific HL7 codes to the TOPOGRAPHY file (#61) using VA FileMan Version 21 - Enter or Edit File Entries option.

Example: How to ADD specific HL7 codes to TOPOGRAPHY file (#61)

```
Select OPTION:    ENTER OR EDIT FILE ENTRIES<Enter>

INPUT TO WHAT FILE: TOPOGRAPHY FIELD// <Enter>
EDIT WHICH FIELD: ALL// .08 HL7 CODE <Enter>
THEN EDIT FIELD: <Enter>

Select TOPOGRAPHY FIELD NAME: ? <Enter>
 Answer with TOPOGRAPHY FIELD NAME, or SNOMED CODE, or ABBREVIATION, or
     SYNONYM
 Do you want the entire 8575-Entry TOPOGRAPHY FIELD List? NO<Enter>
     You may enter a new TOPOGRAPHY FIELD, if you wish
     ANSWER MUST BE 2-80 CHARACTERS IN LENGTH
Select TOPOGRAPHY FIELD NAME:    AMNIOTIC FLUID        8Y300
HL7 CODE: ? <Enter>
     Answer must be 2-4 characters in length.

Enter the two to four character codes from the left column:

ABS       ABCs
AMN       Amniotic fluid
ASP       Aspirate
BPH       Basophils
ABLD      Blood arterial
BBL       Blood bag
BON       Bone
BRTH      Breath
BRO       Bronchial
BRN       Burn
```

Printing LAB SEARCH/EXTRACT file (#69.5) Definitions:

Use the following VA FileMan print option to print your local sites definitions from the LAB SEARCH/EXTRACT file (#69.5).

Examples: How to PRINT LAB SEARCH/EXTRACT file (#69.5) local sites definitions:

```
Select VA FileMan 22.0


Select OPTION: 2  PRINT FILE ENTRIES<Enter>

OUTPUT FROM WHAT FILE: REMINDER TERM// LAB SEARCH<Enter>
     1   LAB SEARCH/EXTRACT               (19 entries)
     2   LAB SEARCH/EXTRACT PROTOCOL      (2 entries)
CHOOSE 1-2: 1 <Enter> LAB SEARCH/EXTRACT         (19 entries)
SORT BY: NAME//<Enter>
START WITH NAME: FIRST// HEPATITIS<Enter>
GO TO NAME: LAST// HEPATITIS Z<Enter>
  WITHIN NAME, SORT BY:
FIRST PRINT FIELD: ? <Enter>
 Answer with FIELD NUMBER, or LABEL
 Do you want the entire 21-Entry FIELD List? Y<Enter> (Yes)
Choose from:
   .01          NAME
   .05          REFERENCE NUMBER
   1            ACTIVE
   2            LAB TEST  (multiple)
   3            ETIOLOGY  (multiple)
   4            ICD DIAGNOSIS  (multiple)
   5            ANTIMICROBIAL SUSCEPTIBILITY  (multiple)
   6            INCLUDED SITES  (multiple)
   7            EXCLUDED SITES  (multiple)
   8            SNOMED CODES  (multiple)
   9            RUN DATE
   10           CYCLE
   10.5         LAG DAYS
   11           FIRST ENCOUNTER
   12           PROTOCOL
   13           FOLLOW PTF
   14           PTF  (multiple)
   15           Description  (word-processing)
   16           SEX
   17           BEFORE DATE OF BIRTH
   18           AFTER DATE OF BIRTH
                ^
     TYPE '&' IN FRONT OF FIELD NAME TO GET TOTAL FOR THAT FIELD,
        '!' TO GET COUNT, '+' TO GET TOTAL & COUNT, '#' TO GET MAX & MIN, ']'
TO FORCE SAVING PRINT TEMPLATE
     TYPE '[TEMPLATE NAME]' IN BRACKETS TO USE AN EXISTING PRINT TEMPLATE
     YOU CAN FOLLOW FIELD NAME WITH ';' AND FORMAT SPECIFICATION(S)
FIRST PRINT FIELD: .01;C1;L30  NAME<Enter>
```

```
THEN PRINT FIELD: ACTIVE;C35;L5<Enter>
THEN PRINT FIELD: LAG DAYS;C45;L5<Enter>
THEN PRINT FIELD: LAB TEST    (multiple)<Enter>
  THEN PRINT LAB TEST SUB-FIELD: .01;C5;L30  LAB TEST<Enter>
  THEN PRINT LAB TEST SUB-FIELD: INDICATOR;C38;L15<Enter>
  THEN PRINT LAB TEST SUB-FIELD: INDICATED VALUE;C55;L23<Enter>
  THEN PRINT LAB TEST SUB-FIELD: <Enter>
THEN PRINT FIELD: <Enter>
Heading (S/C): LAB SEARCH/EXTRACT LIST  Replace L With site name_L
  Replace site name_LAB SEARCH/EXTRACT LIST
STORE PRINT LOGIC IN TEMPLATE:
START AT PAGE: 1//
DEVICE: ;;999999  WAN    Right Margin: 80//<Enter>


site name_LAB SEARCH/EXTRACT LIST         AUG 18,2000  12:21    PAGE 1
                                            LAG
NAME                                 ACTIVE    DAYS
    LAB TEST                            INDICATOR    INDICATED VALUE
-------------------------------------------------------------------------
HEPATITIS A ANTIBODY POS             NO        15
    HEP A ANTIBODY-TOTAL                Equal To    Reactive
    HEP A ANTIBODY(IgM)
    HEP A ANTIBODY(IgM)                 Contains      POS
    HEPATITIS A AB(IGG)D/C(2/99)        Contains      POS
    HEPATITIS A AB(IGG)D/C(2/99)        Contains      Pos
    HEPATITIS A AB(IGG)D/C(2/99)        Contains      p
    HEPATITIS A AB(IGG)D/C(2/99)        Equal To      Reactive
    HEPATITIS A AB(IGG)D/C(2/99)        Contains      p
    HEPATITIS A AB(IGG)D/C(2/99)        Equal To      Pos
HEPATITIS B POS                      NO        15
    HEP B SURFACE Ag                    Contains      POS
    HEP B SURFACE AB                    Contains      POS
    HEP B CORE AB(IgM)                  Contains      POS
    HEP Be ANTIGEN                      Contains      POS
    HEP Be ANTIGEN                      Contains      Pos
    HEP Be ANTIGEN                      Contains      p
    HEP Be ANTIGEN                      Contains      P
HEPATITIS C ANTIBODY NEG             NO        15
    HEP C ANTIBODY                      Contains      NEG
    HEP C ANTIBODY                      Contains      SEE COMMENT
HEPATITIS C ANTIBODY POS             NO        15
    HEP C ANTIBODY                      Contains      POS
```

How to Link Antimicrobial Entries to Workload Codes Entries:

The Laboratory EPI software automatically links as many of the ANTIMICROBIAL SUSCEPTIBILITY file (#62.06) data entries to the WKLD CODE file (#64) data entries that are identified in your site files. However, the ANTIMICROBIAL SUSCEPTIBILITY file (#62.06) data entries that were **not** linked (i.e. no match found) to the WKLD CODE file (#64) will require linking. The Antimicrobial Link Update [LREPILK] option contains three functionalities that can be used to identify and link data entries that were **not** linked by the EPI software installation post-INIT process.

Examples: Antimicrobial Link Update [LREPILK] options

```
Select Lab EPI Primary Menu<Enter>

   ENH    Lab Search/Extract Manual Run (Enhanced)
   VR     Print Detailed Verification Report
   LO     Local Pathogen Menu ...
   PI     Pathogen Inquiry
   UP     Lab EPI Parameter Setup
          Lab EPI Protocol Edit
   LK     Antimicrobial Link Update

Select Lab EPI Primary Menu Option: LK<Enter>Antimicrobial Link Update

This option will allow you to link file '62.06 ANTIMICROBIAL
SUSCEPTIBILITY' file with file '64 WKLD CODE.

     Select one of the following:

          A         AUTO
          M         MANUAL
          S         SEMI-AUTO
```

AUTO function

The AUTO function identifies and attempts to link data entries that are **not** currently linked. This option also displays linked and non-linked data entries.

Example: AUTO function

```
Enter response: A<Enter>UTO
AMIKACN                       <----Linked---->    Amikacin
AMPICLN                       <----Linked---->    Ampicillin
CLINDAM                       <----Linked---->    Clindamycin
POLYMYXIN B                   <----Not Linked---->No Match Found
RIFAMPIN                      <----Linked---->    Rifampin
```

MANUAL function

The MANUAL function is use to add or delete linked entries. **Note:** Examples are from entries in the ANTIMICROBIAL SUSCEPTIBILITY file (#62.06).

Example: Deleting an Entry

```
Enter response: MANUAL<Enter>
Select ANTIMICROBIAL SUSCEPTIBILITY NAME: PENICLIN<Enter>    PENICILLIN
NATIONAL VA LAB CODE: Substance P// PEN<Enter>
     1   PENFIELD AND CONE STAIN          88010.0000
     2   PENICILLIN  Penicillin        81852.0000
     3   PENTAZOCINE  Pentazocine        81854.0000
     4   PENTOBARBITAL  Pentobarbital        81856.0000
CHOOSE 1-4: 2  Penicillin<Enter>
Select ANTIMICROBIAL SUSCEPTIBILITY NAME: VANCMCN<Enter>      VANCOMYCIN
NATIONAL VA LAB CODE: Shell Vial Technique// VANCOMYCIN<Enter> Vancomycin
81485.0000<Enter>
Select ANTIMICROBIAL SUSCEPTIBILITY NAME: Ampicillin/sulbactam<Enter>
Ampicillin/subalctam
NATIONAL VA LAB CODE: Ampicillin// @<Enter>
   SURE YOU WANT TO DELETE? Y  (Yes)<Enter>
Select ANTIMICROBIAL SUSCEPTIBILITY NAME: <Enter>
```

SEMI-AUTO function

The SEMI-AUTO function looks for entries that are not currently linked and prompts the user to select the corresponding entry in the WKLD CODE file (#64).

Example: SEMI-AUTO function

```
Enter response: SEMI-AUTO<Enter>

AMIKACN        AMIKACIN
NATIONAL VA LAB CODE: AMIK<Enter>ACIN  Amikacin        81098.0000
Continue YES/<Enter>

AMPICLN        AMPICILLIN
NATIONAL VA LAB CODE: AMP<Enter>
     1   AMP CYCLIC           81029.0000
     2   AMPHETAMINE  Amphetamine        81528.0000
     3   AMPHOTERICIN B  Amphotericin B        81530.0000
     4   AMPICILLIN  Ampicillin        81532.0000
CHOOSE 1-4: 4  Ampicillin
Continue YES// <Enter>

CLINDAM        CLINDAMYCIN
NATIONAL VA LAB CODE: CLINDAMYCIN  Clindamycin        81676.0000
Continue YES// <Enter>

CARBCLN        CARBENICILLIN
NATIONAL VA LAB CODE:
Continue YES// NO<Enter>
```

Delete Entry from Laboratory EPI Parameters Input Screen

Use the tab key to move the cursor. Highlight the entry that is to be deleted, select the "@" symbol, then press enter/return. You will then receive a deletion warning asking if you are sure.

Example: Deleting an entry from the Laboratory EPI Parameters Input Screen.

```
LABORATORY EPI PARAMETERS INPUT SCREEN     Page 2 of 5

NAME: CANDIDA                                              ACTIVE:   YES
_____________________________________________________________________________
Selected Etiology

CANDIDA PARAPSILOSIS <Tab>
CANDIDA PSEUDOTROPICALIS <Tab>
CANDIDA SKIN TEST ANTIGEN     @ <Enter>
CANDIDA STELLATOIDEA

Antimicrobial Susceptibility      NLT Code       NLT Description
<Tab>



_____________________________________________________________________________
Exit     Save     Next Page     Refresh


COMMAND:                              Press <PF1>H for help
WARNING: DELETIONS ARE DONE IMMEDIATELY!
           (EXITING WITHOUT SAVING WILL NOT RESTORE DELETED RECORDS.)
Are you sure you want to delete this entire Subrecord (Y/N)? y <Ret>
```

How to add an entry to the Laboratory EPI Parameters Input Screen

Use the tab key to move the cursor. Highlight a blank line where the entry is to be added.

Example: Adding entries via the Laboratory EPI Parameters Input Screen

```
       LABORATORY EPI PARAMETERS INPUT SCREEN     Page 2 of 5

NAME: CANDIDA                                          ACTIVE:   YES
_____________________________________________________________________________
Selected Etiology
 CANDIDA
 CANDIDA GUILLIERMONDII
 CAN <Ret>

Antimicrobial Susceptibility      NLT Code       NLT Description
<Tab>
_____________________________________________________________________________

1      CAN  CANDIDA ALBICANS      4081
2      CANARYPOX VIRUS        3604
3      CANDICIDIN        7328
4      CANDIDA, NOS        4080
5      CANDIDA GUILLIERMONDII        4082
Choose 1-5 or '^' to quit: 1 <Ret>
```

```
LABORATORY EPI PARAMETERS INPUT SCREEN     Page 2 of 5

NAME: CANDIDA                                        ACTIVE:    YES
_____________________________________________________________________________
Selected Etiology
 CANDIDA GUILLIERMONDII
 CANDIDA KRUSEI
 CANDIDA ALBICANS       <- The entry will appear after answering yes
                           to the adding a new ETIOLOGY prompt.
Antimicrobial Susceptibility      NLT Code       NLT Description
<Tab>
_____________________________________________________________________________

CAN CANDIDA ALBICANS
  Are you adding 'CANDIDA ALBICANS' as a new ETIOLOGY? Y <Ret>
```

Lab EPI Generate Local Report/Spreadsheet [LREPI GENERATE REPORT/SP] option Field Definitions:

SEGMENT	NUMBER	FIELD ELEMENT NAME	FIELD DESCRIPTION
PID	1	Set ID	Patient ID Sequence Number The Set ID field is used to identify the number of repetitions of the PID segment by HL7. The first PID segment would have a Set ID value of 1, the next would have a value of 2, etc.
	2	Social Security Number	Patient's Social Security Number NNN-NN-NNNN
	3	VA Master Patient Index (MPI)	Patient's MPI
	4	Patient Name	Patient's Name Last, First M
	5	Date of Birth	Patient's Date of Birth
	6	Sex	Patient's Sex Refer to Table 0001.
	7	RACE	Patient's Race Refer to Table 0005.
	8	Homeless	If patient is homeless, then "Homeless" prints.
	9	State	Patient's State
	10	Zip Code	Patient's Zip Code
	11	County	Patient's County
	12	Ethnicity	Patient's Ethnicity Refer to table 0189.
	13	Period of Service	Military Status assigned to a veteran. Refer to Table VA011.
PV1	1	Set ID - Patient VisitA	PV1 Sequence Number The Set ID field is used to identify the number of repetitions of the PV1 segment by HL7. The first PV1 segment would have a Set ID value of 1, the next would have a value of 2, etc.
	2	Patient Class	Inpatient or Outpatient
	3	Hospital Location	Assigned Patient Location-Treatment Location For inpatients only. WARD~ROOM~BED
	4	Discharge Disposition	Type of Disposition For Inpatients Only Source VA File PTF (#45)

Lab EPI Generate Local Report/Spreadsheet [LREPI GENERATE REPORT/SP] option Field Definitions *continued.*

SEGMENT	NUMBER	FIELD ELEMENT NAME	FIELD DESCRIPTION
	5	Facility	Servicing Facility-Primary Facility
	6	Admit Date/Time	Inpatient-Admission Date/Time Outpatient- Accession Date
	7	Discharge Date/Time	Discharge Date/Time For Inpatients Only
DG1	1	Set ID-Diagnosis (Sequence #)	DG1 Sequence Number The Set ID field is used to identify the number of repetitions of the DG1 segment by HL7. The first DG1 segment would have a Set ID value of 1, the next would have a value of 2, etc.
	2	Diagnosis Code (Code(id) ~Text (St.) ~ Name of coding system (st)	Diagnosis Code
	3	Diagnosis	Diagnosis
	4	Admission Date	Inpatient- Admission Date Outpatient- Accession Date
	2	DATE	Date
	3	RESOLVED TERM	Resolved Term
	4	TEXT	Text
	5	RESULT	Test result
		SOURCE ID	Source ID
NTE	1	Set ID	Sequence Number The Set ID field is used to identify the number of repetitions of the NTE segment by HL7. The first NTE segment would have a Set ID value of 1, the next would have a value of 2, etc.
	3	Comment	Five formats exist for this segment: a. NTE||manual/automatic indicator (Null for automatic, R for Manual)~REPORTING DATE FROM from date TO to date~message number~~software version number (blank for original system/V2 for new system(epi)~Negative Input Indicator (null if input is present, N if negative) b. NTE|sequence number|reference number from field .05 (reference number) in file 69.5 (LAB SEARCH/EXTRACT)

Lab EPI Generate Local Report/Spreadsheet [LREPI GENERATE REPORT/SP] option Field Definitions *continued*.

SEGMENT	NUMBER	FIELD ELEMENT NAME	FIELD DESCRIPTION
			c. NTE||Totals indicator (T if NTE describes totals for run)~National Lab Test Code~Test Name from files 60 (Lab Test) or file 61.2 (Etiology Field)~Total number of tests performed. d. NTE||Totals indicator (T if NTE describes totals for run)~National Lab Test Code~"PATIENTS WITH "_Test Name from files 60 (Lab Test) or file 61.2 (Etiology Field)~Number of unique patients receiving this test e. NTE||Totals indicator (T if NTE describes totals for run)~Hepatitis Assessment~Total number of Hepatitis C Assessments
OBR	1	Set ID-Observation Request (Seq #)	OBR Sequence Number The Set ID field is used to identify the number of repetitions of the OBR segment by HL7. The first OBR segment would have a Set ID value of 1, the next would have a value of 2, etc.
	2	Test Name	The name of the lab test performed.
	3	Accession Date	Accession Date
	4	Specimen	Specimen
	5	Accession Number	Accession Number
OBX	1	Set Id-Observational	OBX Sequence Number The Set ID field is used to identify the number of repetitions of the OBX segment by HL7. The first OBX segment would have a Set ID value of 1, the next would have a value of 2, etc.
	2	Value Type	CE or ST
	3	Test Name	The name of the lab test performed.
	4	LOINC Code	LOINC Code
	5	LOINC Name	LOINC Name
	6	Test Result	Result of the test performed or the MIC value.
	7	Units	Units
	8	Abnormal Flags	Abnormal Flags
	9	Verified Date/Time	The date/time that the test was verified.

APPENDIX-B
HELPFUL HINTS

Appendix – B Helpful Hints

This section provides helpful hints, methods, and examples for maintaining and validating EPI data.

Preferred Methods for Clostridium difficile Data Capture

There are two preferred methods that will make it easy to capture data for Clostridium difficile criteria (i.e., as well as several other methods which sites may already employ).

NOTE: As long as the designated parameter results being tracked are in a retrievable field (i.e., **not** a "Free Text" or "Comment" field) the method the site chooses is an individual decision.

Preferred Method #1:

The first preferred method is to have the site define an etiology of **"Clostridium difficile toxin positive"**. This allows a topography specimen of accession area **"feces/stool"** to be accessioned through the Microbiology accession area. Then, if the stool specimen were indeed positive for *Clostridium difficile* toxin, by any of the known methods of testing, the etiology would be **"Clostridium difficile toxin positive."** To accomplish this method would require sites to enter three new local etiologies:

- Clostridium difficile toxin positive
- Clostridium difficile toxin negative
- Clostridium difficile toxin in determinant

These would be different from a culture isolate being positive for *Clostridium difficile,* in that they actually are etiologies/results based on toxin testing. This leaves the etiology of *Clostridium difficile* for actual culture positive specimens for the organism *Clostridium difficile*. The Lab EPI Parameter Setup [LREPI PARAMETER SETUP] option, the site parameter by which the software will capture a patient diagnosed with proven *Clostridium difficile*-associated colitis, will be by placing "**Clostridium difficile toxin positive**" etiology into the selected etiology entry screen. This has the advantage of being more consistent with other data entry practices in the Microbiology sections of most laboratories.

Preferred Method #2:

The second preferred method is having the data in retrievable form would be to enter/accession the specimen for *Clostridium difficile* toxin assay under the chemistry/serology format (regardless of where the test is physically done) with the results being a choice of "positive", "negative", or "indeterminate". This would allow one to enter *"Clostridium difficile* toxin" assay as the test for the EPI software to search in the chemistry/serology format. The result would be retrievable for EPI under a chemistry/serology lab test of "*Clostridium difficile* toxin" with the indicator "contains" and the value of "pos", as noted in the sample page. If your site does not routinely do *Clostridium difficile* toxin assay testing this way, a different method of accessioning the specimen to get it in chemistry/serology format would be needed.

However, the Chemistry/Serology format would give additional flexibility in placing interpretational guidelines for the test results in the "Comments" field. For the EPI, "positive" or "negative" results **cannot** be located in a "Free Text" or "Comments" field as these are **not** retrievable.

Some VAMCs accession the stool specimen for the *Clostridium difficile* toxin assay under the Microbiology format. An etiology is not given under the final culture result, but written into free text or comments section stating the *Clostridium difficile* toxin assay test result. This is not in a retrievable format and therefore not acceptable for the EPI criteria.

Some VAMCs still use cytotoxin assays of cell culture, which are again entered in a "Free Text" or "Comment" field. This again is not acceptable unless it is accessioned and recorded under the chemistry/serology format as a straightforward lab test result of "positive" or "negative" or "indeterminate".

Some VAMCs choose to report *Clostridium difficile* toxin assay positivity under the Microbiology application. As an etiology/culture result of *Clostridium difficile* (even though culture, was not actually done) this is not a true measure of what is actually being tested (as most sites do not culture the organism but just run the toxin assay test). However, if your site uses this means to represent *Clostridium difficile* toxin assay positivity and there are no exceptions (such as the site reporting an actual positive culture of (*Clostridium difficile* which is toxin assay negative), then this would be acceptable though less desirable for EPI purposes.

Validating EPI Data Captures

The purpose of validating EPI data captures is **not** to require extra paperwork for QI monitors and long-term document files. The validation should be done at the initial implementation of the Laboratory EPI software to ensure accurate data capture. Thereafter, a review should be done once every 4-6 months to ensure that Lab EPI Parameter Setup [LREPI (EPI) PARAMETER UPDATE] option entries for the EPI criteria remain accurate. Parameter updates may be required when a new lab test/result is to be implemented for one of the Emerging Pathogens Initiative.

Once the predetermined emerging pathogens parameter descriptions are defined using the Lab EPI Parameter Setup [LREPI PARAMETER SETUP] option EPI data captures and monthly EPI HL7 format mailman messages transmissions can take place. EPI data captures are "automatically generated" monthly and sent to AITC, formerly AAC, on the 15th day of each month. Upon receipt of the EPI HL7 Format mailman messages transmission, AITC sends individual "EPI Confirmation Mailman Message" to the sending VHA sites EPI mail group members notifying them that the EPI mailman messages transmission has ONLY been received and NO EPI data has been processed.

The **new** 'EPI Summary Verification Report of EPI Extracted Data from Site' mailman messages **replaced** the original Emerging Pathogens Verification Report mailman messages. The **new** EPI Summary Verification Report mailman messages are "automatically generated" at each site on the 15th day of the month and sent to the EPI-REPORT mail group members (i.e., in a human readable format). The **new** report includes the VHA site's station number and all predetermined emerging pathogens extracted data occurrences totals for the monthly processing reporting cycle. This **new** report may be used for quick previewing of the EPI data captures entries and totals.

The **new** Detailed Verification Report of EPI Extracted Data from Site' **replaces** the original Emerging Pathogens Verification Report. The **new** report contains the VHA reporting site's station number with Notes and Comment Segments (NTE) findings in human readable pages. VHA sites reporting NTE findings (i.e., 1, 2, 3 . . . 23) starts with a new page for each NTE findings.

The Microbiology Laboratory personnel, Laboratory Manager, TQI/QI/QA, or other personnel (i.e., as determined by the sites) may already have data of isolated "organisms of interest". Several of the nationally defined emerging pathogens may well corresponds. Therefore, a quick comparison can be done using the **new** Verification Detail Report of EPI Extracted Data from Site mailman messages. This comparison also ensures that the Laboratory EPI software is appropriately capturing all EPI cases and numbers.

For tests such as Hepatitis A Antibody NEG, Hepatitis B Antibody NEG, Hepatitis C Antibody POS, and Hepatitis C Antibody NEG most LIMs should be able to generate reports (with patient names) that include "positive" tests results to use for comparison. Additionally, the Health Information Management Section at each site should be able to generate a report of ICD Diagnoses by date. This ICD Diagnoses by-date-report helps determine if the VACO Infectious Disease Program Office EPI and emerging pathogens data captures concurs with the defined EPI criterion (i.e., Cryptosporidium-007.8, Legionnaire's disease--482.80, malaria--084, 084.0, 084.1, 084.2, 084.3, 084.4, 084.5, 084.6, 085.7, 084.8, 084.9, dengue-061, 065.4, Creutzfeldt-Jakob--046.1, and Leishmaniasis--085, 085.0, 085.1, 085.2, 085.3, 085.4, 085.5, 085.9.

Be aware that a number of these pathogens DO NOT occur at a high frequency. VHA sites with previously known cases of emerging pathogens, such as TB, should run the Lab EPI Manual Run [LREPI (EPI) MANUAL RUN] option for the entire month to verify that the TB culture was isolated and to see if it is captured. Additionally, "test patients" known to have these lab results can also be run.

Required EPI Mail Groups and Descriptions

The EPI Roll up Modification software release requires the following mail groups:

- EPI mail group
- EPI-REPORT mail group

NOTES:

It is highly recommended that the **Office of the Director** (00) at each VHA facility initially designate the member(s) responsible for overseeing the EPI mail group, and the EPI-REPORT mail group.. The Office of Director (00)-designated staff for EPI process implementation should be assigned to this mail group and kept current as personnel assume this responsibility. This/these staff member(s) is/are responsible for reviewing processing (error) reports and coordinating EPI data corrections (as necessary) due to the numerous files from which the data is obtained (e.g., PTF, PIMS, Health Information Management, Laboratory, etc.). Once the corrections are made, it is the responsibility of this designated staff to re-transmit the EPI data to the AITC using the Lab EPI Manual Run (Enhanced) option. Other personnel at the site who may be of assistance trouble-shooting errors may also elect to be member of this mail group.

It is highly recommended that a TQI/QI/QA staff, Laboratory Information Manager (LIM), Microbiology director or supervisor, Infection Control Practitioners, or Hospital Epidemiologist), or individual(s) with similar functions be a member(s) of one or more of these mail groups as previously noted.

EPI Mail Group Description

The EPI mail group is used by VHA facilities to transmit EPI HL7 format mailman messages **TO** the Austin Information Technology Center (AITC). This mail group is also used by AITC to transmit EPI Confirmation mailman messages **BACK** to the sending VHA facilities once the EPI HL7 format mailman messages data transmission has been received by AITC.

EPI-REPORT Mail Group Description

The EPI-Report mail group is use to receive the automatically generated **new** Verification Summary Report on the 15th day of each month. This mail group is also use to receive the **new** Verification Summary Report when manually generated using the Lab EPI Manual Run (Enhanced) [LREPI ENHANCE MANUAL RUN] option.

NOTE: Members of the EPI-Report mail group will assist with the EPI data validation and data correction process.

EPI Data Processing Cycles

Currently, twenty three predetermined emerging pathogens act as triggers for EPI data extraction (i.e., as defined by VACO) within the EPI software application. The software then retrieves relevant, predetermined, and patient-specific data.

EPI software builds a HL7 format mailman message transmission on the 15th day of each month containing specific EPI data extractions. **Note:** A local global build is used to automatically generate the **new** "Verification Summary Report and Verification Detailed Report of EPI Extracted Data From Site' in a HL7 format mailman message.

EPI HL7 format mailman messages containing the EPI data extractions are transmitted to the Austin Automation Center via the REDACTEDdomain on the 15th day of each month.

Austin Automation Center returns an EPI Confirmation mailman message upon receiving the sending facility EPI HL7 format mailman message. **Note:** The EPI Confirmation mailman message ONLY confirms that the EPI HL7 Format mailman messages have reached the Austin Automation Center queue, NOT necessarily accepted for processing.

On about the 25th day of the month Austin Automation Center processes the EPI data set and sends an EPI Processing (Error)Report mailman messages back to each sending facility via the EPI mail group. **Note:** The EPI Processing Report notifies the sending facility that the EPI data set has been processed by the Austin Automation Center, either with NO fatal errors indicating EPI data set acceptance OR that Fatal Error codes occurred constituting rejection of the entire EPI data set.

Once the EPI data set is accepted, the Austin Automation Center analyzes the EPI data set using the Statistical Analysis System (SAS) based statistical software. VACO Reports may then be generated for appropriate use and distribution at the national level.

EPI HL7 Format Mailman Message

The VistA Laboratory EPI software automatically searches, extracts, processes, and transmits EPI data using an HL7 format mailman message on the 15th of each month via the REDACTED domain to the AITC for processing. The EPI software is **enhanced** to include LOINC, MIC values, MPI values, race, ethnic Groups, county codes, and assigned patient class for inpatient/outpatient data.

Example: New EPI HL7 Format Mailman Message

```
MailMan message for LABPROGRAMMER, ONE
Printed at TEST.CINCINNATI.MED.VA.GOV 01/15/04@11:31
Subj: HL7 Msg JAN 14,2004@23:03:31 from CINCINNATI [#53959] 01/14/04@23:03
588 lines
From: POSTMASTER (POSTMASTER In 'IN' basket. Page 1 *New*
-------------------------------------------------------------------------
MSH|~^\&|EPI-LAB|539|EPI-LAB|539|20040114230323-
0400||ORU~R01|53923600917|T|2.2
|||NE|NE|USA

NTE||R~REPORTING DATE FROM 20030101 TO 20030131~1~~V3

PID|1|000-00-0035~~|122~2~M10~1004151421V503772~VAMPI||LABPATIENT3,
FIVE||193403
14|M|||~~~39^OHIO~45227~~~~89^PATIENT||||||||000000035||||||||0

PV1|1|O|||||||||||||||||||||||||||||||539||||||20030116084420-0400

DG1|1||401.9~HYPERTENSION NOS~I9

DSP|1||20030116084420-0400~HEP C VIRUS ANTIBODY NEGATIVE~6~NEGATIVE~||0

NTE|1|15~HEPATITIS C ANTIBODY NEG

OBR|1|||81121.0000~CHEMISTRY TEST~VANLT|||20030116084420-
0400||||||||SER~~SERUM
|||RIA 03 637

OBX|1|ST|89070.0000~HEPATITIS C AB~VANLT~1486~HEP C
ANTIBODY~VA60~13955~HEPATIT
IS C VIRUS AB:ACNC:PT:S~LOINC||NEGATIVE||-|||||||20030122144539-0400

PID|2|000-00-0036~~|140~4~M10~1004666645V068241~VAMPI||LABPATIENT3,
SIX||1947020
3|M|||~~~39^OHIO~45229~~~~89^PATIENT||||||||000000036||||||||7

PID|3|000-00-0037~~|310~3~M10~1008185084V033776~VAMPI||LABPATIENT3,
SEVEN||19551019
|M|||~~~12^FLORIDA~33931~~~~39^LEE||||||||000000037||||||||8
PV1|1|O|||||||||||||||||||||||||||||||539||||||200301080813-0400
OBR|1|||81121.0000~CHEMISTRY TEST~VANLT|||200301080813-
0400||||||||SER~~SERUM||
|RIA 03 244
```

Example: New EPI HL7 Format Mailman Message *continued*

```
OBX|1|ST|89070.0000~HEPATITIS C AB~VANLT~1486~HEP C
ANTIBODY~VA60~13955~HEPATIT
IS C VIRUS AB:ACNC:PT:S~LOINC||NEGATIVE||-|||||||20030114135036-0400

PID|4|000-00-0038~~|480~4~M10~1004671166V025205~VAMPI||LABPATIENT3, EIGHT|
|19230612|M|||~~~39^OHIO~45212~~~~89^PATIENT||||||||282534399||||||||2

PV1|1|I|6 NORTH~A611~2|||||||||||||||||||||||||||||||7~DEATH WITHOUT
AUTOPSY~
VA45|||539|||||20021227043712-0400|20030126155036-0400

DG1|1||112.2~CANDIDIAS UROGENITAL NEC~I9|20021227043712-0400||

DG1|2||287.1~THROMBOCYTOPATHY~I9|20021227043712-0400||

NTE|1|4~CLOSTRIDIUM DIFFICILE

OBR|1|||87999.0000~MICRO CULTURE~VANLT|||200301061200-
0400||||||||STL~~FECES|||
MICRO 03 34

OBX|1|CE|87993.0000~BACTERIOLOGY CULTURE~VANLT|1|~YEAST|||||||||20030127

OBX|3|CE|87993.0000~BACTERIOLOGY CULTURE~VANLT|3|~STAPHYLOCOCCUS (COAGULASE

PID|5|000-00-0039~~|563~7~M10~1004677502V513322~VAMPI||LABPATIENT3,
NINE||19300
425|M||2076-8-SLF~NATIVE HAWAIIAN OR OTHER PACIFIC ISLANDER~0005~2076-
8~NATIVE
HAWAIIAN OR OTHER PACIFIC
ISLANDER~CDC|~~~39^OHIO~45230~~~~89^PATIENT||||||||000000039|||2186-5-SLF~NOT
HISPANIC OR LATINO~0189~2186-5|||||0

PV1|1|I|6
SOUTH~A649~2|||||||||||||||||||||||||||||||1~REGULAR~VA45|||539||||
|20030109175930-0400|20030121104552-0400

DG1|9||575.11~CHRONIC CHOLECYSTITIS~I9|20030109175930-0400||

DSP|1||20030110021103-0400~HEP C VIRUS ANTIBODY NEGATIVE~6~NEGATIVE~||0

OBX|1|ST|89070.0000~HEPATITIS C AB~VANLT~1486~HEP C
ANTIBODY~VA60~13955~HEPATIT
IS C VIRUS AB:ACNC:PT:S~LOINC||NEGATIVE||-|||||||20030116134325-0400
NTE|2|16~HEPATITIS A ANTIBODY POS

OBR|1|||81121.0000~CHEMISTRY TEST~VANLT|||20030110021103-
0400||||||||SER~~SERUM
|||RIA 03 355

OBX|1|ST|89083.0000~HEPATITIS A IGM AB~VANLT~505~HEP A
ANTIBODY(IGM)~VA60~13950
```

EPI Confirmation Mailman Message

Upon AITC receipt of the VHA facilities EPI HL7 format mailman message monthly transmission (i.e., 15th of each month via the REDACTED domain) individual EPI Confirmation mailman messages are sent by AITC to the originating VHA facilities via the EPI mail group. Members of this mail group are being notified that EPI HL7 format mailman message data transmission has been received by AITC for processing.

Examples: EPI Confirmation mailman message sent by AITC

```
Subj: DOY7352 EPI Confirmation [#11057401] 15 Feb 01 23:11 CST 2 lines
From: REDACTED  In 'EPI' basket.   Page 1
---------------------------------------------------------------------------
Ref:  Your EPI message #11057352 with Austin ID #130120489, is assigned
confirmation number 010462303783006.

Enter message action (in EPI basket): Ignore//
```

New EPI Summary Verification Report of EPI Extracted Data from Site' HL7 Mailman Message

The **new** EPI Verification Summary Report of EPI Extracted Data from Site HL7 format mailman message **replaced** the original Emerging Pathogens Verification Report HL7 format mailman message. This **new** EPI Summary Verification Report HL7 format mailman message is automatically generated at the VHA site on the 15th the month and sent to the EPI-REPORT mail group members via a HL7 format mailman messages (i.e., in a human readable format). The **new** EPI Verification Summary Report mailman messages contains the VHA site's station number and all predetermined emerging pathogens extracted data occurrences totals for the monthly processing reporting cycle. This **new** report may be used for quick previewing of the EPI data captures entries and totals.

NOTES:
The **new** EPI Summary Verification Report of EPI Extracted Data from Site can also be generated **manually** as often as necessary using the Lab EPI Manual Run (Enhanced) [LREPI ENHANCE MANUAL RUN] option. This option can be **manually** generated as often as necessary. After the report is generated data is automatically sent to EPI-REPORT mail group which may be use for EPI data validation.

Lab EPI extract data transmissions to AITC occur after 6:00 pm and are processed the next day.

DO NOT run the Lab EPI Manual Run (Enhanced) [LREPI ENHANCED MANUAL RUN] option to transmit EPI extract data on Wednesdays of PAY ROLL weeks. These transmissions may cause a delay in processing the PAY ROLL data.

Example: New EPI Summary Verification Report of EPI Extracted Data from Site' mailman message.

NOTE: The **new** EPI Summary Verification Report of EPI Extracted Data from Sites can be manually generated using the Lab EPI Manual Run (Enhanced) [LREPI ENHANCE MANUAL RUN] option. After the report is generated it is automatically sent to EPI-REPORT mail group which can be used for EPI data validation.

```
Subj: EPI Summary Verification Report [#19669319] 05/19/04@23:35
128 lines
From: POSTMASTER  In 'IN' basket.  Page 1  *New*
------------------------------------------------------------------------------
SUMMARY VERIFICATION REPORT OF EPI EXTRACTED DATA
FROM STATION 539 CINCINNATI

Processing Month PROCESSING PERIOD: 04-01-2004 through 04-30-2004

                                                                 Number of
                                                    Number of    Persons
with Emerging Pathogen                              Occurrences  Occurrence
_____________________________________________________________________________
NTE~1-Vancomycin-resistant Enterococcus                    4          4
NTE~2-Hepatitis C antibody Positive                       24         22
NTE~3-Penicillin-Resistant Streptococcus pneumoniae        0          0
NTE~4-Clostridium difficile                                4          4
NTE~5-Tuberculosis                                         0          0
NTE~6-Streptococcus, Group A                               4          4
NTE~7-Legionella/Legionaire's Disease                      0          0
NTE~8-Candida bloodstream infections                       1          1

Subj: EPI Summary Verification Report  [#19669319]  Page 2
------------------------------------------------------------------------------
NTE~9-Crytosporidium                                       0          0
NTE~10-Escherichia coli O157                               0          0
NTE~11-Malaria                                             0          0
NTE~12-Dengue                                              0          0
NTE~13-Creutzfeldt-Jakob Disease                           0          0
NTE~14-Leishmaniasis                                       0          0
NTE~15-Hepatitis C antibody negative                     208        205
NTE~16-Hepatitis A antibody positive                      24         22
NTE~17-Hepatitis B positive                               65         42
NTE~18-All Staphylococcus Aureus                          32         29
NTE~19-Methicillin-Resistant Staphylococcus Aureus (Mrsa) 22         20
NTE~20-Vancomycin-Resistant Staphylococcus Aureus (Vrsa)   0          0
NTE~21-Vancomycin-Resistant Coagulase Negative
       Staphylococci/Staph EPI (Vrse)                      0          0
NTE~22-All Streptococcus Pneumoniae                        5          4
NTE~23-All Enterococci                                    24         21
```

Example: New EPI Summary Verification Report of EPI Extracted Data from Site' mailman message *continued.*

```
For definitions of case ascertainment for each category, please refer to
documentation in Laboratory EPI Patch LR*5.2*281 Technical and User Guide in
conjunction with your local parameter set-up of this process.

Subj: EPI Summary Verification Report  [#19669319]   Page 3
------------------------------------------------------------------------------
If you feel that these numbers are in error, please verify with the local
facility personnel responsible for setting the EPI Laboratory Search/Extract
parameters.  However, do not change these parameters if they are incorrect
without fully reading the documentation; this will be crucial in order to
avoid any misalignment with the concomitant Hepatitis C Extract patches
(PXRM*1.5*1, VA-National EPI DB Update, LR*5.2*260, PSJ*5*48, Hepatitis C
Initiative, and PSO*7*45, Hepatitis C Initiative).  In particular, the
hepatitis C antibody positive, hepatitis C antibody negative, hepatitis A
antibody positive and hepatitis B positive will be especially sensitive to
changes, and concomitant changes of all of the patches may need to occur.

                                                          Number of
Persons
                                                          with the Term
and
                                                          Transmitted For
                  Nationally rolled-up resolution term    National Roll-up
_____________________________________________________________________________
Resolved term-1-Declined Assessment for Hepatitis C             6
Resolved term-2-No Risk Factors for Hepatitis C               142
Resolved term-3-Previously Assessed for Hepatitis C             0
Resolved term-4-Risk Factors for Hepatitis C                   88

Enter RETURN to continue or '^' to exit:

Subj: EPI Summary Verification Report  [#19669319]  Page 4
------------------------------------------------------------------------------

Resolved term-5-Positive Test for Hepatitis C antibody          22
Resolved term-6-Negative Test for Hepatitis C antibody         205
Resolved term-7-Hepatitis C diagnosis (ICD based)              173
                                                              -----
Total Hepatitis C Risk Assessment Resolution                   636
This table represents only those who had a once-lifetime resolution of the
National Clinical Reminder for Risk Assessment for Hepatitis C. This
resolution will only occur once during the care of a patient (unless actively
changed by a point-of-care practitioner at a later date).

Processing Month: PROCESSING PERIOD: 04-01-2004 through 04-30-2004 for site #
539 CINCINNATI
Site totals
```

Example: New EPI Summary Verification Report of EPI Extracted Data from Site' mailman message *continued.*

```
STAPHYLOCOCCUS AUREUS                                          12
PATIENTS WITH STAPHYLOCOCCUS AUREUS                             9
CANDIDA ALBICANS                                               36
PATIENTS WITH CANDIDA ALBICANS                                 20
ENTEROCOCCUS                                                   20
PATIENTS WITH ENTEROCOCCUS                                     15

Subj: EPI Summary Verification Report  [#19669319]   Page 5
------------------------------------------------------------------------------
STREPTOCOCCUS BETA HEMOLYTIC, GROUP A                           4
PATIENTS WITH STREPTOCOCCUS BETA HEMOLYTIC, GROUP A             4
CANDIDA TROPICALIS                                              1
PATIENTS WITH CANDIDA TROPICALIS                                1
CANDIDA (TORULOPSIS) GLABRATA                                   4
PATIENTS WITH CANDIDA (TORULOPSIS) GLABRATA                     4
YEAST NOT CANDIDA ALBICANS                                      8
PATIENTS WITH YEAST NOT CANDIDA ALBICANS                        5
STAPHYLOCOCCUS (COAGULASE NEGATIVE)                            38
PATIENTS WITH STAPHYLOCOCCUS (COAGULASE NEGATIVE)              29
STREPTOCOCCUS PNEUMONIAE                                        7
PATIENTS WITH STREPTOCOCCUS PNEUMONIAE                          4
STAPHYLOCOCCUS AUREUS (MRSA)                                   28
PATIENTS WITH STAPHYLOCOCCUS AUREUS (MRSA)                     20
ENTEROCOCCUS FAECALIS                                           6
PATIENTS WITH ENTEROCOCCUS FAECALIS                             3
ENTEROCOCCUS FAECIUM                                            3
PATIENTS WITH ENTEROCOCCUS FAECIUM                              3
POSITIVE FOR CLOSTRIDIUM DIFFICILE TOXIN                        4
PATIENTS WITH POSITIVE FOR CLOSTRIDIUM DIFFICILE TOXIN          4

Subj: EPI Summary Verification Report [#19669319]   Page 6
------------------------------------------------------------------------------
ENTEROCOCCUS GALLINARUM                                         1
PATIENTS WITH ENTEROCOCCUS GALLINARUM                           1
HEP B SURFACE AG                                              141
PATIENTS WITH HEP B SURFACE AG                                136
HEP A ANTIBODY(IGM)                                            12
PATIENTS WITH HEP A ANTIBODY(IGM)                              12
HEP B SURFACE AB                                              130
PATIENTS WITH HEP B SURFACE AB                                127
HEP B CORE AB(IGM)                                             16
PATIENTS WITH HEP B CORE AB(IGM)                               16
HEP C ANTIBODY                                                232
PATIENTS WITH HEP C ANTIBODY                                  227
HEP A ANTIBODY-TOTAL                                           42
PATIENTS WITH HEP A ANTIBODY-TOTAL                             41
```

Example: New EPI Summary Verification Report of EPI Extracted Data from Site' mailman message *continued.*

```
1. For Microbiology Lab Package Organism results/isolates (e.g. Enterococcus,
or Streptococcus pneumoniae), the number corresponding to the name represents
the total number reported from your local microbiology package during the
processing month.  The number corresponding to the line 'Patients
with...<Microbiology Lab Result/isolates> (e.g. Patients with Enterococcus or
Patients with Streptococcus pneumoniae) represents the number of individual
patients from whom the results were isolated.

Subj: EPI Summary Verification Report [#19669319]   Page 7
------------------------------------------------------------------------------
2. For non-microbiology results (e.g. chemistry/serology results such as
Hepatitis C antibody), the number corresponding to the name represents the
TOTAL number of <named> tests done at your facility during the processing
month.  The number corresponding to the line <Patients with...<non-
Microbiology test> (e.g. Hepatitis C antibody) represents the number of
individuals on whom the test(s) was/were performed. This does not represent
the number of persons who had a positive test result.
3. These results have been obtained based on specimen accession date and not
results reported dating.

Enter message action (in IN basket): Ignore//
```

1. For Microbiology Lab Package Organism results/isolates (e.g. Enterococcus, or Streptococcus pneumoniae), the number corresponding to the name represents the total number reported from your local microbiology package during the processing month. The number corresponding to the line 'Patients with...<Microbiology Lab Result/isolates> (e.g. Patients with Enterococcus or Patients with Streptococcus pneumoniae) represents the number of individual patients from whom the results were isolated.

2. For non-microbiology results (e.g. chemistry/serology results such as Hepatitis C antibody), the number corresponding to the name represents the TOTAL number of <named> tests done at your facility during the processing month. The number corresponding to the line <Patients with...<non-Microbiology test> (e.g. Hepatitis C antibody) represents the number of individuals on whom the test(s) was/were performed. This does not represent the number of persons who had a positive test result.

3. These results have been obtained based on specimen accession date and not results reported dating.

New EPI Summary Verification Report for prior month - TB only

NOTE: This **new** EPI Summary Verification Report for prior month – TB only represents a second pass at acquiring data for the EPI from the prior month on Mycobacterium tuberculosis due to the extended period of time that may be expected with accessioning, growth, and finally reporting of results. Since this is designed to acquire only the remaining Mycobacterium tuberculosis data from the prior month, most of the numbers present for this report will be zero. The accompanying Summary Verification Report for the current month should contain more complete number counts on the other EPI pathogens and data items for this current month.

Example: New EPI Summary Verification Report for prior month - TB only

```
Subj: EPI Summary Verification Report for prior month -TB only
[#19669069] 05/19/04@22:18  97 lines
From: POSTMASTER  In 'IN' basket.   Page 1  *New*
------------------------------------------------------------------------------
This report represents a second pass at acquiring data for the EPI from the
prior month on Mycobacterium tuberculosis due to the extended period of time
that may be expected with accessioning, growth, and finally reporting of
results.  Since this is designed to acquire only the remaining Mycobacterium
tuberculosis data from the prior month, most of the numbers present for this
report will be zero. The accompanying Summary Verification Report for the
current month should contain more complete number counts on the other EPI
pathogens and data items for this current month.

SUMMARY VERIFICATION REPORT OF EPI EXTRACTED DATA
FROM STATION 539 CINCINNATI

Processing Month PROCESSING PERIOD: 03-01-2004 through 03-31-2004

                                                                  Number of
                                                    Number of     Persons
with Emerging Pathogen                             Occurrences   Occurrence

Subj: EPI Summary Verification Report for prior month -TB only
[#19669069]   Page 2
------------------------------------------------------------------------------

NTE~1-Vancomycin-resistant Enterococcus                 0          0
NTE~2-Hepatitis C antibody Positive                     0          0
NTE~3-Penicillin-Resistant Streptococcus pneumoniae     0          0
```

Example: New EPI Summary Verification Report for prior month - TB only *continued.*

```
NTE~4-Clostridium difficile                                    0       0
NTE~5-Tuberculosis                                             0       0
NTE~6-Streptococcus, Group A                                   0       0
NTE~7-Legionella/Legionaire's Disease                          0       0
NTE~8-Candida bloodstream infections                           0       0
NTE~9-Crytosporidium                                           0       0
NTE~10-Escherichia coli O157                                   0       0
NTE~11-Malaria                                                 0       0
NTE~12-Dengue                                                  0       0
NTE~13-Creutzfeldt-Jakob Disease                               0       0
NTE~14-Leishmaniasis                                           0       0
NTE~15-Hepatitis C antibody negative                           0       0
NTE~16-Hepatitis A antibody positive                           0       0
NTE~17-Hepatitis B positive                                    0       0
NTE~18-All Staphylococcus Aureus                               0       0

Subj: EPI Summary Verification Report for prior month -TB only
[#19669069]   Page 3
------------------------------------------------------------------------
-
NTE~19-Methicillin-Resistant Staphylococcus Aureus (Mrsa)      0       0
NTE~20-Vancomycin-Resistant Staphylococcus Aureus (Vrsa)       0       0
NTE~21-Vancomycin-Resistant Coagulase Negative
       Staphylococci/Staph EPI (Vrse)                          0       0
NTE~22-All Streptococcus Pneumoniae                            0       0
NTE~23-All Enterococci                                         0       0

For definitions of case ascertainment for each category, please refer to
documentation in Laboratory EPI Patch LR*5.2*281 Technical and User Guide in
conjunction with your local parameter set-up of this process.

If you feel that these numbers are in error, please verify with the local
facility personnel responsible for setting the EPI Laboratory Search/Extract
parameters. However, do not change these parameters if they are incorrect
without fully reading the documentation; this will be crucial in order to
avoid any misalignment with the concomitant Hepatitis C Extract patches
(PXRM*1.5*1, VA-National EPI DB Update, LR*5.2*260, PSJ*5*48, Hepatitis C
Initiative, and PSO*7*45, Hepatitis C Initiative). In particular, the
hepatitis C antibody positive, hepatitis C antibody negative, hepatitis A
antibody positive and hepatitis B positive will be especially sensitive to
changes, and concomitant changes of all of the patches may need to occur.

Subj: EPI Summary Verification Report for prior month -TB only
[#19669069]   Page 4
------------------------------------------------------------------------
                                                               Number of
Persons
                                                               with the Term
and
                                                               Transmitted For
                  Nationally rolled-up resolution term         National Roll-up
```

Example: New EPI Summary Verification Report for prior month - TB only *continued*.

```
_____________________________________________________________________________
_
Resolved term-1-Declined Assessment for Hepatitis C              0
Resolved term-2-No Risk Factors for Hepatitis C                  0
Resolved term-3-Previously Assessed for Hepatitis C              0
Resolved term-4-Risk Factors for Hepatitis C                     0
Resolved term-5-Positive Test for Hepatitis C antibody           0
Resolved term-6-Negative Test for Hepatitis C antibody           0
Resolved term-7-Hepatitis C diagnosis (ICD-9 based)              0
                                                               -----
Total Hepatitis C Risk Assessment Resolution                     0
This table represents only those who had a once-lifetime resolution of the
National Clinical Reminder for Risk Assessment for Hepatitis C. This
resolution will only occur once during the care of a patient (unless actively
changed by a point-of-care practitioner at a later date).

Enter RETURN to continue or '^' to exit:

Subj: EPI Summary Verification Report for prior month -TB only
[#19669069]   Page 5
------------------------------------------------------------------------------
Processing Month: PROCESSING PERIOD: 03-01-2004 through 03-31-2004 for site #
539 CINCINNATI
Site totals

1. For Microbiology Lab Package Organism results/isolates (e.g. Enterococcus,
or Streptococcus pneumoniae), the number corresponding to the name represents
the total number reported from your local microbiology package during the
processing month.  The number corresponding to the line 'Patients
with...<Microbiology Lab Result/isolates> (e.g. Patients with Enterococcus or
Patients with Streptococcus pneumoniae) represents the number of individual
patients from whom the results were isolated.
2. For non-microbiology results (e.g. chemistry/serology results such as
Hepatitis C antibody), the number corresponding to the name represents the
TOTAL number of <named> tests done at your facility during the processing
month.  The number corresponding to the line <Patients with...<non-
Microbiology test> (e.g. Hepatitis C antibody) represents the number of
individuals on whom the test(s) was/were performed. This does not represent
the number of persons who had a positive test result.

Subj: EPI Summary Verification Report for prior month -TB only
[#19669069]   Page 6

------------------------------------------------------------------------------
-
3. These results have been obtained based on specimen accession
date and not results reported dating.

Enter message action (in IN basket): Ignore//<Enter>

IN Basket Message: 7842//<Enter>
```

New Detailed Verification Report of EPI Extracted Data from Site Mailman Message

The **new** Verification Detailed Report of EPI Extracted Data from Site' **replaces** the original Emerging Pathogens Verification Report. The **new** report contains the VHA reporting site's station number with Notes and Comment Segments (NTE) findings in a human readable format. VHA sites reporting NTE findings (i.e., 1, 2, 3 . . . 23) starts with a new page for each NTE findings. The report is automatically generated on the 15th of the month and can also be generated **manually** as often as necessary using the Lab EPI Manual Run (Enhanced) [LREPI ENHANCE MANUAL RUN] option. After the report is generated the data is automatically sent to EPI-REPORT mail group which may be use for EPI data validation. Use the **new** Print Detailed Verification Report [LREPI VERIFICATION REPORT] option to print the **new** Verification Detailed Report.

Example: New Detailed Verification Report of EPI Extracted Data from Site mailman messages.

```
PAGE 1
               DETAILED VERIFICATION REPORT OF EPI EXTRACTED DATA
             FROM STATION (Your station number and name is displayed here.)
                 PROCESSING PERIOD: 03-01-2003 through 03-31-2003

NTE~1-Report of Vancomycin-resistant Enterococcus
These data note persons at your facility during the month that had a
positive result for Vancomycin-resistant Enterococcus. Identifying
information, along with specimen and culture results has been provided.


PATIENT NAME                   LAST 4 DOB        SEX   PERIOD OF SERVICE
LABPATIENT3, TEN               0310    03-11-1925 M     WORLD WAR II
Inpatient Admission Date:  03-08-2003@1717
Discharge Date:  --"" Discharge Disposition:

03-18-2003@0700 BACT 03 2038 MICRO CULTURE URINE
     2                                 03-20-2003   ENTEROCOCCUS FAECIUM

ORG # 2 03-18-2003@0700 ANTIBIOTIC MIC  URINE
     PENICILLIN                        R                  R
     VANCOMYCIN                        R                  R
     NITROFURANTOIN                    S                  S
     CIPROFLOXACIN                     R                  R
     LEVOFLOXACIN                      R                  R
     GENTAMICIN HP                     SYN-S              SYN-S
     STREPTOMYCIN HP                   SYN-R              SYN-R
```

Example: New Detailed Verification Report of EPI Extracted Data from Site mailman messages *continued.*

```
PAGE 2
              DETAILED VERIFICATION REPORT OF EPI EXTRACTED DATA
           FROM STATION (Your station number and name is displayed here.)
              PROCESSING PERIOD: 03-01-2003 through 03-31-2003

NTE~2 Report of Hepatitis C antibody positive
This represents a line listing of persons reported during the month that
had a positive test for hepatitis C antibody (based on accession date and
not results reported date). Definitions for data to be extracted are
provided in the Technical and User Guide documentation for Laboratory EPI
LR*5.2*281.


Name                  LAST 4 Accession Date Test Name   Test Result
_____________________________________________________________________
LABPATIENT4~ONE         0041   03-26-2003@1240 HEP C ANTIBODY STRONG
POSITIVE
LABPATIENT4~TWO         0042   03-27-2003@1614 HEP C ANTIBODY STRONG
POSITIVE
LABPATIENT4~THREE       0043   03-13-2003@0700 HEP C ANTIBODY STRONG
POSITIVE
LABPATIENT4~FOUR        0044   03-19-2003      HEP C ANTIBODY STRONG
POSITIVE
LABPATIENT4~FIVE        0045   03-08-2003@0700 HEP C ANTIBODY STRONG
POSITIVE
LABPATIENT4~SIX         0046   03-05-2003@0823 HEP C ANTIBODY STRONG
POSITIVE
LABPATIENT4~SEVEN       0047   03-08-2003@0700 HEP C ANTIBODY STRONG
POSITIVE
LABPATIENT4~EIGHT       0048   03-08-2003@0700 HEP C ANTIBODY STRONG
POSITIVE
LABPATIENT4~NINE        0049   03-05-2003@1726 HEP C ANTIBODY STRONG
POSITIVE
LABPATIENT4~TEN         0410   03-14-2003@1004 HEP C ANTIBODY STRONG
POSITIVE
LABPATIENT5~ONE         0051   03-07-2003@1015 HEP C ANTIBODY STRONG
POSITIVE
LABPATIENT5~TWO         0052   03-21-2003@0700 HEP C ANTIBODY STRONG
POSITIVE
LABPATIENT5~THREE       0053   03-10-2003@0807 HEP C ANTIBODY STRONG
POSITIVE
LABPATIENT5~FOUR        0054   03-18-2003      HEP C ANTIBODY STRONG
POSITIVE
```

Example: New Detailed Verification Report of EPI Extracted Data from Site mailman messages *continued.*

```
LABPATIENT5~FIVE        0055   03-11-2003@0916 HEP C ANTIBODY STRONG
POSITIVE
LABPATIENT5~SIX         0056   03-27-2003@0700 HEP C ANTIBODY STRONG
POSITIVE
LABPATIENT5~SEVEN       0057   03-06-2003@0700 HEP C ANTIBODY STRONG
POSITIVE
LABPATIENT5~EIGHT       0058   03-21-2003@0700 HEP C ANTIBODY STRONG
POSITIVE
LABPATIENT5~NINE        0059   03-12-2003@0911 HEP C ANTIBODY STRONG
POSITIVE
LABPATIENT5~TEN         0510   03-25-2003@1443 HEP C ANTIBODY STRONG
POSITIVE
LABPATIENT6~ONE         0061   03-04-2003@1019 HEP C ANTIBODY STRONG
POSITIVE
LABPATIENT6~TWO         0062   03-13-2003@0700 HEP C ANTIBODY STRONG
POSITIVE
LABPATIENT6~THREE       0063   03-13-2003@0700 HEP C ANTIBODY STRONG
POSITIVE
LABPATIENT6~FOUR        0064   03-04-2003@1648 HEP C ANTIBODY STRONG
POSITIVE
LABPATIENT6~FIVE        0065   03-08-2003@0700 HEP C ANTIBODY STRONG
POSITIVE
LABPATIENT6~SIX         0066   03-27-2003@1141 HEP C ANTIBODY STRONG
POSITIVE
LABPATIENT6~SEVEN       0067   03-03-2003@1503 HEP C ANTIBODY STRONG
POSITIVE
LABPATIENT6~EIGHT       0068   03-27-2003@0700 HEP C ANTIBODY STRONG
POSITIVE
LABPATIENT6~NINE        0069   03-13-2003@0700 HEP C ANTIBODY STRONG
POSITIVE
LABPATIENT6~TEN         0610   03-28-2003@1356 HEP C ANTIBODY STRONG
POSITIVE



PAGE 3
              DETAILED VERIFICATION REPORT OF EPI EXTRACTED DATA
            FROM STATION (Your station number and name is displayed here.)
              PROCESSING PERIOD: 03-01-2003 through 03-31-2003

NTE~3-Report of Pencillin-resistant Streptococcus pneumoniae
These data note persons at your facility during the month that had a
positive result for Penicillin-resistant Streptococcus pneumoniae.
Identifying information, along with specimen and culture results has been
provided.

NO PATIENTS REPORTED FOR THE REPORT PERIOD.
```

Example: New Detailed Verification Report of EPI Extracted Data from Site mailman messages *continued.*

```
PAGE 4
               DETAILED VERIFICATION REPORT OF EPI EXTRACTED DATA
            FROM STATION (Your station number and name is displayed here.)
               PROCESSING PERIOD: 03-01-2003 through 03-31-2003

NTE~4-Report of Clostridium difficile
These data note persons at your facility during the month that had a
positive result for Clostridium difficile. Identifying information, along
with specimen and culture results has been provided.


PATIENT NAME                  LAST 4 DOB        SEX   PERIOD OF SERVICE
LABPATIENT7, ONE              0071   01-00-1925 M     WORLD WAR II
Inpatient Admission Date:  02-21-2003@2147
Discharge Date: 03-10-2003@2354 Discharge Disposition: DEATH WITH AUTOPSY

03-04-2003 MICRO 03 286 MICRO CULTURE FECES
     1                                03-05-2003   POSITIVE FOR
CLOSTRIDIUM DIFFICILE TOXIN

PATIENT NAME                  LAST 4 DOB        SEX   PERIOD OF SERVICE
LABPATIENT7, TWO              0072   09-11-1934 M     VIETNAM ERA
Outpatient Accession Date:  03-04-2003

03-04-2003 MICRO 03 279 MICRO CULTURE FECES
     1                                03-05-2003 POSITIVE FOR CLOSTRIDIUM
DIFFICILE TOXIN
PATIENT NAME                  LAST 4 DOB        SEX   PERIOD OF SERVICE
LABPATIENT7, THREE            0073   10-20-1946 M     VIETNAM ERA
Inpatient Admission Date:  03-14-2003@1202
Discharge Date: 03-20-2003@0341 Discharge Disposition: DEATH WITHOUT
AUTOPSY
03-17-2003 MICRO 03 383 MICRO CULTURE FECES
     1                              03-19-2003   POSITIVE FOR CLOSTRIDIUM
DIFFICILE TOXIN
```

Example: New Detailed Verification Report of EPI Extracted Data from Site mailman messages *continued.*

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PAGE 5
               DETAILED VERIFICATION REPORT OF EPI EXTRACTED DATA
                FROM STATION (Your station number will be displayed here.)
               PROCESSING PERIOD: 03-01-2003 through 03-31-2003

NTE~5-Report of Tuberculosis
These data note persons at your facility during the month that had a
positive result for Mycobacterium tuberculosis. Identifying information,
along with specimen and culture results has been provided.


PATIENT NAME                   LAST 4 DOB        SEX   PERIOD OF SERVICE
LABPATIENT7, FOUR              0074   06-07-1930 F     VIETNAM ERA
Outpatient Accession Date:  03-12-2003

03-12-2003 TB 03 212 MICRO CULTURE SPUTUM
     3                                 05-21-2003   MYCOBACTERIUM
TUBERCULOSIS COMPLEX
Outpatient Accession Date:  03-22-2003

03-22-2003 TB 03 213 MICRO CULTURE SPUTUM
     2                                --0   MYCOBACTERIUM TUBERCULOSIS
COMPLEX
```

Example: New Detailed Verification Report of EPI Extracted Data from Site mailman messages *continued.*

```
PAGE 6
               DETAILED VERIFICATION REPORT OF EPI EXTRACTED DATA
            FROM STATION (Your station number and name is displayed here.)
               PROCESSING PERIOD: 03-01-2003 through 03-31-2003

NTE~6-Report of Group A Streptococcus
These data note persons at your facility during the month that had a
positive result for Group A Streptococcus. Identifying information, along
with specimen and culture results has been provided.


PATIENT NAME                   LAST 4 DOB        SEX   PERIOD OF SERVICE
LABPATIENT7, FIVE              0075   08-14-1941 M     VIETNAM ERA
Inpatient Admission Date:  03-13-2003@1229
Discharge Date:  03-14-2003@1333 Discharge Disposition:  REGULAR

03-14-2003 BACT 03 1941 MICRO CULTURE RECTUM
     1                                 03-17-2003   STREPTOCOCCUS BETA
HEMOLYTIC, GROUP A
     2                                 03-17-2003   ESCHERICHIA COLI
ORG # 2 03-14-2003 ANTIBIOTIC MIC RECTUM
     GENTAMICIN                        S                  S
     CEFAZOLIN                         S                  S
     AMPICILLIN                        S                  S
     POLYMIXIN B                       S                  S
     TRIMETHOPRIM+SULFAMETHOXAZOLE     R                  R
     AMIKACIN                          S                  S
     PIPERACILLIN                      S                  S
     CEFOTAXIME                        S                  S
     CIPROFLOXACIN                     S                  S
     IMIPENUM                          S                  S
     CEFTAZIDIME                       S                  S
     AMPICILLIN+SULBACTAM              S                  S
     CEFOTETAN                         S                  S
     LEVOFLOXACIN                      S                  S
     CEFEPIME                          S                  S
     PIPERACILLIN+TAZOBACTAM           S                  S

PATIENT NAME                   LAST 4 DOB        SEX   PERIOD OF SERVICE
LABPATIENT7, SIX               0076   02-13-1973 M     OTHER OR NONE
Outpatient Accession Date:  03-04-2003

03-04-2003 BACT 03 1655 MICRO CULTURE PHARYNX
     1                                 03-05-2003   STREPTOCOCCUS BETA
HEMOLYTIC, GROUP A
```

Example: New Detailed Verification Report of EPI Extracted Data from Site mailman messages *continued.*

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PAGE 7
              DETAILED VERIFICATION REPORT OF EPI EXTRACTED DATA
            FROM STATION (Your station number and name is displayed
here.)
              PROCESSING PERIOD: 03-01-2003 through 03-31-2003

NTE~7- Report of Legionella/Legionaire's
These data note persons at your facility during the month who had an
EITHER an ICD-9 coded diagnosis for Legionella/Legionaire's disease OR a
positive culture result. Identifying information, along with specimen and
culture results has been provided.


NO PATIENTS REPORTED FOR THE REPORT PERIOD.
```

```
PAGE 8
              DETAILED VERIFICATION REPORT OF EPI EXTRACTED DATA
           FROM STATION (Your station number and name is displayed here.)
              PROCESSING PERIOD: 03-01-2003 through 03-31-2003

NTE~8-Report of Candida bloodstream infections
These data note persons at your facility during the month that had a
positive result for Candida (or other yeast) bloodstream infections.
Identifying information, along with specimen and culture results has been
provided.


PATIENT NAME                  LAST 4 DOB        SEX   PERIOD OF SERVICE
LABPATIENT7, SEVEN            0077   05-25-1943 M     VIETNAM ERA
Update Admission Date:  12-19-2002@1605

03-18-2003@2235 BLD 03 856 MICRO CULTURE BLOOD
     1                                03-25-2003   YEAST
     1                                03-25-2003   CANDIDA (TORULOPSIS)
GLABRATA

03-16-2003@1600 BLD 03 837 MICRO CULTURE BLOOD
     1                                03-22-2003   YEAST
     1                                03-23-2003   CANDIDA (TORULOPSIS)
GLABRATA

03-12-2003 BLD 03 793 MICRO CULTURE BLOOD
     1                                03-17-2003   YEAST
     2                                03-17-2003   STAPHYLOCOCCUS
(COAGULASE NEGATIVE)
```

```
     1                                  03-15-2003   CANDIDA (TORULOPSIS)
GLABRATA
```

Example: New Detailed Verification Report of EPI Extracted Data from Site mailman messages *continued.*

```
03-11-2003@0230 MYCOL 03 166 MICRO CULTURE BLOOD
     1                                  03-17-2003   CANDIDA (TORULOPSIS)
GLABRATA

03-11-2003@0230 BLD 03 780 MICRO CULTURE BLOOD
     1                                  03-17-2003   STAPHYLOCOCCUS
(COAGULASE NEGATIVE)
     2                                  03-17-2003   YEAST
     1                                  03-17-2003   CANDIDA (TORULOPSIS)
GLABRATA

03-08-2003@0915 BLD 03 757 MICRO CULTURE BLOOD
     1                                  03-12-2003   YEAST
     1                                  03-12-2003   CANDIDA (TORULOPSIS)
GLABRATA


PAGE 9
               DETAILED VERIFICATION REPORT OF EPI EXTRACTED DATA
            FROM STATION (Station name/number displayed here.)
               PROCESSING PERIOD: 03-01-2003 through 03-31-2003

NTE~9-Report of Cryptosporidium
These data note persons at your facility during the month that had EITHER
an ICD-9 coded diagnosis for Cryptosporidium OR a positive culture result.
Identifying information, along with specimen and culture results has been
provided.


NO PATIENTS REPORTED FOR THE REPORT PERIOD.



PAGE 10
               DETAILED VERIFICATION REPORT OF EPI EXTRACTED DATA
               FROM STATION (Station name/number displayed here.)
               PROCESSING PERIOD: 03-01-2003 through 03-31-2003

NTE~10-Report of Escherichia coli O157
These data note persons at your facility during the month that had a
positive result for Escherichia coli serotype O157. Identifying
information, along with specimen and culture results has been provided.

 NO PATIENTS REPORTED FOR THE REPORT PERIOD.
```

Example: New Detailed Verification Report of EPI Extracted Data from Site mailman messages *continued.*

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PAGE 11
               DETAILED VERIFICATION REPORT OF EPI EXTRACTED DATA
                    STATION (Your station your number is displayed here)
               PROCESSING PERIOD: 03-01-2003 through 03-31-2003

NTE~11-Report of Malaria
These data note persons at your facility during the month that had an ICD-
9 coded diagnosis for malaria. Identifying information has been provided.


NO PATIENTS REPORTED FOR THE REPORT PERIOD.



PAGE 12
               DETAILED VERIFICATION REPORT OF EPI EXTRACTED DATA
                     STATION (Your station your number is displayed here)
               PROCESSING PERIOD: 03-01-2003 through 03-31-2003

NTE~12-Report of Dengue
These data note persons at your facility during the month that had an ICD-
9 coded diagnosis for dengue. Identifying information has been provided.

NO PATIENTS REPORTED FOR THE REPORT PERIOD.


PAGE 13
               DETAILED VERIFICATION REPORT OF EPI EXTRACTED DATA
             FROM STATION (Your station number and name is displayed
here.)
               PROCESSING PERIOD: 03-01-2003 through 03-31-2003

NTE~13-Report of Creutzfeldt-Jakob Disease
These data note persons at your facility during the month that had an ICD-
9 coded diagnosis for Creutzfeldt-Jakob disease. Identifying information
has been provided.

NO PATIENTS REPORTED FOR THE REPORT PERIOD.



PAGE 14
               DETAILED VERIFICATION REPORT OF EPI EXTRACTED DATA
            FROM STATION (Your station number and name is displayed here.)
               PROCESSING PERIOD: 03-01-2003 through 03-31-2003

NTE~14-Report of Leishmaniasis
These data note persons at your facility during the month that had an ICD-
9coded diagnosis for Leishmania.  Identifying information has been
provided.

NO PATIENTS REPORTED FOR THE REPORT PERIOD.
```

Example: New Detailed Verification Report of EPI Extracted Data from Site mailman messages *continued.*

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PAGE 15
              DETAILED VERIFICATION REPORT OF EPI EXTRACTED DATA
            FROM STATION (Your station number and name is displayed
here.)
               PROCESSING PERIOD: 03-01-2003 through 03-31-2003

NTE~15 Report of Hepatitis C antibody negative
This represents a line listing of persons reported during the month who
had a negative test for hepatitis C antibody (based on accession date and
not results reported date).  Definitions for data to be extracted are
provided in the Technical and User Guide documentation for Laboratory EPI
LR*5.2*281.


Name                   LAST 4    Accession Date Test Name   Test Result
_____________________________________________________________________
LABPATIENT7~EIGHT        0078   03-05-2003@0700 HEP C ANTIBODY NEGATIVE
LABPATIENT7~NINE         0079   03-18-2003@0743 HEP C ANTIBODY NEGATIVE
LABPATIENT7~TEN          0710   03-03-2003@0846 HEP C ANTIBODY NEGATIVE
LABPATIENT8~ONE          0081   03-26-2003@1515 HEP C ANTIBODY NEGATIVE
LABPATIENT8~TWO          0082   03-28-2003@1506 HEP C ANTIBODY NEGATIVE
LABPATIENT8~THREE        0083   03-03-2003@0700 HEP C ANTIBODY NEGATIVE
LABPATIENT8~FOUR         0084   03-25-2003@1039 HEP C ANTIBODY NEGATIVE
LABPATIENT8~FIVE         0085   03-04-2003@1138 HEP C ANTIBODY NEGATIVE
LABPATIENT8~SIX          0086   03-20-2003@0700 HEP C ANTIBODY NEGATIVE
LABPATIENT8~SEVEN        0087   03-21-2003@0700 HEP C ANTIBODY NEGATIVE
LABPATIENT8~EIGHT        0088   03-27-2003@0700 HEP C ANTIBODY NEGATIVE
LABPATIENT8~NINE         0089   03-18-2003@1111 HEP C ANTIBODY NEGATIVE
LABPATIENT8~TEN          0810   03-05-2003@0819 HEP C ANTIBODY NEGATIVE
LABPATIENT9~ONE          0091   03-19-2003@1335 HEP C ANTIBODY NEGATIVE
LABPATIENT9~TWO          0092   03-27-2003@1622 HEP C ANTIBODY NEGATIVE
LABPATIENT9~THREE        0093   03-17-2003@1418 HEP C ANTIBODY NEGATIVE
LABPATIENT9~FOUR         0094   03-28-2003@1439 HEP C ANTIBODY NEGATIVE
LABPATIENT9~FIVE         0095   03-05-2003@0822 HEP C ANTIBODY NEGATIVE
LABPATIENT9~SIX          0096   03-19-2003@1553 HEP C ANTIBODY NEGATIVE
LABPATIENT9~SEVEN        0097   03-17-2003@1423 HEP C ANTIBODY NEGATIVE
LABPATIENT9~EIGHT        0098   03-14-2003      HEP C ANTIBODY NEGATIVE
LABPATIENT9~NINE         0099   03-21-2003@0939 HEP C ANTIBODY NEGATIVE
LABPATIENT9~TEN          0910   03-06-2003@1007 HEP C ANTIBODY NEGATIVE
LABPATIENT10~ONE         0101   03-21-2003@1210 HEP C ANTIBODY NEGATIVE
```

Example: New Detailed Verification Report of EPI Extracted Data from Site mailman messages *continued.*

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PAGE 16
              DETAILED VERIFICATION REPORT OF EPI EXTRACTED DATA
            FROM STATION (Your station number and name is displayed here.)
              PROCESSING PERIOD: 03-01-2003 through 03-31-2003

NTE~16 Report of Hepatitis A antibody positive
This represents a line listing of persons reported during the month who
had a positive test for hepatitis A antibody (based on accession date and
not results reported date). Definitions for data to be extracted are
provided in the Technical and User Guide documentation for Laboratory EPI
LR*5.2*281.

Name                 LAST 4      Accession Date Test Name   Test Result
_____________________________________________________________________
LABPATIENT7~NINE         0079   03-18-2003@0743 HEP A ANTIBODY(IGM)
NEGATIVE
LABPATIENT8~THREE        0083   03-03-2003@0700 HEP A ANTIBODY(IGM)
NEGATIVE
LABPATIENT4~ONE          0041   03-26-2003@1240 HEP A ANTIBODY-TOTAL
REACTIVE
LABPATIENT9~TWO          0092   03-27-2003@1622 HEP A ANTIBODY(IGM)
NEGATIVE
LABPATIENT4~FOUR         0044   03-19-2003      HEP A ANTIBODY-TOTAL
REACTIVE
LABPATIENT9~FOUR         0094   03-28-2003@1439 HEP A ANTIBODY(IGM)
NEGATIVE
LABPATIENT9~SIX          0096   03-19-2003@1553 HEP A ANTIBODY-TOTAL
REACTIVE
LABPATIENT10~TWO         0102   03-17-2003@1117 HEP A ANTIBODY-TOTAL
REACTIVE
LABPATIENT4~EIGHT        0048   03-08-2003@0700 HEP A ANTIBODY-TOTAL
REACTIVE
LABPATIENT10~THREE       0103   03-27-2003@0950 HEP A ANTIBODY(IGM)
NEGATIVE
LABPATIENT10~FOUR        0104   03-28-2003@1025 HEP A ANTIBODY-TOTAL
REACTIVE
LABPATIENT10~FIVE        0105   03-17-2003@1024 HEP A ANTIBODY-TOTAL
REACTIVE
LABPATIENT10~SIX         0106   03-12-2003@1450 HEP A ANTIBODY-TOTAL
REACTIVE
LABPATIENT10~SEVEN       0107   03-12-2003@1016 HEP A ANTIBODY(IGM)
NEGATIVE
LABPATIENT5~ONE          0051   03-07-2003@1015 HEP A ANTIBODY-TOTAL
REACTIVE
LABPATIENT10~EIGHT       0108   03-10-2003@0943 HEP A ANTIBODY-TOTAL
REACTIVE
LABPATIENT10~NINE        0109   03-06-2003@0920 HEP A ANTIBODY(IGM)
NEGATIVE
```

Example: New Detailed Verification Report of EPI Extracted Data from Site mailman messages *continued.*

```
LABPATIENT10~TEN        1010   03-06-2003@0700 HEP A ANTIBODY(IGM)
NEGATIVE
LABPATIENT11~ONE        0111   03-28-2003@0930 HEP A ANTIBODY(IGM)
NEGATIVE
LABPATIENT11~TWO        0112   03-03-2003@1549 HEP A ANTIBODY-TOTAL
REACTIVE
LABPATIENT11~THREE      0113   03-17-2003@1136 HEP A ANTIBODY-TOTAL
REACTIVE
LABPATIENT11~FOUR       0114   03-29-2003@0700 HEP A ANTIBODY-TOTAL
REACTIVE
LABPATIENT11~FIVE       0115   03-28-2003@1357 HEP A ANTIBODY(IGM)
NEGATIVE
LABPATIENT11~FIVE       0115                   HEP A ANTIBODY-TOTAL
REACTIVE



PAGE 17
               DETAILED VERIFICATION REPORT OF EPI EXTRACTED DATA
            FROM STATION (Your station number and name is displayed here.)
               PROCESSING PERIOD: 03-01-2003 through 03-31-2003

NTE~17 Report of Hepatitis B positive
This represents a line listing of persons reported during the month who
had a positive test for hepatitis B (based on accession date and not
results reported date). Definitions for data to be extracted are provided
in the Technical and User Guide documentation for Laboratory EPI
LR*5.2*281.


Name                 LAST 4     Accession Date  Test Name   Test Result
_____________________________________________________________________
LABPATIENT7~EIGHT       0078   03-05-2003@0700 HEP B SURFACE AG NEGATIVE
LABPATIENT7~EIGHT       0078                   HEP B SURFACE AB LOW TITER
POSITIVE
LABPATIENT9~TWO         0092   03-27-2003@1622 HEP B SURFACE AG NEGATIVE
LABPATIENT9~TWO         0092                   HEP B SURFACE AB LOW TITER
POSITIVE
LABPATIENT9~TWO         0092                   HEP B CORE AB(IGM) NEGATIVE
LABPATIENT11~SIX        0116   03-22-2003@0700 HEP B SURFACE AG NEGATIVE
LABPATIENT11~SIX        0116                   HEP B SURFACE AB ADEQUATE
TITER
POSITIVE
LABPATIENT11~SEVEN      0117   03-25-2003@1610 HEP B SURFACE AB ADEQUATE
TITER
POSITIVE
LABPATIENT11~EIGHT      0118   03-06-2003@1025 HEP B SURFACE AB LOW TITER
POSITIVE
LABPATIENT4~TEN         0410   03-14-2003@1004 HEP B SURFACE AG NEGATIVE
LABPATIENT4~TEN         0410                   HEP B SURFACE AB ADEQUATE
TITER POSITIVE
```

```
LABPATIENT11~NINE       0119   03-28-2003@1530 HEP B SURFACE AB LOW TITER
POSITIVE
```

Example: New Detailed Verification Report of EPI Extracted Data from Site mailman messages *continued.*

```
LABPATIENT11~TEN        1110   03-13-2003@0700 HEP B SURFACE AG POSITIVE
LABPATIENT11~TEN        1110                   HEP B SURFACE AB NEGATIVE
LABPATIENT12~ONE        0121   03-19-2003@0700 HEP B SURFACE AG NEGATIVE
LABPATIENT12~ONE        0121                   HEP B SURFACE AB LOW TITER
POSITIVE
LABPATIENT12~ONE        0121                   HEP B CORE AB (IGM)
NEGATIVE
WUDFES~JUHDFESXY~K       6546   03-07-2003@1258 HEP B SURFACE AB LOW TITER
POSITIVE
LABPATIENT12~TWO        0122   03-18-2003@1155 HEP B SURFACE AG NEGATIVE
LABPATIENT12~TWO        0122                   HEP B SURFACE AB LOW TITER
POSITIVE
LABPATIENT12~THREE      0123   03-10-2003@1214 HEP B SURFACE AG NEGATIVE
LABPATIENT12~THREE      0123                   HEP B SURFACE AB ADEQUATE
TITER POSITIVE
LABPATIENT12~FOUR       0124   03-19-2003@1520 HEP B SURFACE AG NEGATIVE
LABPATIENT12~FOUR       0124                   HEP B SURFACE AB ADEQUATE
TITER POSITIVE

PAGE 18
              DETAILED VERIFICATION REPORT OF EPI EXTRACTED DATA
            FROM STATION (Your station number and name is displayed
here.)
              PROCESSING PERIOD: 03-01-2003 through 03-31-2003

NTE~18-Report of All Staphylococcus aureus
These data note persons at your facility during the month that had a
positive result for all Staphylococcus aureus. Identifying information,
along with specimen and culture results has been provided.


PATIENT NAME                  LAST 4 DOB        SEX   PERIOD OF SERVICE
LABPATIENT12, FIVE            0125   04-25-1930 M     KOREAN
Inpatient Admission Date:  03-14-2003@2035
Discharge Date:  03-27-2003@1646 Discharge Disposition:  REGULAR

03-16-2003@2120 BLD 03 835 MICRO CULTURE BLOOD
     1                                 03-23-2003   STAPHYLOCOCCUS AUREUS

03-16-2003@2100 BLD 03 836 MICRO CULTURE BLOOD
     1                                 03-23-2003   STAPHYLOCOCCUS AUREUS

03-15-2003@2222 BLD 03 826 MICRO CULTURE BLOOD
     1                                 03-18-2003   STAPHYLOCOCCUS AUREUS

03-15-2003@2222 BLD 03 825 MICRO CULTURE BLOOD
     1                                 03-18-2003   STAPHYLOCOCCUS AUREUS

03-14-2003@2213 BLD 03 812 MICRO CULTURE BLOOD
     1                                 03-20-2003   STAPHYLOCOCCUS AUREUS
```

Example: New Detailed Verification Report of EPI Extracted Data from Site mailman messages *continued.*

```
ORG # 1 03-14-2003@2213 ANTIBIOTIC MIC  BLOOD
     PENICILLIN                        R                   R
     CLINDAMYCIN                       S                   S
     VANCOMYCIN                        S                   S
     GENTAMICIN                        S                   S
     CEFAZOLIN                         S                   S
     TETRACYCLINE                      S                   S
     TRIMETHOPRIM+SULFAMETHOXAZOLE     S                   S
     ERYTHROMYCIN                      S                   S
     NITROFURANTOIN                    S                   S
     RIFAMPIN                          S                   S
     OXACILLIN                         S                   S
     CIPROFLOXACIN                     S                   S
     AMPICILLIN+SULBACTAM              S                   S
     LEVOFLOXACIN                      S                   S
     AMOXICILLIN CLAVULANIC ACID       S                   S


PATIENT NAME                   LAST 4 DOB        SEX   PERIOD OF SERVICE
LABPATIENT12, SIX              0126   01-28-1934 M     KOREAN
Outpatient Accession Date:  03-04-2003

03-04-2003 BLD 03 726 MICRO CULTURE BLOOD
     1                              03-07-2003   STAPHYLOCOCCUS AUREUS

ORG # 1 03-04-2003 ANTIBIOTIC MIC  BLOOD
     PENICILLIN                        R                   R
     CLINDAMYCIN                       S                   S
     VANCOMYCIN                        S                   S
     GENTAMICIN                        S                   S
     CEFAZOLIN                         S                   S
     TETRACYCLINE                      S                   S
     TRIMETHOPRIM+SULFAMETHOXAZOLE     S                   S
     ERYTHROMYCIN                      S                   S
     NITROFURANTOIN                    S                   S
     RIFAMPIN                          S                   S
     OXACILLIN                         S                   S
     CIPROFLOXACIN                     S                   S
     AMPICILLIN+SULBACTAM              S                   S
     LEVOFLOXACIN                      S                   S
     AMOXICILLIN CLAVULANIC ACID       S                   S
Outpatient Accession Date:  03-05-2003@0000

03-05-2003@0000 BLD 03 730 MICRO CULTURE BLOOD
     1                                 03-07-2003   STAPHYLOCOCCUS AUREUS
```

Example: New Detailed Verification Report of EPI Extracted Data from Site mailman messages *continued.*

```
Inpatient Admission Date:  03-05-2003@1520
Discharge Date:  03-31-2003@1447 Discharge Disposition:  REGULAR

03-09-2003@0940 BLD 03 762 MICRO CULTURE BLOOD
     1                                03-14-2003   STAPHYLOCOCCUS AUREUS

ORG # 1 03-09-2003@0940 ANTIBIOTIC MIC BLOOD
     PENICILLIN                       R                  R
     CLINDAMYCIN                      S                  S
     VANCOMYCIN                       S                  S
     GENTAMICIN                       S                  S
     CEFAZOLIN                        S                  S
     TETRACYCLINE                     S                  S
     TRIMETHOPRIM+SULFAMETHOXAZOLE    S                  S
     ERYTHROMYCIN                     S                  S
     NITROFURANTOIN                   S                  S
     RIFAMPIN                         S                  S
     OXACILLIN                        S                  S
     CIPROFLOXACIN                    S                  S
     AMPICILLIN+SULBACTAM             S                  S
     LEVOFLOXACIN                     S                  S
     AMOXICILLIN CLAVULANIC ACID      S                  S
03-05-2003 BLD 03 729 MICRO CULTURE BLOOD
     1                                03-07-2003   STAPHYLOCOCCUS AUREUS


PATIENT NAME                  LAST 4 DOB        SEX   PERIOD OF SERVICE
LABPATIENT12, SEVEN           0127   04-27-1953 M     VIETNAM ERA
HOMELESS Inpatient Admission Date:  03-16-2003@0035
Discharge Date:  03-31-2003@1459 Discharge Disposition:  REGULAR

03-22-2003@0419 BLD 03 879 MICRO CULTURE BLOOD
     2                                03-24-2003   STAPHYLOCOCCUS AUREUS
(MRSA)

ORG # 2 03-22-2003@0419 ANTIBIOTIC MIC BLOOD
     PENICILLIN                       R                  R
     CLINDAMYCIN                      S                  S
     VANCOMYCIN                       S                  S
     GENTAMICIN                       S                  S
     CEFAZOLIN                        R                  R
     TETRACYCLINE                     S                  S
     TRIMETHOPRIM+SULFAMETHOXAZOLE    S                  S
     ERYTHROMYCIN                     R                  R
     NITROFURANTOIN                   S                  S
     RIFAMPIN                         S                  S
     OXACILLIN                        R                  R
     CIPROFLOXACIN                    S                  S
```

Example: New Detailed Verification Report of EPI Extracted Data from Site mailman messages *continued.*

```
     AMPICILLIN+SULBACTAM            R                  R
     LEVOFLOXACIN                    S                  S
     AMOXICILLIN CLAVULANIC ACID     R                  R

03-22-2003@0300 BLD 03 880 MICRO CULTURE BLOOD
     1                          03-24-2003   STAPHYLOCOCCUS AUREUS (MRSA)

03-22-2003@0245 BLD 03 881 MICRO CULTURE BLOOD
     1                           03-24-2003 STAPHYLOCOCCUS AUREUS (MRSA)




PAGE 19
               DETAILED VERIFICATION REPORT OF EPI EXTRACTED DATA
                        FROM STATION 539 CINCINNATI VAMC
               PROCESSING PERIOD: 03-01-2003 through 03-31-2003

NTE~19-Report of methicillin-resistant Staphylococcus
These data note persons at your facility during the month that had a
positive result for methicillin-resistant Staphylococcus aureus.
Identifying information, along with specimen and culture results has been
provided.


PATIENT NAME                  LAST 4 DOB        SEX   PERIOD OF SERVICE
LABPATIENT12, SEVEN           0127   04-27-1953 M     VIETNAM ERA
HOMELESS
Inpatient Admission Date:  03-16-2003@0035
Discharge Date:  03-31-2003@1459 Discharge Disposition:  REGULAR

03-22-2003@0419 BLD 03 879 MICRO CULTURE BLOOD
     2                               03-24-2003   STAPHYLOCOCCUS AUREUS
(MRSA)

ORG # 2 03-22-2003@0419 ANTIBIOTIC MIC BLOOD
     PENICILLIN                      R                  R
     CLINDAMYCIN                     S                  S
     VANCOMYCIN                      S                  S
     GENTAMICIN                      S                  S
     CEFAZOLIN                       R                  R
     TETRACYCLINE                    S                  S
     TRIMETHOPRIM+SULFAMETHOXAZOLE   S                  S
     ERYTHROMYCIN                    R                  R
     NITROFURANTOIN                  S                  S
     RIFAMPIN                        S                  S
     OXACILLIN                       R                  R
```

Example: New Detailed Verification Report of EPI Extracted Data from Site mailman messages *continued.*

```
     CIPROFLOXACIN                    S                   S
     AMPICILLIN+SULBACTAM             R                   R
     LEVOFLOXACIN                     S                   S
     AMOXICILLIN CLAVULANIC ACID      R                   R



PATIENT NAME                  LAST 4 DOB        SEX   PERIOD OF SERVICE
LABPATIENT12, EIGHT           0128   08-26-1922 M     KOREAN
Inpatient Admission Date:  03-13-2003@2113
Discharge Date:  04-03-2003@1216 Discharge Disposition:  REGULAR

03-23-2003@2130 BACT 03 2186 MICRO CULTURE SKIN
     1                               03-27-2003   STAPHYLOCOCCUS AUREUS
(MRSA)

ORG # 1 03-23-2003@2130 ANTIBIOTIC MIC SKIN
     PENICILLIN                       R                   R
     CLINDAMYCIN                      R                   R
     VANCOMYCIN                       S                   S
     GENTAMICIN                       S                   S
     CEFAZOLIN                        R                   R
     TETRACYCLINE                     S                   S
     TRIMETHOPRIM+SULFAMETHOXAZOLE    S                   S
     ERYTHROMYCIN                     R                   R
     NITROFURANTOIN                   S                   S
     RIFAMPIN                         S                   S
     OXACILLIN                        R                   R
     CIPROFLOXACIN                    R                   R
     AMPICILLIN+SULBACTAM             R                   R
     LEVOFLOXACIN                     R                   R
     AMOXICILLIN CLAVULANIC ACID      R                   R
03-15-2003@0000 BACT 03 1984 MICRO CULTURE SPUTUM
    1                                03-18-2003   STAPHYLOCOCCUS AUREUS
(MRSA)
     2                               03-18-2003   PROTEUS MIRABILIS
     3                               03-18-2003   ACINETOBACTER BAUMANII

     4                               03-18-2003   CITROBACTER KOSERII
(DIVERSUS)

ORG # 1 03-15-2003@0000 ANTIBIOTIC MIC SPUTUM
     PENICILLIN                       R                   R
     CLINDAMYCIN                      R                   R
     VANCOMYCIN                       S                   S
     GENTAMICIN                       S                   S
     CEFAZOLIN                        R                   R
     TETRACYCLINE                     S                   S
```

Example: New Detailed Verification Report of EPI Extracted Data from Site mailman messages *continued.*

```
     TRIMETHOPRIM+SULFAMETHOXAZOLE    S                    S
     ERYTHROMYCIN                     R                    R
     NITROFURANTOIN                   S                    S
     RIFAMPIN                         S                    S
     OXACILLIN                        R                    R
     CIPROFLOXACIN                    R                    R
     AMPICILLIN+SULBACTAM             R                    R
     LEVOFLOXACIN                     R                    R
     AMOXICILLIN CLAVULANIC ACID      R                    R

ORG # 2 03-15-2003@0000 ANTIBIOTIC MIC SPUTUM
     GENTAMICIN                       S                    S
     CEFAZOLIN                        S                    S
     AMPICILLIN                       R                    R
     POLYMIXIN B                      S                    S
     TRIMETHOPRIM+SULFAMETHOXAZOLE    R                    R
     AMIKACIN                         S                    S
     PIPERACILLIN                     R                    R
     CEFOTAXIME                       S                    S
     CIPROFLOXACIN                    R                    R
     IMIPENUM                         S                    S
     CEFTAZIDIME                      S                    S
     AMPICILLIN+SULBACTAM             R                    R
     CEFOTETAN                        S                    S
     LEVOFLOXACIN                     R                    R
     CEFEPIME                         S                    S
     PIPERACILLIN+TAZOBACTAM          S                    S
ORG # 3  03-15-2003@0000  ANTIBIOTIC MIC  SPUTUM
     GENTAMICIN                       S                    S
     CEFAZOLIN                        R                    R
     AMPICILLIN                       I                    I
     POLYMIXIN B                      S                    S
     TRIMETHOPRIM+SULFAMETHOXAZOLE    S                    S
     AMIKACIN                         S                    S
     PIPERACILLIN                     S                    S
     CEFOTAXIME                       S                    S
     CIPROFLOXACIN                    R                    R
     IMIPENUM                         S                    S
     CEFTAZIDIME                      S                    S
     AMPICILLIN+SULBACTAM             S                    S
     CEFOTETAN                        R                    R
     LEVOFLOXACIN                     R                    R
     CEFEPIME                         S                    S
     PIPERACILLIN+TAZOBACTAM          S                    S
```

Example: New Detailed Verification Report of EPI Extracted Data from Site mailman messages *continued.*

```
ORG # 4 03-15-2003@0000  ANTIBIOTIC MIC  SPUTUM
     GENTAMICIN                        S                   S
     CEFAZOLIN                         S                   S
     POLYMIXIN B                       S                   S
     TRIMETHOPRIM+SULFAMETHOXAZOLE     S                   S
     AMIKACIN                          S                   S
     PIPERACILLIN                      S                   S
     CEFOTAXIME                        S                   S

     CIPROFLOXACIN                     S                   S
     IMIPENUM                          S                   S
     CEFTAZIDIME                       S                   S
     CEFOTETAN                         S                   S
     LEVOFLOXACIN                      S                   S
     CEFEPIME                          S                   S
     PIPERACILLIN+TAZOBACTAM           S                   S



PAGE 20
               DETAILED VERIFICATION REPORT OF EPI EXTRACTED DATA
             FROM STATION (Your station number and name is displayed here.)
               PROCESSING PERIOD: 03-01-2003 through 03-31-2003

NTE~20-Vancomycin-resistant Staphylococcus aureus
These data note persons at your facility during the month that had a
positive result for Vancomycin-resistant Staphylococcus aureus.
Identifying information, along with specimen and culture results has been
provided.

NO PATIENTS REPORTED FOR THE REPORT PERIOD.


PAGE 21
               DETAILED VERIFICATION REPORT OF EPI EXTRACTED DATA
             FROM STATION (Your station number and name is displayed here.)
               PROCESSING PERIOD: 03-01-2003 through 03-31-2003

NTE~21-Vancomycin-resistant coagulase negative Staphylococcus
These data note persons at your facility during the month that had a
positive result for Vancomycin-resistant coagulase negative
staphylococcus. Identifying information, along with specimen and culture
results has been provided.

NO PATIENTS REPORTED FOR THE REPORT PERIOD.
```

Example: New Detailed Verification Report of EPI Extracted Data from Site mailman messages *continued.*

```
PAGE 22
              DETAILED VERIFICATION REPORT OF EPI EXTRACTED DATA
            FROM STATION (Your station number and name is displayed here.)
               PROCESSING PERIOD: 03-01-2003 through 03-31-2003

NTE~22-All Streptococcus pneumoniae
These data note persons at your facility during the month that had a
positive result for all Streptococcus pneumoniae.  Identifying
information, along with specimen and culture results has been provided.


PATIENT NAME                   LAST 4 DOB        SEX   PERIOD OF SERVICE
LABPATIENT12, NINE             0129   07-06-1922 M     VIETNAM ERA
Inpatient Admission Date:  03-12-2003@1205
Discharge Date:  03-20-2003@1320 Discharge Disposition:  REGULAR

03-12-2003@1420 BACT 03 1894 MICRO CULTURE SPUTUM
     1                                 03-15-2003   STREPTOCOCCUS
PNEUMONIAE

ORG # 1 03-12-2003@1420 ANTIBIOTIC MIC  SPUTUM
     PENICILLIN                        S                   S
     CLINDAMYCIN                       S                   S
     VANCOMYCIN                        S                   S
     CHLORAMPHENICOL                   S                   S
     TETRACYCLINE                      S                   S
     TRIMETHOPRIM+SULFAMETHOXAZOLE     S                   S
     ERYTHROMYCIN                      S                   S
     CEFOTAXIME                        S                   S
     CEFTRIAXONE                       S                   S
     LEVOFLOXACIN                      S                   S

PATIENT NAME                   LAST 4 DOB        SEX   PERIOD OF SERVICE
LABPATIENT12, TEN              1210   03-27-1924 M     WORLD WAR II
Inpatient Admission Date:  03-21-2003@1657
Discharge Date:  --"" Discharge Disposition:

03-21-2003 BACT 03 2154 MICRO CULTURE SPUTUM
     1                                 03-25-2003   STREPTOCOCCUS
PNEUMONIAE

     2                                 03-25-2003   HAEMOPHILUS INFLUENZAE

     3                                 03-25-2003   CANDIDA ALBICANS
```

Example: New Detailed Verification Report of EPI Extracted Data from Site mailman messages *continued.*

```
ORG # 1 03-21-2003 ANTIBIOTIC MIC SPUTUM
     PENICILLIN                        S                    S
     CLINDAMYCIN                       S                    S
     VANCOMYCIN                        S                    S
     CHLORAMPHENICOL                   S                    S
     TETRACYCLINE                      S                    S
     AMPICILLIN                        S                    S
     TRIMETHOPRIM+SULFAMETHOXAZOLE     S                    S
     ERYTHROMYCIN                      S                    S
     CEFOTAXIME                        S                    S
     CEFTRIAXONE                       S                    S
     LEVOFLOXACIN                      S                    S


PATIENT NAME                    LAST 4 DOB        SEX   PERIOD OF SERVICE
LABPATIENT13, ONE               0131   12-13-1947 M     VIETNAM ERA
Outpatient Accession Date:  03-24-2003

03-24-2003 BACT 03 2200 MICRO CULTURE BRONCHUS
     1                                 03-27-2003   STREPTOCOCCUS
PNEUMONIAE

ORG # 1 03-24-2003 ANTIBIOTIC MIC BRONCHUS
     PENICILLIN                        S                    S
     CLINDAMYCIN                       S                    S
     VANCOMYCIN                        S                    S
     CHLORAMPHENICOL                   S                    S
     TETRACYCLINE                      S                    S
     AMPICILLIN                        S                    S
     TRIMETHOPRIM+SULFAMETHOXAZOLE     S                    S
     ERYTHROMYCIN                      S                    S
     CEFOTAXIME                        S                    S
     CEFTRIAXONE                       S                    S
     LEVOFLOXACIN                      S                    S


PAGE 23
               DETAILED VERIFICATION REPORT OF EPI EXTRACTED DATA
             FROM STATION (Your station number and name is displayed
here.)
               PROCESSING PERIOD: 03-01-2003 through 03-31-2003

NTE~23- All Enterococci
These data note persons at your facility during the month that had a
positive result for all Enterococci. Identifying information, along with
specimen and culture results has been provided.
```

Example: New Detailed Verification Report of EPI Extracted Data from Site mailman messages *continued.*

```
PATIENT NAME                  LAST 4 DOB        SEX   PERIOD OF SERVICE
LABPATIENT3, TEN              0310   03-11-1925 M     WORLD WAR II
Inpatient Admission Date:  03-08-2003@1717
Discharge Date:  --"" Discharge Disposition:

03-18-2003@0700 BACT 03 2038 MICRO CULTURE URINE
     2                              03-20-2003   ENTEROCOCCUS FAECIUM

ORG # 2 03-18-2003@0700 ANTIBIOTIC MIC URINE
     PENICILLIN                     R                  R
     VANCOMYCIN                     R                  R
     NITROFURANTOIN                 S                  S
     CIPROFLOXACIN                  R                  R
     LEVOFLOXACIN                   R                  R
     GENTAMICIN HP                  SYN-S              SYN-S
     STREPTOMYCIN HP                SYN-R              SYN-R


PATIENT NAME                  LAST 4 DOB        SEX   PERIOD OF SERVICE
LABPATIENT13, TWO             0132   05-29-1928 M     WORLD WAR II
Inpatient Admission Date:  02-27-2003@1650
Discharge Date:  04-02-2003@1415 Discharge Disposition:  REGULAR

03-20-2003@1740 BLD 03 870 MICRO CULTURE BLOOD
     1                              03-24-2003   ENTEROCOCCUS FAECALIS
     2                              03-24-2003   STAPHYLOCOCCUS
(COAGULASE NEGATIVE)
ORG # 1 03-20-2003@1740 ANTIBIOTIC MIC BLOOD
     PENICILLIN                     S                  S
     VANCOMYCIN                     S                  S
     TETRACYCLINE                   R                  R
     NITROFURANTOIN                 S                  S
     CIPROFLOXACIN                  S                  S
     LEVOFLOXACIN                   S                  S
     GENTAMICIN HP                  SYN-S              SYN-S
     STREPTOMYCIN HP                SYN-R              SYN-R
ORG # 2 03-20-2003@1740 ANTIBIOTIC MIC BLOOD
     PENICILLIN                     R                  R
     CLINDAMYCIN                    S                  S
     VANCOMYCIN                     S                  S
     GENTAMICIN                     S                  S
     CEFAZOLIN                      R                  R
     TRIMETHOPRIM+SULFAMETHOXAZOLE  S                  S
     ERYTHROMYCIN                   R                  R
     NITROFURANTOIN                 S                  S
```

Example: New Detailed Verification Report of EPI Extracted Data from Site mailman messages *continued.*

```
     RIFAMPIN                          S                   S
     OXACILLIN                         R                   R
     CIPROFLOXACIN                     R                   R
     AMPICILLIN+SULBACTAM              R                   R
     LEVOFLOXACIN                      I                   I
     AMOXICILLIN CLAVULANIC ACID       R                   R


PATIENT NAME                   LAST 4 DOB        SEX   PERIOD OF SERVICE
LABPATIENT13, FOUR             0134   06-25-1939 M     POST-KOREAN
Outpatient Accession Date:  03-10-2003

03-10-2003 BACT 03 1816 MICRO CULTURE URINE
     1                                 03-12-2003   ENTEROCOCCUS
     2                                 03-12-2003   STAPHYLOCOCCUS
(COAGULASE NEGATIVE)
ORG # 1 03-10-2003 ANTIBIOTIC MIC URINE
     PENICILLIN                        S                   S
     VANCOMYCIN                        S                   S
     TETRACYCLINE                      R                   R
     NITROFURANTOIN                    S                   S
     CIPROFLOXACIN                     R                   R
     LEVOFLOXACIN                      R                   R
     GENTAMICIN HP                     SYN-R               SYN-R
     STREPTOMYCIN HP                   SYN-S               SYN-S



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UPDATES
This section presents patients who had a transmission of information
during a month on an EPI defined topic that was incomplete. These patients
have information that has been transmitted during the current processing
month in order to complete the EPI files. This information usually
contains inpatient information about discharge date; ICD coded diagnoses,
and occasionally will contain laboratory based testing. This line listing
of patient, SSN, and admission date and discharge date is provided to
assist with analysis should a processing/error report occur with your
monthly automated transmission of this data.
Name                     LAST 4   Admission date     Discharge date
_____________________________________________________________________
LABPATIENT13~FIVE        0135     12-19-2002@1605   04-05-2003@1213
LABPATIENT13~SIX         0136     01-28-2003@1720   03-06-2003@1614
LABPATIENT13~SEVEN       0137     02-04-2003@1045   03-07-2003@1847
```

Example: New Detailed Verification Report of EPI Extracted Data from Site mailman messages *continued.*

```
PAGE 25
Pharmacy-based data extracted for EPI data base.

INTERFERON BETA-1A (AVONEX) 30MCG
     0138    LABPATIENT13~EIGHT      Outpatient 03-12-2003
     0139    LABPATIENT13~NINE       Outpatient 03-27-2003
     1310    LABPATIENT13~TEN        Outpatient 03-19-2003
     1310    LABPATIENT13~TEN        Outpatient 03-21-2003
     1310    LABPATIENT13~TEN        Outpatient 03-28-2003
     0141    LABPATIENT14~ONE        Outpatient 03-11-2003
     0142    LABPATIENT14~TWO        Outpatient 03-20-2003
     0143    LABPATIENT14~THREE      Outpatient 03-03-2003
     0144    LABPATIENT14~FOUR       Outpatient 03-11-2003
     0145    LABPATIENT14~FIVE       Outpatient 03-18-2003
     0146    LABPATIENT14~SIX        Outpatient 03-28-2003
     0147    LABPATIENT14~SEVEN      Outpatient 03-03-2003
     0148    LABPATIENT14~EIGHT      Outpatient 03-24-2003
     0149    LABPATIENT14~NINE       Outpatient 03-14-2003
     1410    LABPATIENT14~TEN        Outpatient 03-10-2003
     0151    LABPATIENT15~ONE        Outpatient 03-02-2003
     0151    LABPATIENT15~ONE        Outpatient 03-21-2003
     0152    LABPATIENT15~TWO        Outpatient 03-20-2003
     0153    LABPATIENT15~THREE      Outpatient 03-20-2003
     0154    LABPATIENT15~FOUR       Outpatient 03-14-2003
     0155    LABPATIENT15~FIVE       Outpatient 03-14-2003
     0156    LABPATIENT15~SIX        Outpatient 03-10-2003
-------------------------------------------------------------
     SUBCOUNT  22


INTERFERON BETA-1A 44MCG/SYR INJ (REBIF)
     0951    FLUZHU~BHYYHSE U~TU      Outpatient 03-06-2003
-------------------------------------------------------------
     SUBCOUNT  1


INTERFERON BETA-1B 0.3MG (BETASERON)
     0157    LABPATIENT15~SEVEN      Outpatient 03-25-2003
     0158    LABPATIENT15~EIGHT      Outpatient 03-26-2003
     0159    LABPATIENT15~NINE       Outpatient 03-06-2003
     0159    LABPATIENT15~NINE       Outpatient 03-26-2003
     1510    LABPATIENT15~TEN        Outpatient 03-18-2003
-------------------------------------------------------------------
     SUBCOUNT  5
```

Example: New Detailed Verification Report of EPI Extracted Data from Site mailman messages *continued.*

```
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Detailed Listing of Hepatitis C Risk Assessment
These Health factors/Resolved terms for hepatitis C risk assessment are
the national Health factors used for roll-up of risk assessment data. They
may not reflect the terms actually utilized (seen) in the Clinical
Reminder package at this facility. To determine which local/facility
Clinical Reminder health factor(s) correspond(s) to the national term,
please contact your facility Clinical Reminder application coordinator.
Note that hepatitis C infection is based on a previously ICD coded
diagnosis of hepatitis C at your site/facility.
DECLINED ASSESSMENT FOR HEPATITIS C
-------------------------------------

NO PATIENTS REPORTED FOR THE REPORT PERIOD


NO RISK FACTORS FOR HEPATITIS C
-------------------------------------
     0161    LABPATIENT16~ONE         Outpatient 03-24-2003@1140
     0162    LABPATIENT16~TWO         Outpatient 03-20-2003@1300
     0163    LABPATIENT16~THREE       Outpatient 03-03-2003@1500
     0164    LABPATIENT16~FOUR        Outpatient 03-05-2003@1500
     0165    LABPATIENT16~FIVE        Outpatient 03-18-2003@1000
     0166    LABPATIENT16~SIX         Outpatient 03-17-2003@1500
     0167    LABPATIENT16~SEVEN       Outpatient 03-24-2003@1515
     0168    LABPATIENT16~EIGHT       Outpatient 03-05-2003@1000
     0169    LABPATIENT16~NINE        Outpatient 03-10-2003@1500
     1610    LABPATIENT16~TEN         Outpatient 03-31-2003@1400
     0171    LABPATIENT17~ONE         Outpatient 03-05-2003@1000
     0172    LABPATIENT17~TWO         Outpatient 03-18-2003@1500
     0173    LABPATIENT17~THREE       Outpatient 03-04-2003@0815
     0174    LABPATIENT17~FOUR        Outpatient 03-18-2003@1500
     0175    LABPATIENT17~FIVE        Outpatient 03-12-2003@1300
     0176    LABPATIENT17~SIX         Outpatient 03-24-2003@0900
-------------------------------------------------------------
     SUBCOUNT  238


PREVIOUSLY ASSESSED FOR HEPATITIS C
-------------------------------------
     0177    LABPATIENT17~SEVEN       Inpatient 03-15-2003
     0178    LABPATIENT17~EIGHT       Inpatient 03-14-2003
-------------------------------------------------------------
     SUBCOUNT  2
```

Example: New Detailed Verification Report of EPI Extracted Data from Site mailman messages *continued.*

```
RISK FACTORS FOR HEPATITIS C
------------------------------------
     0179    LABPATIENT17~NINE        Outpatient 03-07-2003@1530
     1710    LABPATIENT17~TEN         Outpatient 03-26-2003@1300
     0181    LABPATIENT18~ONE         Outpatient 03-31-2003@1400
     0182    LABPATIENT18~TWO         Outpatient 03-27-2003@1530
     0044    LABPATIENT4~FOUR         Outpatient 03-19-2003@1300
     0183    LABPATIENT18~THREE       Outpatient 03-03-2003@1000
     0184    LABPATIENT18~FOUR        Outpatient 03-20-2003@1000
     0185    LABPATIENT18~FIVE        Inpatient 03-10-2003@1120
     0186    LABPATIENT18~SIX         Outpatient 03-26-2003@1000
     0187    LABPATIENT18~SEVEN       Outpatient 03-13-2003@1500
     0068    LABPATIENT6~EIGHT        Inpatient 03-25-2003@1203
     0188    LABPATIENT18~EIGHT       Inpatient 03-26-2003@1239
-------------------------------------------------------------
     SUBCOUNT  132

POSITIVE TEST FOR HEPATITIS C ANTIBODY
------------------------------------
     0041    LABPATIENT4~ONE          Outpatient 03-26-2003@1240
     0042    LABPATIENT4~TWO          Outpatient 03-27-2003@1614
     0043    LABPATIENT4~THREE        Inpatient 03-13-2003@0700
     0044    LABPATIENT4~FOUR         Outpatient 03-19-2003
     0045    LABPATIENT4~FIVE         Inpatient 03-08-2003@0700
     0046    LABPATIENT4~SIX          Outpatient 03-05-2003@0823
     0047    LABPATIENT4~SEVEN        Inpatient 03-08-2003@0700
     0048    LABPATIENT4~EIGHT        Inpatient 03-08-2003@0700
     0049    LABPATIENT4~NINE         Outpatient 03-05-2003@1726
     0410    LABPATIENT4~TEN          Inpatient 03-14-2003@1004
     0051    LABPATIENT5~ONE          Outpatient 03-07-2003@1015
     0052    LABPATIENT5~TWO          Inpatient 03-21-2003@0700
     0053    LABPATIENT5~THREE        Outpatient 03-10-2003@0807
     0054    LABPATIENT5~FOUR         Outpatient 03-18-2003
     0055    LABPATIENT5~FIVE         Outpatient 03-11-2003@0916
     0056    LABPATIENT5~SIX          Inpatient 03-27-2003@0700
     0057    LABPATIENT5~SEVEN        Inpatient 03-06-2003@0700
     0058    LABPATIENT5~EIGHT        Inpatient 03-21-2003@0700
     0189    LABPATIENT18~NINE        Outpatient 03-31-2003@1057
     0059    LABPATIENT5~NINE         Outpatient 03-12-2003@0911
     0510    LABPATIENT5~TEN          Outpatient 03-25-2003@1443
     0061    LABPATIENT6~ONE          Outpatient 03-04-2003@1019
     0062    LABPATIENT6~TWO          Inpatient 03-13-2003@0700
     0063    LABPATIENT6~THREE        Inpatient 03-13-2003@0700
     0064    LABPATIENT6~FOUR         Outpatient 03-04-2003@1648
     0065    LABPATIENT6~FIVE         Inpatient 03-08-2003@0700
     0066    LABPATIENT6~SIX          Outpatient 03-27-2003@1141
     0067    LABPATIENT6~SEVEN        Outpatient 03-03-2003@1503
     0068    LABPATIENT6~EIGHT        Inpatient 03-27-2003@0700
     0069    LABPATIENT6~NINE         Inpatient 03-13-2003@0700
     0610    LABPATIENT6~TEN          Outpatient 03-28-2003@1356
-------------------------------------------------------------
     SUBCOUNT  31
```

Example: New Detailed Verification Report of EPI Extracted Data from Site mailman messages *continued.*

```
NEGATIVE TEST FOR HEPATITIS C ANTIBODY
--------------------------------------
     0078    LABPATIENT7~EIGHT        Inpatient 03-05-2003@0700
     0079    LABPATIENT7~NINE         Outpatient 03-18-2003@0743
     0710    LABPATIENT7~TEN          Outpatient 03-03-2003@0846
     0081    LABPATEINT8~ONE          Outpatient 03-26-2003@1515
     0082    LABPATIENT8~TWO          Outpatient 03-28-2003@1506
     0083    LABPATIENT8~THREE        Inpatient 03-03-2003@0700
     0084    LABPATIENT8~FOUR         Outpatient 03-25-2003@1039
     0085    LABPATIENT8~FIVE         Outpatient 03-04-2003@1138
     1810    LABPATIENT18~TEN         Outpatient 03-24-2003@1700
     0191    LABPATIENT19~ONE         Outpatient 03-25-2003@1120
     0188    LABPATIENT18~EIGHT       Inpatient 03-27-2003@0700
     0192    LABPATIENT19~TWO         Outpatient 03-28-2003@1406
-------------------------------------------------------------
     SUBCOUNT  212


HEPATITIS C DIAGNOSIS (ICD BASED)
---------------------------------
     0193    LABPATIENT19~THREE       Outpatient 03-17-2003@1330
     0037    LABPATIENT3~SEVEN        Outpatient 03-05-2003@1300
     0194    LABPATIENT19~FOUR        Outpatient 03-19-2003@1300
     0195    LABPATIENT19~FIVE        Outpatient 03-24-2003@0800
     0196    LABPATIENT19~SIX         Outpatient 03-18-2003
     0197    LABPATIENT19~SEVEN       Outpatient 03-26-2003@1430
     0198    LABPATIENT19, EIGHT      Outpatient 03-14-2003@1245
     0064    LABPATIENT6~FOUR         Outpatient 03-04-2003@1500
     0199    LABPATIENT19~NINE        Outpatient 03-18-2003
     0069    LABPATIENT6~NINE         Inpatient 03-26-2003@1007
-------------------------------------------------------------
     SUBCOUNT  130

-------------------------------------------------------------
     COUNT 745
```

New EPI Processing Error Report Mailman Message sent from Austin

The **new** EPI Processing/Error Report mailman message itemizes all transmissions received by AITC and document the records status as either being accepted or rejected (with the reason and reject code identified*).* This report is sent to the EPI mail group. *(Examples of "Tables of Rejects and Errors and/or Warning Codes" are located in the Appendix - B section of this manual).*

Example: New EPI Processing Error Report Mailman Message

```
Subj: EPT/DOY #041381117683754 [#19644680] 17 May 04 11:18 CST 46 lines
From: REDACTED In 'IN' basket.   Page 1
-------------------------------------------------------------------------------
2EPI0003 DOY.
 STATION  539     V3  EPI PROCESSING/ERROR REPORT   REPORT DATE 2004/05/17
                                                     PAGE 01

  PROCESS DATE    SSN       ENCOUNTER DATE   MESSAGE  ERROR CODES
    20040430   000001010    20040415114936     090     240
    20040430   000001011    20040408101856     090     240
    20040430   000001012    20040428           042     W07
    20040430   000001013    20040316145349     035     W07
    20040430   000001014    20040428194521     057     W07
    20040430   000001015    20040310110835     031     W07
    20040430   000001016    200404271400       071     W05
    20040430   000001017    19941104101210     026     W05

        THIS REPORT REPRESENTS DATA FROM APRIL     2004 FROM YOUR STATION

  AS A GENERAL GUIDE FOR INTEPRETATION, THERE ARE 2 TYPES OF ERROR CODES.
  ONE TYPE HAS 3 DIGITS (E.G., 240) AND THE OTHER TYPE HAS THE LETTER W
  FOLLOWED BY 2 DIGITS (E.G., W05).  A LISTING OF MEANINGS FOR THE ERRORS

Enter RETURN to continue or '^' to exit:
```

Example: EPI Processing Error Report Mailman Message *continued*

```
Subj: EPT/DOY #041381117683754  [#19644680]   Page 2
------------------------------------------------------------------------------
-
  IS PROVIDED BELOW.  THE 3-DIGIT ERROR CODE INDICATES THAT A FATAL ERROR
  OCCURRED FOR THE LISTED PATIENT AND THE ENTIRE EPI MESSAGE FOR THE MONTH
  OF APRIL     2004 WAS NOT ACCEPTED INTO THE DATA REPOSITORY.  YOUR SITE
  WILL NEED TO CORRECT A 3-DIGIT FATAL ERROR CODE FOR ALL PATIENTS HAVING
  IT PRESENT, AND THEN RE-TRANSMIT THE APRIL     2004 EPI MESSAGE USING THE
  MANUAL RUN OPTION--L AB EPI MANUAL RUN (ENHANCED).  THIS MANUALLY
  RE-SUBMITTED MESSAGE WILL BE PROCESSED AT THE AUSTIN AUTOMATION CENTER.
  KEEP IN MIND THAT IF YOU DO RE-SUBMIT A TRANSMISSION, THE NORMAL EPI
  PROCESS WILL ALSO GENERATE AND SEND ITS NORMAL MONTHLY DATA AS SCHEDULED;
  THEREFORE, AT THE TIME OF RECEIPT OF PROESSING MESSAGES, YOU SHOULD
  RECEIVE REPORTS FOR MORE THAN ONE TRANSMISSION.  A WARNING CODE DOES NOT
  CONSTITUTE A FATAL ERROR.  THESE WARNING MESSAGES SHOULD BE CORRECTED IF
  ABLE, BUT DO NOT NEED FOR THE DATA TO BE RESUBMITTED.  YOU SHOULD MONITOR
  THE WARNING MESSAGES OVER THE NEXT COUPLE OF TRANSMISSIONS TO BE ASSURED
  THAT THEY DO NOT PERSIST.  IF YOUR PROCESSING MESSAGE CONTAINS ONLY
  WARNING ERROR CODES (I.E., THERE ARE NO FATAL ERROR CODES), MANUAL
  RE-TRANSMISSION DOES NOT NEED TO BE PERFORMED.

 240  Period of Service was invalid.

  W07  Specimen Source Code is blank.

Enter RETURN to continue or '^' to exit:

Subj: EPT/DOY #041381117683754  [#19644680]   Page 3
------------------------------------------------------------------------------
  W05  Patient Date of Birth is not in a valid date format.



          END OF REPORT     TOTAL PAGES:  01
```

Table of Reject and Errors and/or Warning Codes

The following Table of Rejects and Errors and/or Warning Codes definitions are used by the Austin Automation Center for the **new** EPI Error Processing Report mailman messages.

Examples: Tables of Rejects and Errors and/or Warning Codes.

Tables of Rejects and Errors and/or Warning Codes			
ERROR NUMBER	FIELD NAME	EDIT DESCRIPTION	ERROR MESSAGE
000 Series			
Miscellaneous			
001	Message Control ID	Must not be blank	Message control ID was blank
002	Batch Sending Facility	Sending Station not valid. (Refer to table AA001)	Invalid Batch Sending Facility.
003	Segment Name	PID Segment missing. Do not edit for the existence of PID when NTE segments are present.	PID Segment missing.
004	Segment Name	PV1 Segment missing. Do not edit for the existence of PV1 when NTE segments are present.	PV1 Segment missing.
005	Segment Name	Invalid Segment Name.	Invalid HL7 Segment Name.
006	Message Creation Date	Must a valid date.	Message Creation Date is Invalid.
007	Message Creation Time	Must a valid time.	Message Creation Time is invalid.
008	Processing Period	Must a valid date.	Processing period in the NTE segment is invalid.
009	Processing Period	Historical processing for V2 of EPI (commonly known as HEP C) must be received in Austin sequentially from 1998 forward.	For V2 only - Processing into AITC must be sequential from 10/98 forward.

Examples: Tables of Rejects and Errors and/or Warning Codes *continued*.

Tables of Rejects and Errors and/or Warning Codes			
ERROR NUMBER	FIELD NAME	EDIT DESCRIPTION	ERROR MESSAGE
100 Series			
NTE Totals Segment			
100	Action Ind	Currently not being used.	Currently not being used.
105	Totals Total Count	Must be numeric, if Action Ind is 'T'.	NTE Totals Total Count was not numeric.
110	Negative Input Ind	Must be 'N', if Action Ind is not 'T '.	Negative Input Ind was not 'N'.
200 Series			
PID Segment			
200	Patient Name	Required. Must be alpha numeric. Must not be all numeric. Must not be all blanks.	Patient Name is missing, or not alphanumeric, or all numeric, or all blanks.
205	Patient Date of Birth	Not required. Must be less than the processing year.	Date of Birth is after the Date of transmission. (Also see W03, W04, and W05)
210	Patient Sex	Not required. Must be blank or match table. (Refer to table T0001)	Sex code is not blank or a valid code. (Refer to table 0001)
215	Patient Race	Not required. Must be blank or a valid code. (Refer to table VA07)	Race code is not blank or a valid code. (Refer to table VA07)
220	Patient Address	Must be blank or ‘H’.	Patient Address is not blank or ‘H’.
235	Social Security Number	Required. Last byte must be ‘P’ or blank.	Pseudo SSN is not ‘P’ or blank.
236	Social Security Number	Required. Must be numeric. Must be greater than zeros.	Social Security Number is missing, or not numeric, or is equal to zeros.
240	Patient Veteran Status	Must be a valid code. (Refer to table VA11)	Period of Service was invalid. (Refer to table VA11).

Examples: Tables of Rejects and Errors and/or Warning Codes *continued*.

Tables of Rejects and Errors and/or Warning Codes			
ERROR NUMBER	FIELD NAME	EDIT DESCRIPTION	ERROR MESSAGE
300 Series			
OBR Segment			
300	Universal Service ID	Must be a valid code. (Refer to table NLT)	Invalid Universal Service ID (Refer to table NLT)
305	Observation Date	Must be numeric date. Must be a valid date. Must be less than Processing date.	Observation Date is invalid date or after the date of transmission.
307	Observation Time	Not required. Must be blank or numeric. If numeric, must be a valid time.	Observation Time is invalid.
310	Specimen Source Code	Not required. If not blank, must be a valid code. (Refer to table SPC)	Invalid Specimen Source (Refer to table SPC) Code. (also see W07)
315	Parent Observation ID	Not required. Must be blank or a valid code. (Refer to table NLT)	Invalid Parent Observation ID (Refer to table NLT).

Examples: Tables of Rejects and Errors and/or Warning Codes *continued*.

Tables of Rejects and Errors and/or Warning Codes			
ERROR NUMBER	FIELD NAME	EDIT DESCRIPTION	ERROR MESSAGE
400 Series			
PV1 Segment			
400	Patient Class	Required. Must be 'I', 'O', or 'U'.	Patient Class is not 'I', 'O', or 'U'.
410	Discharge Date	Not required. Must be blank or a valid date. Must be less than or equal to processing date.	Discharge Date is invalid or after date of transmission.
411	Discharge Time	Not required. Time must be blank or a valid time.	Discharge Time is invalid
420	Admit Date/Time	Required. Must be numeric. Must be a valid date. Must be less than or equal to processing date.	Admit Date is invalid or after date of transmission.
421	Admit Date/Time	Required. Time must be numeric. Must be a valid time.	Admit Time is invalid.
500 Series			
DG1 Segment			
500	Diagnosis Code	Required. Must be a valid code. (Refer to table AA010)	Invalid Diagnosis Code (Refer to table 0051)
600 Series			
OBX Segment			
605	Final Result Date	Must be blank or a valid date. Must be numeric. Must be a less than or equal to the processing date.	Final Result Date is invalid or after the date of transmission.

Examples: Tables of Rejects and Errors and/or Warning Codes *continued*.

Tables of Rejects and Errors and/or Warning Codes			
ERROR NUMBER	FIELD NAME	EDIT DESCRIPTION	ERROR MESSAGE
W00 Series			
Warnings			
W03	Patient Date of Birth	Must not be all spaces.	Patient Date of Birth is all spaces. (Also see 205)
W04	Patient Date of Birth	Year must not be all zeros	Patient Date of Birth Year is all zeros. (See also 205)
W05	Patient Date of Birth	Must be a valid date.	Patient Date of Birth is not in a valid date format. (Also see 205)
W07	Specimen Source Code	Blanks in code.	Specimen Source code is blank. (See also 310)
W09	Observation Nat Lab Num	Blanks in code.	Observation Nat Lab Num is blank. (Also see 600)
W10	Date of Prescription	Must not be all spaces.	Date of Prescription is all Spaces.
W11	Date of Prescription	Year must not be all zeros.	Date of Prescription is all Zeros.
W12	Date of Prescription	Must be a valid date.	Date of Prescription is not in a valid date format.
W14	Resolve Term	Must be numeric.	Resolve Term must be numeric.
W15	Days Supply	Must be numeric or blank.	Days Supply not numeric or blank.
W16	Release Date	Must be numeric date. Must be a valid date. Must be less than processing date.	Release Date is invalid date or after the date of transmission.
W17	Fill Date	Must be numeric date. Must be a valid date. Must be less than processing date.	Fill Date is invalid date or after the date of transmission.

Examples: Tables of Rejects and Errors and/or Warning Codes *continued*.

Tables of Rejects and Errors and/or Warning Codes			
ERROR NUMBER	FIELD NAME	EDIT DESCRIPTION	ERROR MESSAGE
W18	Stop Date	Must be numeric date. Must be a valid date. Must be less than processing date.	Stop Date is invalid date or after the date of transmission.
W19	Primary Indicator	One DG1 diagnostic code must be designated as the primary code - valid starting with version 2 of the software.	No diagnostic code designated as primary
W20	Release Date/Fill Date	At least one of the two - release date or fill date - must be present.	Release Date and Fill Date are both blank.
W21	DSP Nomenclature	Must not be all spaces.	DSP Nomenclature is all spaces.
W22	Resolve Term	Must be 1, 2, 3, 4, 5, 6, 7, or 0.	Invalid Resolve Term.
W23	Lab Result	Must be spaces if Resolve Term is 1, 2, 3, 4, or 7.	Lab Result is not in sync with Resolve Term.
W24	LOINC Code	Must be a valid code or blank.	LOINC Code is invalid.

National Laboratory Test (NLT) List

The NLT WKLD Code Request Form is accessible via the following web sites:

Vist**A** Laboratory Version 5.2 Home Page
REDACTED
Vist**A** Documentation Library (VDL)
http://www.va.gov/vdl/

```
DEVICE: 0;80;9999  UCX/TELNET
VistA NLT List 3/25/2004                    MAR 25,2004  15:04    PAGE 1
WKLD CODE     PROCEDURE
------------------------------------------------------------------------------

80000.0000    Analyte NOS
80079.0000    RAJI Cell
81000.0000    Urinalysis Chemical w micr Man
81001.0000    Urinalysis Micros only
81002.0000    Urinalysis Chemical w o micro
81003.0000    Bilirubin Conjugated
81004.0000    Urinalysis Components
81005.0000    Sulfonamide Crystals Qual
81006.0000    Urine Volume Measure
81007.0000    Urinalysis Microsopic
81008.0000    Bilirubin Unconjugated
81009.0000    Cholesterol VLDL
81010.0000    Triglycerides VLDL
81011.0000    Amylase Fractionation
81012.0000    Angiotensin Converting Enzyme
81013.0000    Histamine
81014.0000    Desmethyldiazepam
81015.0000    Drug Screen Opiate
81016.0000    Pepsinogen
81017.0000    Thiothixene
81018.0000    Phenobarbital
81019.0000    Vitamin B1
81020.0000    Primidone
81021.0000    Vitamin B2
81022.0000    Procainamide
81023.0000    Vitamin B6
81024.0000    Propranolol
81025.0000    Vitamin E
81026.0000    Citrate
81027.0000    Carnitine
81028.0000    Chromogranin A
81029.0000    Cyclic AMP
81030.0000    DHEA
81031.0000    DHEA S
81032.0000    Encainide
81033.0000    Hemoglobin Fetal Feces
81034.0000    Erythropoietin
81035.0000    Estrone
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81036.0000    Ethmozine
81037.0000    Fiorinal
81038.0000    Fluoxetine
81039.0000    Fluphenazine
81040.0000    Free T3 (dialysis)
81041.0000    Gonadotrophins REL Hormone
81042.0000    Insulin Ab
81043.0000    Insulin Free
81044.0000    Insulin Immunoreactive
81045.0000    Ionize Calcium
81046.0000    Iron Liver Tissue
81047.0000    Ketones
81048.0000    Mepho Barbital
81049.0000    Mesantoin
81050.0000    Methylmalonic Acid
81051.0000    Metopirone Response
81052.0000    Navane
81053.0000    Nitrogen Total
81054.0000    Pepsinogen I
81055.0000    Pepsinogen II
81056.0000    Phytanic Acid
81057.0000    Proinsulin
81058.0000    Pseudocholinesterase Total
81059.0000    PTH Related Protein
81060.0000    Sex Hormone Binding Globulin
81061.0000    Hemoglobin Unstable Isopropyl
81062.0000    Testosterone Free
81063.0000    Thyrotropin Bind Inhib Immuno
81064.0000    Thyroxine Free (Dialysis)
81065.0000    Tolmetin
81066.0000    Trazodone
81067.0000    Verapamil
81068.0000    Acetaminophen
81069.0000    Arylsulfatase a
81070.0000    Vitamin B12 Binding Capacity
81071.0000    Carbohydrate Ag
81072.0000    Ativan
81073.0000    Urinalysis Chemical w micro Au
81074.0000    Carisprodal
81075.0000    Beta Glucuronidase
81076.0000    Beta Hydroxybutyrate
81077.0000    C1 Esterase Inhibitor (Qual)
81078.0000    C1 Esterase Inhibitor (Quant)
81079.0000    Hemoglobin electrophoresis
81080.0000    Homocystine
81081.0000    Dibucaine number
81082.0000    IgG Subsets
81083.0000    Cotinine
81084.0000    Chylomicrons
81085.0000    Total iron binding capacity
81086.0000    Opiate group
81087.0000    Transthyretin
81088.0000    Protein electrophoresis
81089.0000    Free Hemoglobin, serum
81090.0000    Lactescence
81091.0000    T-UPTAKE
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81092.0000    ALA Dehydratase
81093.0000    UPG Synthase
81094.0000    Clozaril
81095.0000    Myoglobin Serum
81096.0000    Misc Chem Test 1
81097.0000    Misc Chem Test 2
81098.0000    Amikacin
81098.3035    Amino Levulinic Acid Delta~DU
81098.3103    Amino Levulinic Acid Delta~EKT
81098.8044    Amino Levulinic Acid Delta~LAB
81099.0000    Misc Chem Test 3
81100.0000    Misc Chem Test 4
81101.0000    Misc Chem Test 5
81102.0000    Misc Chem Test 6
81103.0000    Misc Chem Test 7
81104.0000    Misc Chem Test 8
81105.0000    Misc Chem Test 9
81106.0000    Misc Chem Test 10
81107.0000    Instrument CH Setup
81108.0000    Auto Chem 1-2 test
81109.0000    Auto Chem 3 test
81110.0000    Auto Chem 4 test
81111.0000    Auto Chem 5 test
81112.0000    Amitriptyline
81113.0000    Auto Chem 6 test
81114.0000    Auto Chem 7 test
81115.0000    Auto Chem 8 test
81116.0000    Auto Chem 9 test
81117.0000    Auto Chem 10 test
81118.0000    Auto Chem 11 test
81119.0000    Auto Chem 12 test
81120.0000    Auto Chem 13-16 test
81121.0000    Auto Chem 17-18 test
81122.0000    Auto Chem >18 test
81123.0000    General Health Screen panel
81124.0000    Pre Marital Profile
81125.0000    Executive Profile
81126.0000    Obstetric Profile
81127.0000    Amenorrhea Profile
81128.0000    Male Infertility and/or Gyneco
81129.0000    Hepatic Function Panel
81130.0000    Hepatitis Panel
81131.0000    Hypertension Panel
81132.0000    Lipid Panel
81133.0000    Cardiac Evaluation Panel
81134.0000    Cardiac Injury Panel
81135.0000    Cardiac Injury Panel w CPK and
81136.0000    Metabolic Panel
81137.0000    Malabsorption Panel
81138.0000    Pulmonary Panel
81139.0000    Lung Maturity Profile
81140.0000    Thyroid Panel
81141.0000    Thyroid Panel w TRH
81142.0000    Arthritis Panel
81143.0000    Renal Panel
81144.0000    Parathyroid Panel
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81145.0000    Prostatic Panel
81146.0000    Pancreatic Panel
81147.0000    Pituitary Panel
81148.0000    Microcytic Anemia Panel
81149.0000    Macrocytic Anemia Panel
81150.0000    Transition Panel
81151.0000    Muscle Panel
81152.0000    Antibody Panel
81153.0000    Unlisted Panel
81154.0000    Thyrotropin Releasing Hormone
81155.0000    Therapeutic Quantitative Drug
81156.0000    Serum Antimicrobial Level, Bio
81157.0000    Serum RIA Circulating Antibiot
81158.0000    Vitamin K
81159.0000    Folate, RBC
81160.0000    Microalbumin
81161.0000    Felbamate
81162.0000    Glucose 2hr
81163.0000    Glucose Tolerance 3hr
81164.0000    Glucose Tolerance 6hr
81165.0000    Xylose TT
81166.0000    Lactose
81167.0000    Lactose TT
81168.0000    D-Xylose
81169.0000    Creatinine Clearance
81170.0000    Amorphus Sediment
81171.0000    Ascorbic Acid Stick
81172.0000    RBC Urine
81173.0000    Bilirubin Crystals
81174.0000    Bilirubin Stick
81175.0000    Calcium Carbonate Crystal
81176.0000    Calcium Oxalate Crystal
81177.0000    Calcium Phosphate Crystal
81178.0000    Cystine Crystal
81179.0000    Epithelial Cast
81180.0000    Epithelial Cell
81181.0000    Fat Globule
81182.0000    Fatty Cast
81183.0000    Filamentous Bodies
81184.0000    Glucose Stick
81185.0000    Granular Cast
81186.0000    Gross Blood
81187.0000    Hemoglobin Stick
81188.0000    Hyaline Cast
81189.0000    Ketone Stick
81190.0000    Mucus Urine
81191.0000    Nitrate Stick
81192.0000    pH Stick
81193.0000    Protein Stick
81194.0000    Pyrophosphate Crystal
81195.0000    RBC Cast
81196.0000    Reducing Substance
81197.0000    Renal Epithelial Cell
81198.0000    Specific Gravity Urine
81199.0000    Sperm in Urine
81200.0000    Squamous Epithelial Cell
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81201.0000    Trichomonas in Urine
81202.0000    Triple Phosphate Crystal
81203.0000    Unidentified Crystal
81204.0000    Uric Acid Crystal
81205.0000    Clarity Urine
81206.0000    Color Urine
81207.0000    Urobilinogen Stick
81208.0000    Waxy Cast
81209.0000    WBC Cast
81210.0000    WBC Esterase Stick
81211.0000    WBC in Urine
81212.0000    Yeast in Urine
81213.0000    Anion Gap
81214.0000    Albumin/Creat Ratio
81215.0000    Amylase Pancreatic
81216.0000    Bicarbonate
81217.0000    BSA
81218.0000    BUN/Creat Ratio
81219.0000    Calcium Normalized
81220.0000    Deoxyhemoglobin
81221.0000    FiO2
81222.0000    Hemolyzed Specimen
81223.0000    Icteric Specimen
81224.0000    Turbid Specimen
81225.0000    LDH Isoenzyme 1
81226.0000    LDH Isoenzyme 2
81227.0000    LDH Isoenzyme 3
81228.0000    LDH Isoenzyme 4
81229.0000    LDH Isoenzyme 5
81230.0000    O2 Content
81231.0000    Oxyhemoglobin
81232.0000    Volume
81233.0000    MASS
81234.0000    GGTP
81234.3000    Ethanol~MANUAL
81234.3035    Ethanol~DU PONT ACA
81235.0000    Dilantin
81236.0000    Ethanol
81237.0000    N-Acetyl
81238.0000    Mysoline
81239.0000    Tegretol
81240.0000    Bence Jones Protein
81241.0000    Motility
81242.0000    Mesothelial Cell
81243.0000    O2Hb %
81244.0000    COHb %
81245.0000    MetHb %
81246.0000    Base Excess
81247.0000    Pt Temp
81248.0000    pH
81249.0000    pH Corrected
81250.0000    PCO2 Corrected
81251.0000    PO2 Corrected
81252.0000    pH Urine
81253.0000    WBC/HPF
81254.0000    RBC/HPF
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81255.0000    Bacteria Urine
81256.0000    Urine Cast
81257.0000    Crystal Urine
81258.0000    Amorphus Urate
81259.0000    Amorphus Phosphate
81260.0000    Leucine Crystal
81261.0000    Tyrosine Crystal
81262.0000    Cholesterol Crystal
81263.0000    Calculus Urine
81264.0000    Addis Count
81265.0000    Transitional Epithelial
81266.0000    %O2
81267.0000    %CO2
81268.0000    Osmolality Calc
81269.0000    Leukocyte Esterase
81270.0000    Mononuclear Cell
81271.0000    TCO2
81272.0000    Xanthochromic
81273.0000    Amiodarone
81274.0000    Ritalin
81275.0000    Methyl Tertiary Butyl Ether
81276.0000    Phenolphthalein
81277.0000    Phenelzine
81278.0000    Sertraline
81279.0000    Silver
81280.0000    Propafenone
81281.0000    T3 OK Ag
81282.0000    T3 OK Ab
81283.0000    Myelin Glycoprotein
81284.0000    Molybdenum
81285.0000    3-Methyoxy 4-hydroxypheylglyco
81286.0000    Anafranil
81287.0000    Bile Salt Conc.
81288.0000    Bypivicaine
81289.0000    Diltiazam
81290.0000    Xanthine
81291.0000    Bupropion Hydrochloride
81292.0000    Levodopa
81293.0000    Midazolam
81294.0000    Molindone Hydrochloride
81295.0000    Hexosamidiase
81296.0000    Disulfiram
81297.0000    Vitamin C
81298.0000    Trimipramine
81299.0000    2 Methylcitric Acid
81300.0000    Benzene
81301.0000    Beta Lactoglobulin
81302.0000    CPK BB
81303.0000    CPK MM
81304.0000    Cystathionine
81305.0000    DNA Analysis
81306.0000    Estradiol 17 B
81307.0000    Gentamicin
81308.0000    Estradiol E1 E2
81309.0000    Fluconazole
81310.0000    Gabapentin
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81311.0000    Homocysteine
81312.0000    Metharbital
81313.0000    Normethsuximide
81314.0000    Fatty Acid VLC
81315.0000    Arylsulfatase a Leukocyte
81316.0000    Catecholamines Fract
81317.0000    Imipramine & Desipramine
81318.0000    PTH C Terminal
81319.0000    PTH Intact
81320.0000    Folic Acid
81321.0000    Vasopressin
81322.0000    FK506
81323.0000    Gen Chem Specimen
81324.0000    Sp Chem Specimen
81325.0000    Kanamycin
81326.0000    UA Specimen
81327.0000    UA Chem Specimen
81328.0000    Tox Specimen
81329.0000    TDM Specimen
81330.0000    STAT Lab Specimen
81331.0000    RIA Specimen
81332.0000    RIA Sp Specimen
81333.0000    Gen Specimen
81334.0000    IgG
81335.0000    Buspirone
81336.0000    Desethylaminodarone
81337.0000    Norverapamil
81338.0000    Tertiary Butyl Alcohol
81339.0000    Trichloroethanol
81340.0000    IgM
81341.0000    Meclofenamic Acid
81342.0000    IgD
81343.0000    Moricizine
81344.0000    Naproxen
81345.0000    Procardia
81346.0000    Pyridinium
81347.0000    Schlicter Test
81348.0000    Spironolactone
81349.0000    Tripamine
81350.0000    IgL
81351.0000    IgK
81352.0000    Glucose Fasting
81353.0000    Urine Dipstick Manual
81354.0000    Urine Dipstick Auto
81355.0000    Electrophoretic Fractionation
81356.0000    Methotrexate
81357.0000    Electrolytes
81358.0000    GLC Analysis
81359.0000    Immunoassay
81360.0000    Alpha Galactosidase
81361.0000    D-Lactate
81362.0000    Alpha1 Globulins
81363.0000    Alpha2 Globulins
81364.0000    Beta Globulins
81365.0000    Albumin Fraction
81366.0000    Relative Index
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81367.0000    Excretion Rate
81368.0000    Iron Panel Chemistry
81369.0000    Adenosine Deaminase
81370.0000    Trichloracetia Acid
81371.0000    Acetoacetate
81372.0000    Augmentin
81373.0000    N-Telopeptide
81374.0000    5 Hydroyindoleacetic Acid
81375.0000    Adenosine Diphosphate
81376.0000    Timentin
81377.0000    Free Hemoblobin, Urine
81378.0000    Fecal Electrolytes
81379.0000    Mycophenolic Acid
81380.0000    Phenazopyridine
81381.0000    Phosphofructokinase
81382.0000    Antabuse
81383.0000    Bertylium
81384.0000    Phencyclidine Quant
81385.0000    Bromociptine
81386.0000    Captopril
81387.0000    Malathion
81388.0000    N-Telopeptide ELISA
81389.0000    Pimozide
81390.0000    Sotalol
81391.0000    Sulfonylurea
81392.0000    Toxic Analysis
81393.0000    Toxic substance Analysis
81394.0000    Venlafaxine
81395.0000    Vistaril
81396.0000    Osmolality Urine
81397.0000    Osmolality Stool
81398.0000    Ictotest
81399.0000    Protein UR Quant
81400.0000    ACTH Stimulation
81401.0000    Amiodarone & Metabolite
81402.0000    Grepafloxacin
81403.0000    Trovafloxacin
81404.0000    T3 RIA
81405.0000    Clofazimine
81406.0000    Arsenic Nail
81407.0000    Trazodone2
81408.0000    Aldosterone Suppression
81409.0000    Hexacarboxypoprhyrin
81410.0000    Pentacarboxyporphyrin
81411.0000    Norchlordiazepoxide
81412.0000    Cathartic Laxative Panel
81413.0000    Orotic Acid
81414.0000    Clonidine
81415.0000    Microalbumin Point
81416.0000    Arsenic Hair
81417.0000    Electrocardiogram
81418.0000    Cardiac Stress
81419.0000    Sulfonylurea Hypoglycemic
81420.0000    Dexamethasone
81421.0000    Beta-lactamase
81422.0000    C-Peptide 30min
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81423.0000    X*C-Peptide
81424.0000    C-Peptide 60min
81425.0000    C-Peptide 90Min
81426.0000    C-Peptide 120min
81427.0000    C-Peptide 180min
81428.0000    Insulin 30min
81429.0000    Insulin 60min
81430.0000    Insulin 90min
81431.0000    Insulin 120min
81432.0000    Insulin 180min
81433.0000    LH 30min
81434.0000    LH Stimulation Panel
81435.0000    LH 60min
81436.0000    LH 90min
81437.0000    LH 120MIN
81438.0000    FSH Stimulation Panel
81439.0000    FSH 30min
81440.0000    FSH 60min
81441.0000    FSH 90min
81442.0000    FSH 120min
81443.0000    ACTH 30min
81444.0000    ACTH 60min
81445.0000    Cortisol 30min
81446.0000    Cortisol 60min
81447.0000    TRH Stimulation
81448.0000    TRH 30min
81449.0000    TRH 60min
81450.0000    Prolactin Stimulation
81451.0000    Prolactin 30min
81452.0000    Prolactin 60min
81453.0000    TSH 30min
81454.0000    TSH 60min
81455.0000    TSH Receptor Ab
81456.0000    Nifedipine
81457.0000    Lipase Urine
81458.0000    Normetanephrine
81459.0000    Norclozaril
81460.0000    Heptacarboxyprophyrin
81461.0000    Tripramine
81462.0000    Prednisoline
81463.0000    Porphyrin Feces
81464.0000    Joint Fluid Panel
81465.0000    Steroid Anabolic
81466.0000    Alpha Subunits Pituitary
81467.0000    Bentiromide
81468.0000    Phosphatase Alkaline Bone
81469.0000    Baclofen
81470.0000    Glucose Qual
81471.0000    Albumin/Globulin Ratio
81472.0000    Serotonin Release Heparin Indu
81473.0000    Phenolsulfophthalein
81474.0000    Trimethadoine
81475.0000    Tobramycin
81476.0000    Benztropine
81477.0000    Porphobilinogen Deaminase
81478.0000    Trifluoperazine
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81479.0000    Tricyclic Antidepressants
81480.0000    Cardiomyopathy Panel
81481.0000    Apolipoprotein E
81482.0000    Lipid Phenotype
81483.0000    Plasma Volume
81484.0000    Blood Volume
81485.0000    Vancomycin
81486.0000    B12/Folate Panel
81487.0000    Valproic Acid
81487.3035    Vanillymandelic Acid~DU PONT A
81488.0000    Adenosine Triphosphate
81489.0000    Methyl Tetra Hydor Folate Redu
81490.0000    Oxypurinol
81491.0000    Free Valproic Acid
81492.0000    Hemoglobin Acid Prep
81493.0000    Allopurinol
81494.0000    Polychlorindate Biphenyl
81495.0000    Pyphylline
81496.0000    B-Human Chorionic Gonadotropin
81497.0000    Protein electrophoresis HR
81498.0000    Alpha-naphthyl acetate esteras
81499.0000    Lamotrigine
81500.0000    Acepromazine
81501.0000    Furosemide
81502.0000    Acetaldehyde
81503.0000    Free Thyroxine Index
81504.0000    Acetone
81505.0000    Cefuroxime-Sodium
81506.0000    Alcohol Ethyl
81507.0000    Epoxide
81508.0000    Alcohol Isopropyl
81509.0000    Cefuroxime-Axetil
81510.0000    Alcohol Methyl
81511.0000    Alprazolam
81512.0000    Aluminum
81513.0000    Dimenhydrinate
81514.0000    Amdinocillin
81515.0000    Cefipime
81516.0000    Aminosalicyclic Acid Para
81517.0000    Cyclobenzaprine HCL
81518.0000    X*Amiodarone
81519.0000    Antihistamine
81520.0000    Amobarbital
81521.0000    Albuterol
81522.0000    Amoxapine
81523.0000    Trihexyhenidyl HCL
81524.0000    Amoxicillin
81525.0000    Tin
81526.0000    Amoxicillin Clavulanic Acid
81527.0000    Thiamine
81528.0000    Amphetamine
81529.0000    Phenol
81530.0000    Amphotericin B
81531.0000    Paroxetine
81532.0000    Ampicillin
81533.0000    Long Acting Thyroid Hormone
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81534.0000    Amrinone
81535.0000    Anticonvulsants
81536.0000    Antimony
81537.0000    Crystals
81538.0000    Arsenic
81539.0000    Crystals Id
81540.0000    Atropine
81541.0000    Atrial Natriuretic Polypeptide
81542.0000    Azlocillin
81543.0000    Sperm Count
81544.0000    Aztreonam
81545.0000    Fluvoxamine
81546.0000    Bacitracin
81547.0000    Clotest
81548.0000    Barbiturate Identification
81549.0000    Barbiturate NOS
81550.0000    Barbiturate Screen
81551.0000    +Amikacin Peak
81552.0000    Benzodiazepines Quant
81553.0000    Marijuana
81554.0000    Benzodiazepines Screen
81555.0000    Amikacin Trough
81556.0000    Benzoylecgonine
81557.0000    Vancomycin Peak
81558.0000    Beryllium
81559.0000    Vancomycin Trough
81560.0000    Bismuth
81561.0000    Gentamicin Peak
81562.0000    Borate
81563.0000    Gentamicin Trough
81564.0000    Bromide
81565.0000    Tobramycin Peak
81566.0000    Butabarbital
81567.0000    Tobramycin Trough
81568.0000    Butalbital
81569.0000    Butorphanol Tartrate
81570.0000    Cadmium
81571.0000    Saturation %
81572.0000    Caffeine
81573.0000    Cyclosporine
81574.0000    Cannabinoids Screen
81575.0000    Cyclosporine Metabolite
81576.0000    Cannabinol Tetrahydro
81577.0000    Albumin Fract Urine
81578.0000    Cannabinol Tetrahydro Car
81579.0000    Alpha Globulin Urine
81580.0000    Cannabinol Tetrahydro Hydro
81581.0000    Beta Globulin Urine
81582.0000    Capreomycin
81583.0000    Gamma Globulin Urine
81584.0000    Carbamazepine
81585.0000    Amphetamine Quant
81586.0000    Carbamazepine Free
81587.0000    Opiate
81588.0000    Carbenicillin
81589.0000    Opiate Quant
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81590.0000    Carbinoxamine
81591.0000    Propoxyphene Quant
81592.0000    Carbon Monoxide
81593.0000    Insulin Like Growth Factor II
81594.0000    Carbon Tetrachloride
81595.0000    Iodine
81596.0000    Carboxyhemoglobin
81597.0000    Estriol Unconjugated
81598.0000    Cefacetrile
81599.0000    Bartonella henselea Ab IgG
81600.0000    Cefaclor
81601.0000    Bartonella Henselae Ab IgM
81602.0000    Cefadroxil
81603.0000    Bartonella quintana Ab IgG
81604.0000    Cefamandole
81605.0000    Transglutaminase Tissue
81606.0000    Cefatrizinc
81607.0000    OK T3 and T Cells Total
81608.0000    Cefazaflur
81609.0000    Olanzapine
81610.0000    Cefazolin
81611.0000    Urea Urine
81612.0000    Cefmenoxime
81613.0000    Albumin Urine
81614.0000    Cefmetazole
81615.0000    Albumin Urine 24h
81616.0000    Cefoperazone
81617.0000    Report Chemistry
81618.0000    Ceforanide
81619.0000    Thyroid Ab
81620.0000    Cefotaxime
81621.0000    Adrenaline
81622.0000    Adrenocorticotropic Hormone
81623.0000    Adrenocorticotropic Hormone St
81624.0000    Cefoxitin
81625.0000    Phosphate Urine 24h
81626.0000    Uric Acid Urine 24h
81627.0000    Iron Urine 24h
81628.0000    Cefradine
81629.0000    Glucose Tolerance 2hr
81630.0000    Ceftazidime
81631.0000    Glucose Tolerence 1hr
81632.0000    Glucose Tolerence 30min
81633.0000    Glucose Tolerence Fasting
81634.0000    Ceftizoxime
81635.0000    Lactose Tolerence Fasting
81636.0000    Ceftriaxone
81637.0000    Myeloperoxidase
81638.0000    Cefsulodin
81639.0000    Cystic Fibrosis F508
81640.0000    Cefuroxime
81641.0000    Deoxypyridinoline
81642.0000    Cephalexin
81643.0000    Oxalate 24Hr
81644.0000    Cephaloglycin
81645.0000    Corticosteroids
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81646.0000    Cephaloridine
81647.0000    Creatinine 24Hr
81648.0000    Cephalothin
81649.0000    Cryoglobulin Panel
81650.0000    Cephapirin
81651.0000    Cryoglobulin Comp
81652.0000    Cepharadine
81653.0000    Cortisol 24Hr
81654.0000    Chloral Hydrate
81655.0000    Cortisol PM
81656.0000    Chloramphenicol
81657.0000    Cortisol AM
81658.0000    Chlordiazepoxide
81659.0000    Amitriptyline Panel
81660.0000    Chloroform
81661.0000    Amiodarone Panel
81662.0000    Chlorpheniramine
81663.0000    p-ANCA
81664.0000    Chlorphentermine
81665.0000    c-ANCA
81666.0000    Chlorpromazine
81667.0000    Alpha Amino Acid
81668.0000    Chlorpropamide
81669.0000    Alcohol Screen
81670.0000    Chromium
81671.0000    Isopropanol
81672.0000    Cimetidine
81673.0000    Naltrexone
81674.0000    Ciprofloxacin
81675.0000    Cocaine Qt
81676.0000    Clindamycin
81677.0000    Pyridinoline
81678.0000    Clonazepam
81679.0000    Clorazepate
81680.0000    Cloxacillin
81681.0000    Cocaine
81682.0000    Codeine
81683.0000    Colistin
81684.0000    Copper
81685.0000    Coumermycin
81686.0000    Cyanide
81687.0000    Methadone Qt
81688.0000    Cycloserine
81689.0000    Cyclosporin
81690.0000    Dapsone
81691.0000    Daunomycin
81692.0000    Desipramine
81693.0000    Dexchlorpheniramine
81694.0000    Diazepam
81695.0000    Dicloxacillin
81696.0000    Digitoxin
81697.0000    Digoxin
81698.0000    Diphenhydramine
81699.0000    Dipyridamole
81700.0000    Disopyramide
81701.0000    Doxepin
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81702.0000    Doxycycline
81703.0000    Drug Screen Acid Neutral
81704.0000    Drug Screen Basic
81705.0000    Drug Screen for Mult Const
81706.0000    Drug Screen Hypnotic
81707.0000    Drug Screen NOS
81708.0000    Enoxacin
81709.0000    Ephedrine
81710.0000    Erythromycin
81711.0000    Ethambutol
81712.0000    Ethchlorvynol
81713.0000    Ethionamide
81714.0000    Ethosuximide
81715.0000    Ethylene Glycol
81716.0000    Flucytosine
81717.0000    Fluoride
81718.0000    Fluorocytosine5
81719.0000    Flurazepam
81720.0000    Formic Acid Formaldehyde Expos
81721.0000    Epinephrine
81722.0000    Glutethimide
81723.0000    Flecainide
81724.0000    Gold
81725.0000    Hydrocarbons Halogenated
81726.0000    Alpha1 Microglobulin
81727.0000    Haloperidol
81728.0000    Alpha2 Macroglobin
81729.0000    Heavy Metal Screen Reinsch
81730.0000    Aluminin Urine
81731.0000    Hydrochlorothiazide
81732.0000    Hydrocodone
81733.0000    Hydromorphone
81734.0000    Hydroxyzine
81735.0000    Ibuprofen
81736.0000    Imipenum
81737.0000    Imipramine
81738.0000    Iodide
81739.0000    Isoniazid
81740.0000    Ketoconazole
81741.0000    Lead
81742.0000    Lidocaine
81743.0000    Fentanyl Citrate
81744.0000    Lithium
81744.3103    Lung Carcinoma Surface Ag~EKTA
81745.0000    Mitotane
81746.0000    Loxapine
81747.0000    Aprobarbital
81748.0000    Lysergic Acid Diethylamide
81749.0000    Amino Acids CSF
81750.0000    Manganese
81751.0000    Amino Acids Urine
81752.0000    Maprotiline
81753.0000    5-Aminolevulinic Acid Urine
81754.0000    Meperidine
81755.0000    Amitriptyline and Nortriptylin
81756.0000    Mephentermine
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81757.0000    Amylase/Creat Clearance
81758.0000    Mephenytoin
81759.0000    CPK MB/CPK Tot
81760.0000    Meprobamate
81761.0000    Synercid
81762.0000    Mercury
81763.0000    Insulin Fasting
81764.0000    Mescaline
81765.0000    Insulin Total
81766.0000    Mesoridazine
81767.0000    Alkaline Phosphatase Other
81768.0000    Methadone
81769.0000    Arsenic Urine
81770.0000    Methamphetamine
81771.0000    Mercury Urine
81772.0000    Methapyrilene
81773.0000    Immunoglobulin G CSF
81774.0000    Methaqualone Quant
81775.0000    Albumin CSF
81776.0000    Methaqualone Screen
81777.0000    Methemoglobin and Sulfhemo
81778.0000    Methicillin
81779.0000    Methemoglobin
81780.0000    Methocarbamol
81781.0000    Albumin Index
81782.0000    Methorphan Dextro
81783.0000    CSF IgG Synthesis
81784.0000    Methsuximide
81785.0000    IgG Index
81786.0000    Methylphenidate Hydrochl
81787.0000    Albumin/IgG Ratio
81788.0000    Methyprylon
81789.0000    Estrogen Fract
81790.0000    Metronidazole
81791.0000    Exposure Panel
81792.0000    Mexilitine
81793.0000    Lead Exposure Panel
81794.0000    Mezlocillin
81795.0000    CPK BB/CPK Tot
81796.0000    Miconazole
81797.0000    Microglobulin Beta 2
81798.0000    Minocycline
81799.0000    CPK MM/CPK Tot
81800.0000    Morphine
81801.0000    Arsenic 24H
81802.0000    Morphine Diacetyl (heroin)
81803.0000    Arsenic Panel
81804.0000    Morphine Glucuronide
81805.0000    Arsenic/Creatinine
81806.0000    Moxalactam
81807.0000    Muramidase (lysozyme)
81808.0000    Nafcillin
81809.0000    Nalbuphine Hydrochloride
81810.0000    Nalidixic Acid
81811.0000    Triglyceride
81812.0000    Neomycin
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81813.0000    Barbiturate
81814.0000    Netilmicin
81815.0000    Lipoprotein Beta
81816.0000    Nickel
81817.0000    Lipoprotein Pre Beta
81818.0000    Nicotine
81819.0000    Lipoprotein Alpha
81820.0000    Nitrate
81821.0000    Iron Index
81822.0000    Nitrite
81823.0000    Microalbumin/Creatinine
81824.0000    Nitrofurantoin
81825.0000    Xylose Absorption
81826.0000    Nitrophenol Para
81827.0000    Amoxapine 8 Hydroxy
81828.0000    Nordiazepam
81829.0000    Creatine Kinase (CK MB) Mass
81830.0000    Norfloxacin
81831.0000    Color
81832.0000    Norpethidine
81833.0000    Norepinephrine
81834.0000    Norpropoxyphene
81835.0000    Tube Number
81836.0000    Nortriptyline
81837.0000    Desmethylsertraline
81838.0000    Novobiocin
81839.0000    Sirolimus
81840.0000    Nystatin
81841.0000    Organic Acids
81842.0000    Organophosphate NOS
81843.0000    Platelet Function
81844.0000    Oxacillin
81845.0000    Phosphorus Urine
81846.0000    Oxazepam
81847.0000    Phosphorus Timed
81848.0000    Oxycodone
81849.0000    Phorphorus Urine 24H
81850.0000    Paraldehyde
81851.0000    Procainamide N Acetyl(NAPA)
81852.0000    Penicillin
81853.0000    Comprehensive Met Panel
81854.0000    Pentazocine
81855.0000    Potassium Misc
81856.0000    Pentobarbital
81857.0000    Sodium Misc
81858.0000    Percodan
81859.0000    Urea 24H
81860.0000    Perphenazine
81861.0000    Hemocystein
81862.0000    Pethidine
81863.0000    Homocystine Urine
81864.0000    Phenacetin
81865.0000    Liprotein Fractionation
81866.0000    Phencyclidine Screen
81867.0000    Zonisamide
81868.0000    Phenmetrazine
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81869.0000    Carnitine Tot
81870.0000    Phenothiazine Quant
81871.0000    Carnitine Free
81872.0000    Phenothiazine Screen
81873.0000    Chloride Misc
81874.0000    Phensuximide
81875.0000    Phentermine
81876.0000    Phenylbutazone
81877.0000    Chlorine Esterase Inh
81878.0000    Phenylephrine
81879.0000    Glucose Misc
81880.0000    Phenylpropanolamine
81881.0000    Levitracetam
81882.0000    Phenytoin
81883.0000    Uranium
81884.0000    Phenytoin Free
81885.0000    Uranium Depleted
81886.0000    Piperacillin
81887.0000    Pesticide Exposure
81888.0000    Polymixin B
81889.0000    Prazepam
81890.0000    Primidone+Phenobarbital
81891.0000    Carnitine Esterified
81892.0000    Prochlorperazine
81893.0000    Alpha 1 Acid Glucoprotein
81894.0000    Promazine
81895.0000    Lipid Assoc Sialic Acid
81896.0000    Promethazine
81897.0000    Didanosine
81898.0000    Propoxyphene
81899.0000    Zalcitabine
81900.0000    Protriptyline
81901.0000    Stavudine
81902.0000    Pseudoephedrine
81903.0000    Lamivudine
81904.0000    Psilocybin
81905.0000    Abacavir
81906.0000    Pyrazinamide
81907.0000    Tenofovir
81908.0000    Pyrilamine
81909.0000    Nevirapine
81910.0000    Pyrimethamine Sulfadoxine
81911.0000    Delavirdine
81912.0000    Quadracyclic NOS
81913.0000    Efavirenz
81914.0000    Quinidine
81915.0000    Indinavir
81916.0000    Quinine
81917.0000    Ritonavir
81918.0000    Rifampin
81919.0000    Nelfinavir
81920.0000    Salicylamide
81921.0000    Amprenavir
81922.0000    Salicylates
81923.0000    Lopinavir
81924.0000    Secobarbital
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81925.0000    Lopinavir Ritonavir
81926.0000    Selenium
81927.0000    Norfluoxetine
81928.0000    Silicon
81929.0000    Creatinine Urine
81930.0000    Sisomicin
81931.0000    Clozapine
81932.0000    Spectinomycin
81933.0000    Norclozapine
81934.0000    Spiramycin
81935.0000    Atenolol
81936.0000    Streptomycin
81937.0000    Calcium/Creatinine
81938.0000    Strychnine
81939.0000    Sulfhemoglobin
81940.0000    Sulfamethoxazole
81941.0000    Saquinavir
81942.0000    Sulfonamide NOS
81943.0000    Arachidonate
81944.0000    Teichoic Acid
81945.0000    Temazepam
81946.0000    Tetracycline NOS
81947.0000    Azathioprine
81948.0000    Thallium
81949.0000    Linoleate
81950.0000    Theophylline
81951.0000    Platinum
81952.0000    Thiazide
81953.0000    Procaine
81954.0000    Thiocyanate
81955.0000    Quetiapine
81956.0000    Thiopental
81957.0000    Magnesium RBC
81958.0000    Thioridazine
81959.0000    Tranylcypromine
81960.0000    Ticarcillin
81961.0000    Acteazolaminde
81962.0000    Ticarcillin Clavulanic Acid
81963.0000    Succinyl Acetone
81964.0000    Tocainide
81965.0000    Alpha-naphthyl Butyrate Estera
81966.0000    Tolazamide
81967.0000    Cortisol 90min
81968.0000    Tolbutamide
81969.0000    Metanephrine Total
81970.0000    Toluene
81971.0000    Triazolam
81972.0000    Trichloroethylene
81973.0000    Tiech Acid
81974.0000    Hexagonal Phospholipid Neut
81975.0000    Dioxin
81976.0000    Tricyclic Antidepressants Scr
81977.0000    Metanephrine 24H
81978.0000    Sulfapyridine
81979.0000    Sperm Non-Motile
81980.0000    Trimethoprim
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81981.0000    Sperm Slow
81982.0000    Tripelennamine
81983.0000    Blood Occult Semen
81984.0000    Volatile Screen
81985.0000    Hemoglobinuria Paroxysmal Noct
81986.0000    Warfarin
81987.0000    Topiramate
81988.0000    Zinc
81989.0000    Thin Layer Chromatography
81990.0000    Progesterone Binding Receptor
81991.0000    Allylbarbital
81992.0000    Talbutal
81993.0000    Demoxepam
81994.0000    Desalkylflurazepam
81995.0000    N Desmethyldiazepam
81996.0000    Flunitrazepam
81997.0000    Lorazepam
81998.0000    Mecloqualone
81999.0000    Levorphanol
82000.0000    TCP
82001.0000    Mercury Urine 24h
82002.0000    Blood Occult NOS
82003.0000    Carbohydrate Deficient Transfe
82004.0000    BUN Urine 24h
82005.0000    Microalbumin Urine Rand
82006.0000    Desmethylclomipramine
82007.0000    Glutamic Acid Decarboxylase
82008.0000    Antenolol
82009.0000    Clonidine Suppression
82010.0000    Cytomegalovirus PCR
82011.0000    Fragile X Syndrone
82012.0000    Glycerol Lysis
82013.0000    Hepatitis B Core Ab & IgM
82014.0000    Herpes simplex PCR
82015.0000    Tiagabine Hydrochloride
82016.0000    Hepatitis C RNA Qual
82017.0000    Hepatitis C RNA Quant
82018.0000    RBC Agglutinated
82019.0000    HIV 1 Qual PCR
82020.0000    ACTH
82021.0000    Natriuretic Peptide Brain (B T
82022.0000    Ovarian Ab
82023.0000    Microalbumin Urine 24h
82024.0000    Luteinizing Hormone Beta
82025.0000    Serotonin Platelet
82026.0000    C Reactive Protein HS
82027.0000    Sulfonylurea Urine
82028.0000    Viscosity Blood
82029.0000    Thrombotic Risk
82030.0000    Adenosine 5 Monophosphate
82031.0000    Mycobacterium TB Complex DNA P
82032.0000    Toxoplasma PCR
82033.0000    Viscosity Plasma
82034.0000    Glutamic Acid Decarboxylase Ab
82035.0000    Adenosine 5 Triphosphate
82036.0000    Clonidine Hydrochloride
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82037.0000    Cortisol Stimulation Panel
82038.0000    Immunofixation Electrophoresis
82039.0000    Immunofixation Electrophoresis
82040.0000    Albumin
82041.0000    WBC Clumps
82042.0000    Albumin Pre
82043.0000    Ammonium Biruate Crystal
82044.0000    Lead Urine 24h
82045.0000    Malanin
82046.0000    Lactose Tolerence 30min
82047.0000    Lactose Tolerence 1h
82048.0000    Lactose Tolerence 2h
82049.0000    Lactose Tolerence 3h
82050.0000    Glucose Urine 24h
82051.0000    Acid Quant Urine
82052.0000    Macroglobulin Alpha2
82053.0000    Macroglobulins SIA
82054.0000    Saturation of Serum w Iron
82055.0000    Cholinesterase RBC
82056.0000    Potassium Urine 24h
82057.0000    Tetrahydroeoxycortisol
82058.0000    Heparin Cofactor II
82059.0000    Glutamic Acid
82060.0000    Transferrin
82061.0000    Extraction and Quant Chromato
82062.0000    Concentration of Specimen Dial
82063.0000    Extraction w Organic Solvent
82064.0000    Derivatization Compnd Chromat
82065.0000    Precipitation and Separation
82066.0000    Hemochromatosis Scr
82067.0000    Hemolysate Preparation
82068.0000    Kiniogen High MW
82069.0000    Cefotiam
82070.0000    Cephradine
82071.0000    Concentration of Specimen Ultr
82072.0000    Concentration of Specimen Evap
82073.0000    Levofloxacin
82074.0000    Levofloxacin Quant
82075.0000    Entrofloxacin
82076.0000    Fosfomycin
82077.0000    Fusidic Acid
82078.0000    3-Methoxy O Desmethylencainide
82079.0000    Dry Weight
82080.0000    Total Solids
82081.0000    Phosphatidyl Glycerol
82082.0000    Glucose Mean
82083.0000    Glucose Tolerence 1.5hr
82084.0000    Glycolic Acid
82085.0000    Procain+NAPA
82086.0000    Cloz+Norcloz
82087.0000    Oxcarbazepine
82088.0000    Amylase/Creat Ratio
82089.0000    Hydroxylysine
82090.0000    Aldolase
82091.0000    Niacin Vitamin
82092.0000    Niacinamide
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82093.0000    Sarcosine
82094.0000    Aminobutyric 4
82095.0000    Camosine
82096.0000    Anserine
82097.0000    Transferrin Receptor Soluble
82098.0000    Digoxin Free
82099.0000    Hydroxyitraconazole
82101.0000    Promonocytes Percent
82102.0000    Amylase Salivary
82103.0000    Citrate 24hr
82104.0000    WBC Clumps Urine
82105.0000    Amino Acids Nitrogen  Total Ur
82106.0000    Opiate Synthetic
82107.0000    Prostatic Specific Ag Free Per
82108.0000    Busulfan
82109.0000    Amylase Macro
82110.0000    Phosphatase Alkaline Placental
82111.0000    Parathyroid Relate Protein
82112.0000    Tocopherol Alpha
82113.0000    Tocopherol Beta Gamma
82114.0000    Corticosteriod Binding Globuli
82115.0000    Glucose POC
82116.0000    Glucose Capillary
82117.0000    Glycohemoglobin HbA 1c Capilla
82118.0000    Comment
82119.0000    Acetylmethadol
82120.0000    Ketoglutarate Alpha
82121.0000    Creatine Kinase (BB)
82122.0000    Callagen Crosslink N Telopepti
82123.0000    O Desmethylencainide
82124.0000    Isoleucine
82125.0000    Lenght
82126.0000    Calculus
82127.0000    Length Calculus
82128.0000    Length NOS
82129.0000    Leucine
82130.0000    Amino Acids Quant
82131.0000    Leucine/Creatinine
82132.0000    Isoleucine+Leucine
82133.0000    Lysine
82134.0000    C1 Esterase Inhibitor Function
82135.0000    Creatinine eGFR
82136.0000    Atazanavir
82137.0000    Oxycodone,Rapid
82138.0000    Cytomegalovirus DNA
82139.0000    Cytomegalovirus DNA Probe
82140.0000    Ammonia
82141.0000    Epstein Barr PCR
82142.0000    Amniotic Fluid Scan
82143.0000    Lysozyme
82144.0000    Magnesium Stool
82145.0000    Methionine
82146.0000    Carbidoba and Levodopa
82147.0000    Liver Kidney Microsomal Ab
82148.0000    Hu Ab IFA
82149.0000    MTHFR DNA Mutation
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82150.0000    Amylase
82151.0000    Carbidoba
82152.0000    Methlmalonic Acid Urine
82153.0000    Calculus Appearance
82154.0000    Androstanediol Glucuronide
82155.0000    Norclomipramine
82156.0000    Stone
82157.0000    Calculus Analysis
82158.0000    Calculus Constituents
82159.0000    Ornithine
82160.0000    Androstenedione
82161.0000    Other NOS
82162.0000    Drug NOS
82163.0000    Angiotensin II Enzyme
82164.0000    Phosphoethanolimine
82165.0000    Phophoserine
82166.0000    Pidgeon Serum
82167.0000    Band
82168.0000    Band Predominant
82169.0000    Sperm Progression
82170.0000    Proline
82171.0000    Vitamin K Protein Induced
82172.0000    Pyruvate CSF
82173.0000    Risk factor
82174.0000    Risk Relative
82175.0000    Cholesterol/HDL Risk Factor
82177.0000    Serine
82178.0000    Steroid Screen
82179.0000    Steroid ID
82180.0000    Ascorbic Acid
82181.0000    Sodium Urine 24h
82182.0000    Sodium Urine
82183.0000    Phosphate Urine
82184.0000    Uric Acid Urine
82185.0000    Iron Urine
82186.0000    Glucose Urine
82187.0000    Potassium Urine
82188.0000    Magnesium Urine
82189.0000    Lead Urine
82190.0000    Threonine
82191.0000    Homocysteine Urine
82192.0000    Amylase Urine
82193.0000    Calcium Urine
82194.0000    Bismuth Urine
82195.0000    Nitrogen Urine
82196.0000    Chloride Urine
82197.0000    Carbon Dioxide Urine
82198.0000    Copper Urine
82199.0000    Calcium Urine 24h
82200.0000    Thiopurine Methyltransferase
82201.0000    Valine
82202.0000    Amylase Urine 24h
82203.0000    Chloride Urine 24h
82204.0000    Carbon Dioxide Urine 24h
82205.0000    Phospate Urine 24h
82206.0000    Sperm Viscosity
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82207.0000    Zinc Urine
82208.0000    Sperm Volume
82209.0000    Zinc Urine 24h
82210.0000    Sperm WBC
82211.0000    Dopamine Urine
82212.0000    Protein/Creatinine Ratio Urine
82213.0000    Calculus Morphology
82214.0000    PaO2/PAO2 ratio
82215.0000    PAO2-PaO2 Difference
82216.0000    Doxepin and Nordoxepin Tot
82217.0000    Phosphatase Alkaline Intestine
82218.0000    Amitriptyline and Nortriptylin
82219.0000    Phosphatase Alkaline Liver
82220.0000    Amino Acids Qual
82221.0000    Epinephrine+Norepinephrine
82222.0000    Clomipramine + N Desmethly Clo
82223.0000    Hexosaminidase A
82224.0000    Hexosaminidase A Percent
82225.0000    Drug Screen 5
82226.0000    Drug Screen 5+
82227.0000    Drug Screen 6
82228.0000    Misc Toxicology 1
82229.0000    Misc Toxicology 2
82230.0000    Hemoglobin A1
82231.0000    Misc Toxicology 3
82232.0000    Misc Toxicology 4
82233.0000    Misc Toxicology 5
82234.0000    Misc Toxicology 6
82235.0000    Thiopurine Methyltransferase R
82236.0000    N Desmethyldoxepin
82237.0000    Nefazodone
82239.0000    Bile Acids Total
82240.0000    Bile Acids Triunsaturated
82241.0000    Cholylglycine
82242.0000    Normephenytoin
82243.0000    Organochloride
82244.0000    Operator
82245.0000    Serial Number
82246.0000    Trichomonas
82247.0000    Russell's Viper Venom Ratio
82249.0000    Bilirubin Direct
82249.3000    Bilirubin Total and Direct~MAN
82249.3035    Bilirubin Total and Direct~DU
82250.0000    Bilirubin Total
82250.3000    Bilirubin Qual Feces~MANUAL
82250.3035    Bilirubin Qual Feces~DU PONT A
82251.0000    Bilirubin Total and Direct
82252.0000    Bilirubin Qual Feces
82253.0000    Bilirubin Binding Capacity
82254.0000    Trichophyton Skin Test
82255.0000    Tuberculin Skin Test
82256.0000    PTT Aged Serum
82257.0000    PTT Incubated Mix
82258.0000    PTT Immediate Mix
82259.0000    Prophobilinogen
82260.0000    Stone Risk Profile
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82261.0000    Sulfite
82262.0000    Sulfate
82263.0000    Histamine Plasma
82264.0000    Strontium
82265.0000    Cadmium Urine
82266.0000    1 Methylhistidine
82267.0000    2 Aminoadipic Acid
82268.0000    2 Aminobutyric Acid
82269.0000    3-Methylhistidine
82270.0000    Blood Occult feces
82271.0000    Blood Occult feces spot test
82272.0000    Amino Acid Interpretation
82273.0000    Alanine
82274.0000    Asparagine
82275.0000    Aldosterone Urine
82276.0000    Aspartic Acid
82277.0000    Alanine Beta
82278.0000    Blood Qual Duodenal Gastric
82279.0000    Chenodoxycholic Acid
82280.0000    Cholic Acid
82281.0000    Citrulline
82283.0000    Deoxycholic Acid
82284.0000    Ethanolamine
82285.0000    Phenobarbital Free
82286.0000    Bradykinin
82287.0000    Glycine
82288.0000    Histidine
82289.0000    Diazepam+Nordiazepam
82290.0000    P50
82291.0000    Coagulation Profile
82293.0000    Coagulation Profile Hyper
82294.0000    Thrombin Time Control
82295.0000    Trypsinogen 1
82296.0000    Trypsinogen 1 Free
82297.0000    Vitamin K Dependent Coag Facto
82298.0000    Anti Nuclear Ab Screen
82299.0000    Anti Nuclear Ab Stain
82300.0000    Atypical ANCA
82301.0000    Lacatose Tolerence 4h
82302.0000    Drainage Site
82303.0000    Sulfate Urine
82304.0000    FSH Beta Subunit
82305.0000    2 4 Dichlorophenoxyacetate
82306.0000    Apolipoprotein A1/B
82307.0000    Apolipoprotein B/A1
82308.0000    Carotene Alpha
82309.0000    Carotene Beta
82310.0000    Calcium
82311.0000    Trasferrin Saturation
82312.0000    Color NOS
82313.0000    Mono,Eos,Baso Percent
82314.0000    Sperm Motility
82315.0000    Tissue Cell Percent
82316.0000    Pressure
82317.0000    Tidal Volume
82318.0000    Ventilation
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82319.0000    Lactose Tolerence 15min
82320.0000    Lactose Tolerence 45min
82321.0000    Lactose Tolerence 1.5hr
82322.0000    Phosphatase Alkaline Heat Labi
82323.0000    Reticulocyte %
82324.0000    Prostatic Specific Ag Free/Tot
82325.0000    Log
82326.0000    HDW
82327.0000    Histocytes
82328.0000    Phosphatase Acid Tartrate Resi
82329.0000    Leukocyte Stick
82330.0000    Phosphate Alkaline MacroHepati
82331.0000    Calcium Infusion
82332.0000    Porphobilinogen
82333.0000    Testosterone Bioavailable
82334.0000    Reticulocyte Immature
82335.0000    Terbinafine
82336.0000    Brompheniramine
82337.0000    Conglutin Immune Complex
82338.0000    Amacair
82339.0000    Ammonium
82340.0000    Methoxsalen
82341.0000    Hereditary Neuropathy Heridita
82342.0000    Hemachromatosis
82343.0000    Fat Neutral
82344.0000    Quentiapine
82345.0000    Calcium 24 hour Excret Feces
82346.0000    TAU Protein
82347.0000    Uroporphyrinogen Decarboxylase
82348.0000    Propoxyphene+Norpropoxyphenen
82349.0000    Nucleoside RT Inhibitors
82350.0000    Calculation
82351.0000    Nucleoside-Non RT Inhibitors
82352.0000    Protease Inhibitors
82353.0000    Calculus Nidus
82354.0000    KI-67
82355.0000    Calculus Analysis Chemical
82356.0000    BUN Blood
82357.0000    CSF Panel
82358.0000    Cytotoxic Rejection Percent
82359.0000    Mexlocillin
82361.0000    Norfentanyl
82363.0000    Spinocerebellar Ataxia 6
82364.0000    Occult
82365.0000    Pristamic Acid
82366.0000    Protein C Activity
82367.0000    Collagen/Epinephrine Platelet
82368.0000    Collagen/ADP Induced Platelet
82369.0000    Cortisol Binding Globulin
82370.0000    Ferritin
82371.0000    Schillings Test
82372.0000    G6PD Screen
82373.0000    Carbon Dioxide Combine Power
82374.0000    Phosphoinostiol
82375.0000    Phosphoethanolami
82376.0000    Persenilin 1
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82377.0000    Colchicine
82378.0000    Citalopram
82379.0000    Insulin 240min
82380.0000    Carotene
82381.0000    Insulin 300min
82382.0000    Insulin 360min
82383.0000    Insulin Bovine
82384.0000    Insulin Porcine
82385.0000    Left Shift
82386.0000    Oxyphenisatin
82387.0000    Cathepsin-D
82388.0000    Biscodyl
82389.0000    Triiodothyronine Uptake
82390.0000    Ceruloplasmin (Copper O)
82390.3035    Checking Timer on Centrifuge~D
82390.3103    Checking Timer on Centrifuge~E
82391.0000    Neopterin
82392.0000    Renin Direct
82393.0000    Tigabine
82394.0000    Mercaptopurine
82395.0000    Biotin
82396.0000    Limulus Lystae
82397.0000    Chemiluminescent
82398.0000    Hydroxypregnenolone 17
82399.0000    Pincered RBC
82400.0000    Chemistry Analysis Profile
82401.0000    Blood Unit Release
82402.0000    Hydroxyrisperidone 9
82403.0000    Hydroxyloxepine 8
82404.0000    Arsenic (Inorganic)
82405.0000    Arsenic(Inorganic)/Creatinine
82406.0000    Cadmium/Creatinine Ratio
82407.0000    Lead/Creatinine
82408.0000    Copper, RBC
82409.0000    Copper, Plasma
82410.0000    Instrument Set Up
82411.0000    Western Equine Encephalitis Ig
82412.0000    Ritalinic Acid
82413.0000    Brodifacoum
82414.0000    Varicella Zoster PCR
82415.0000    La Crosse Virus PCR
82416.0000    Jamestown Canyon Virus PCR
82417.0000    Eastern Equine Encephalitis PC
82418.0000    Powassan Virus PCR
82419.0000    Cache Valley Virus PCR
82420.0000    Multiple Ion Analysis
82421.0000    St Louis Equine Encephalitis P
82422.0000    Western Equine Encaphalitis PC
82423.0000    Enterovirus PCR
82424.0000    California Encephalitis PCR
82425.0000    Viral PCR Panel
82426.0000    Interferon Neutralizing Ab
82427.0000    Myositis Assessment Profile
82428.0000    Inhibin A
82429.0000    Inhibin B
82430.0000    Charcoal Urine
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82431.0000    Dichloromethane
82432.0000    Perchloroethylene
82433.0000    Barium
82434.0000    Tellurium
82435.0000    Chloride
82436.0000    Fat Stool Total Qual
82437.0000    Fat Neutral Stool Qual
82438.0000    Muscle Fibers Stool Qual
82439.0000    Fat/Fibers Stool Qual
82440.0000    Zolpidem
82441.0000    Chlorohydrocarbons
82442.0000    Volatile Panel 1
82443.0000    Volatile Panel 2
82444.0000    Volatile Panel 3
82445.0000    Volatile Panel 4
82446.0000    Volatile Panel 5
82447.0000    Acetonitrile
82449.0000    Acrolein
82450.0000    Acrylonitrile
82451.0000    Allyl Alcohol
82452.0000    Amyl Acetate
82453.0000    Butane
82454.0000    Butanois
82455.0000    Butyl Acetates
82456.0000    Cumene
82457.0000    Cyclohexane
82458.0000    Cyclopentane
82459.0000    Cyclopropane
82460.0000    Dichloroethanes
82461.0000    Dichloroethylene
82462.0000    Diisobutyl Ketone
82463.0000    Enflurane
82464.0000    Epichlorhydrin
82465.0000    Ethyl Acetate
82466.0000    Cholesterol Total
82466.3035    Cholinesterase plus DN~DU PONT
82467.0000    Ethyl Benzenes
82468.0000    Ethyl Ether
82469.0000    Ethyl t-Butyl Ether
82470.0000    Ethylene Oxide
82471.0000    Freons
82472.0000    Halothane
82473.0000    Heptane
82474.0000    Hexane
82475.0000    Isoamyl Acetate
82476.0000    Isoamyl Alcohol
82477.0000    Iso-Butane
82478.0000    Isoflurane
82480.0000    Isopropyl Ether
82481.0000    Isovaleraldehyde
82482.0000    Mesityl Oxide
82483.0000    Methane
82484.0000    Methanol
82485.0000    Chondroitin Sulfate
82486.0000    Methoxyflurane
82487.0000    Methyl Ethyl Ketone
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82488.0000    Methyl Isoamyl Ketone
82489.0000    Methyl Isobutyl Ketone
82490.0000    Chromogenic Substrate
82491.0000    Methyl Methacrylate
82492.0000    Methyl n-Amyl Ketone
82493.0000    Methyl n-Butyl Ketone
82494.0000    Methyl n-Propyl Ketone
82495.0000    Methyl t-Butyl Ether
82496.0000    Methyl Acrylate
82497.0000    Methylene Chloride
82498.0000    Methylpentanes
82499.0000    n-Amyl Alcohol
82500.0000    Nonane
82501.0000    Octane
82502.0000    Pentane
82503.0000    Propane
82504.0000    Propanol
82505.0000    Propyl Acetate
82507.0000    Drug 1 ID
82508.0000    Drug 2 ID
82509.0000    Drug 3 ID
82510.0000    Drug 4 ID
82511.0000    Drug 5 ID
82512.0000    Drug 6 ID
82513.0000    Drug 7 ID
82514.0000    Drug 8 ID
82515.0000    Drug 9 ID
82516.0000    Drug 10 ID
82517.0000    Drug 11 ID
82518.0000    Drug 12 ID
82519.0000    Drug 13 ID
82520.0000    Drug 14 ID
82521.0000    Drug 15 ID
82522.0000    Drug 16 ID
82523.0000    Collagen Ab
82524.0000    Drug 17 ID
82525.0000    Drug 18 ID
82526.0000    Drug 19 ID
82527.0000    Drug 20 ID
82528.0000    Gamma Hydroxybutyrateacnc
82529.0000    Amylase Pancreatic P1
82530.0000    Amylase Pancreatic P2
82531.0000    Amylase Pancreatic P3
82532.0000    Amylase Salivary S1
82533.0000    Amylase Salivary S2
82534.0000    Amylase Salivary S3
82535.0000    Porphyrin Copro
82536.0000    Amylase P1/Amylase Ratio
82537.0000    Porphyrin Proto
82538.0000    Amylase P2/Amylase Ratio
82539.0000    Amylase P3/Amylase Ratio
82540.0000    Creatine
82541.0000    Amylase S1 Amylase Ratio
82542.0000    Amylase S2/Amylase Ratio
82543.0000    Amylase S3/Amylase Ratio
82544.0000    Fentanyl/Norfentanyl
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82545.0000    Fentanyl Total
82546.0000    Fentanyl
82547.0000    Pancreatic Elastase 1 Stool
82550.0000    Creatine Kinase (CK)
82555.0000    Creatine Kinase (CK MB)
82562.0000    Creatine Kinase Isoenz (CK MB)
82563.0000    Xylene Exposure Panel Quant Ur
82564.0000    Ion exchange Column Prep
82565.0000    Creatinine
82565.3035    Creatinine~DU PONT ACA
82565.3103    Creatinine~EKTACHEM 700
82566.0000    Pyridine
82567.0000    Styrene
82568.0000    Tetrachloroethane
82569.0000    Tetrachloroethylene
82570.0000    Tetrahydrofuran
82571.0000    Xylenes
82572.0000    Acetone Urine
82573.0000    o-Cresol Urine
82574.0000    Ethanol Urine
82575.0000    Hippuric Acid Urine
82576.0000    Isopropanol Urine
82577.0000    Mandelic Acid Urine
82578.0000    Methanol Urine
82579.0000    Methyl Ethyl Ketone Urine
82580.0000    Methylhippuric Acid Urine
82581.0000    Methyl Isobutyl Ketone Urine
82582.0000    Phenol Urine
82583.0000    Phenylglyoxylic Acid Urine
82584.0000    Trichlororganic Metabolites Ur
82585.0000    Cryofibrinogen
82586.0000    Paraquat
82587.0000    Paraquat Urine
82588.0000    Osmium
82589.0000    Osmium Urine
82590.0000    Osmium 24Hr
82591.0000    Pentachlorophenol
82592.0000    Pentachlorophenol Urine
82593.0000    Pentachlorophenol 24Hr
82594.0000    Pentachlorophenol Exposure Sur
82595.0000    Cryoglobulin Qual Blood
82596.0000    Carbamate Pesticides
82597.0000    Bendiocarb
82598.0000    Carbaryl
82599.0000    Carbofuran
82600.0000    1-Naphthol
82601.0000    Propoxur
82602.0000    Bendiocarb Urine
82603.0000    Carbaryl Urine
82604.0000    Carbofuran Urine
82605.0000    1-Naphthol Urine
82606.0000    Propoxur Urine
82607.0000    Carbamate Pesticides Urine
82608.0000    Organochlorine Pesticides
82609.0000    DDE
82610.0000    Lindane
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82611.0000    DDE Urine
82612.0000    Lindane Urine
82613.0000    Alpha-Chlordane
82614.0000    Alpha-Chlordane Urine
82615.0000    Cystine
82616.0000    Gamma-Chlordane
82617.0000    Gamma-Chlordane Urine
82618.0000    Trans-Nonachlor
82619.0000    Trans-Nonachlor Urine
82620.0000    Heptachlor
82621.0000    Heptachlor Urine
82623.0000    Heptachlorepoxide
82624.0000    Heptachlorepoxide Urine
82625.0000    DDT
82626.0000    DDT Urine
82627.0000    Hexachlorobenzene
82628.0000    Hexachlorobenzene Urine
82629.0000    Dieldrin Urine
82630.0000    Amino Levulinic Acid Delta
82632.0000    Dehydroepiandrosterone (DHEA)
82633.0000    Desoxycorticosterone
82634.0000    Dehydroepiandrosterone Sulfate
82635.0000    Deoxycortisol
82636.0000    Dieldrin
82637.0000    Methoxychlor Urine
82638.0000    Methoxychlor
82639.0000    DDD
82640.0000    DDD Urine
82641.0000    Organochlorine Pesticides Urin
82642.0000    Organophosphate Pesticides
82643.0000    Organophosphate Pesticides Uri
82644.0000    Methyl Parathion Urine
82645.0000    Methyl Parathion
82646.0000    Dihydrocodeinone
82647.0000    Vinyl Chloride Metabolite Qual
82649.0000    Dihydromorphinone
82651.0000    Dihydrotestosterone
82654.0000    Dimethadione
82655.0000    Mevinphos
82656.0000    Mevinphos Urine
82657.0000    P-Nitrophenol
82658.0000    P-Nitrophenol Urine
82659.0000    Parathion
82660.0000    Parathion Urine
82661.0000    Phorate
82662.0000    Phorate Urine
82663.0000    Terbufos
82664.0000    Terbufos Urine
82665.0000    Azinphos-Methyl
82666.0000    Epiandrosterone
82670.0000    Diphosphoglycerate 2 3
82671.0000    Azinphos-Methyl Urine
82672.0000    Carbophenthion
82673.0000    Carbophenthion Urine
82674.0000    Chlorpyrifos
82675.0000    Chlorpyrifos Urine
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82676.0000    Coumaphos
82677.0000    Coumaphos Urine
82678.0000    Diazinon
82679.0000    Diazinon Urine
82680.0000    Deoxycorticosterone
82681.0000    Dichlorvos
82682.0000    Dichlorvos Urine
82683.0000    Dimethoate
82684.0000    Dimethoate Urine
82685.0000    EPN
82686.0000    EPN Urine
82687.0000    Ethion
82688.0000    Ethion Urine
82689.0000    Fenchlorphos Urine
82690.0000    Fenchlorphos
82691.0000    Fenthion
82692.0000    Fenthion Urine
82693.0000    Fonofos
82694.0000    Fonofos Urine
82696.0000    Etiocholanolone
82697.0000    Malathion Urine
82698.0000    Metasystox
82699.0000    Metasystox Urine
82700.0000    Dopamine
82701.0000    Cadmium Exposure Survey Panel
82702.0000    Oxychlordan
82703.0000    Oxychlordan Urine
82704.0000    Paraoxon
82705.0000    Fat Qual
82706.0000    Heavy Metal Panel 5
82707.0000    Heavy Metal Panel 6
82708.0000    Heavy Metal Panel 7
82709.0000    Heavy Metal Panel 8
82710.0000    Fat Total Quant Feces
82711.0000    Paraoxon Urine
82712.0000    Barium Urine
82713.0000    Barium 24Hr
82714.0000    Tellurium Urine
82715.0000    Tellurium 24Hr
82716.0000    Heavy Metal Panel 1
82717.0000    Heavy Metal Panel 2
82718.0000    Heavy Metal Panel 3
82719.0000    Heavy Metal Panel 4
82720.0000    Fatty Acid Esters
82721.0000    Heavy Metal Panel 9
82722.0000    Heavy Metal Panel 10
82723.0000    Trichloroacetic Acid Urine
82724.0000    Trichloroacetic Acid 24Hr
82725.0000    Fatty Acids Free
82726.0000    Toluene Urine
82727.0000    Toluene 24Hr
82728.0000    Trichloroethylene Urine
82729.0000    Trichloroethylene 24Hr
82730.0000    Fibrin Degradation Products
82731.0000    Trichloroethane Urine
82732.0000    Trichloroethane 24Hr
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82733.0000    Trichloroethane
82745.0000    Folate Bioassay
82751.0000    Folate
82756.0000    Fructosamine
82758.0000    Fructose
82759.0000    Galactokinase
82760.0000    Galactose
82775.0000    GAL 1 PHOS Uridyl Transferase
82785.0000    Gamma Globulin
82790.0000    Transpeptidase Gamma Glut
82804.0000    Entrance or Correction Pt Dem
82805.0000    pH Body Fluids
82820.0000    PCO2 Direct Reading
82830.0000    Carbon Dioxide Content
82840.0000    Carbon Dioxide Titrimetric
82870.0000    O2 Saturation
82880.0000    PO2 Direct Reading
82883.0000    Blood Gas Analysis
82884.0000    Blood Gas POC
82885.0000    Coagulation POC
82925.0000    Acid Free QNT DUOD
82930.0000    Acid TOT QNT DUOD
82945.0000    Gastric Analysis Tubeless
82955.0000    Glucose 6 Phos Dehydrogenase
82963.0000    Glucosidase
82965.0000    Glutamate Dehydrogenase
82975.0000    Glutamine
82980.0000    Glycoprotein Acid Alpha1
82985.0000    Glycoprotein
83001.0000    Glucose Tolerance 4hr
83002.0000    Glucose Tolerance 5hr
83003.0000    LDL Cholesterol Direct
83008.0000    Guanosine
83011.0000    Haptoglobin
83012.0000    LDL/HDL Ratio
83013.0000    Cholesterol HDL
83017.0000    Cholesterol LDL
83020.0000    Hemoglobin
83030.0000    Hemoglobin Fetal Chemical
83031.0000    Fetal Hemoglobin Detection  K
83032.0000    Hemoglobin Plasma
83052.0000    Hemoglobin S Solubility
83055.0000    Hemoglobin Unstable Heat
83057.0000    Hemoglobin A(2)
83070.0000    Hemosiderin Urine
83071.0000    Urine WBC Cast
83072.0000    Urine RBC Cast
83073.0000    Urine Grandular Cast
83074.0000    Urine Fatty Cast
83075.0000    Crystal Am Urate
83076.0000    Phosphate Am Crystal
83077.0000    Urine RBC Clumps
83090.0000    Homogentisic Acid
83110.0000    Aldosterone
83118.0000    Calcitonin
83125.0000    Catecholamines
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83132.0000    Acetohexamide
83133.0000    Renin Stimulation
83134.0000    Tryptase
83135.0000    Glipizide
83140.0000    Vanillymandelic Acid
83141.0000    Phosphorus
83145.0000    Metanephrines
83146.0000    Pregnenolone
83148.0000    Protein CSF
83150.0000    Homovanillic Acid
83151.0000    Prostaglandin
83155.0000    Chemotaxis
83156.0000    Sialic Acid
83185.0000    Troponin T
83186.0000    Troponin C
83190.0000    Cortisol Free
83191.0000    Troponin I
83199.0000    Cortisol
83200.0000    Trimethadione
83201.0000    Tropomyosin
83210.0000    Insulin Tolerance
83224.0000    Nocardia
83230.0000    Corticosterone
83232.0000    Estrogen Binding Receptor
83233.0000    Estradiol
83234.0000    Estriol
83235.0000    Triprolid
83236.0000    Terfenadine
83245.0000    Estrogens
83248.0000    Gastrin
83249.0000    Hydroxyproline Free
83250.0000    Glucagon
83251.0000    Hydroxyproline
83252.0000    Iodine Total  Urine
83253.0000    Hydroxyprogesterone 17
83254.0000    Insulin
83255.0000    Ketogenic Steroids
83256.0000    Ketosteroids 17
83257.0000    Hydroxycorticosterone 18
83258.0000    Amantadine
83259.0000    Cobalt
83260.0000    Gallium
83261.0000    Glyburide
83262.0000    Heavy Metal Screen
83263.0000    Palladium
83264.0000    Para-Amino Benzoic Acid
83265.0000    Protoporphyrin
83266.0000    Protoporphyrin Zinc
83267.0000    Risperidone
83280.0000    Ketosteroids 17 Neutral
83290.0000    Ketosteroids 17  Beta
83305.0000    Luteinizing Hormone
83306.0000    LH/FSH Panel
83310.0000    Follicle Stimulating Hormone
83316.0000    Placental Lactogen
83319.0000    RBC Transketolase
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83320.0000    Pregnanediol
83340.0000    Pregnanetriol
83350.0000    Progesterone
83351.0000    Progesterone Receptor
83355.0000    Prolactin
83355.3035    Protein Bence Jones Heat~DU PO
83355.3103    Protein Bence Jones Heat~EKTAC
83360.0000    Renin
83370.0000    Angiotensin
83380.0000    Growth Hormone
83395.0000    Parathoromone
83400.0000    Deoxynucleotidyl Transferase
83405.0000    Testosterone
83415.0000    Testosterone + Dihydrotest
83440.0000    Triiodothyronine (T 3) Resin
83445.0000    Triiodothyronine (T 3)
83446.0000    Triiodothyronine (T 3) Rev
83447.0000    Triiodothyronine Free (FT3)
83448.0000    Alpha1 Antitrypsin
83449.0000    Alpha1 Antitrypsin Phenotype
83450.0000    Thyroxine (T 4)
83455.0000    Thyroxine Free (FT4)
83457.0000    Thyroxine Free (FT4) SA Ligand
83480.0000    Thyroid Stimulating Hormone
83490.0000    Thyroxine Binding Globulin
83495.0000    Hydroxybutyric Dehydrogenase
83496.0000    Hydroxycorticosteroids 17
83540.0000    Iron Total
83550.0000    Iron Total and Combining
83555.0000    Iron Binding Capac Unsatur(UIB
83575.0000    Isocitric Dehydrogenase
83600.0000    Kynurenic Acid
83605.0000    Lactic Acid
83620.0000    Lactate Dehydrogenase
83620.3000    Lactic Acid~MANUAL
83620.3035    Lactic Acid~DU PONT ACA
83625.0000    Lactate Dehydrogenase Isoenz
83642.0000    Lactose Qual Urine
83665.0000    Lecithin Sphingomyelin Ratio
83675.0000    Leucine Amino Peptidase
83690.0000    Lipase Blood
83700.0000    Lipids Total
83715.0000    Lipoprotein
83735.0000    Magnesium
83775.0000    Malate Dehydrogenase
83795.0000    Melanin Qual Urine
83857.0000    Methemalbumin
83865.0000    Mucopolysaccarides
83875.0000    Myoglobin Urine
83900.0000    Biotinidase
83915.0000    Nucleotidase 5'
83920.0000    Ornithine Carb Transferase
83925.0000    Osmolality
83930.0000    Osmolarity
83944.0000    Alpha1 Acid Glycoprotein
83945.0000    Oxalate
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83946.0000    Anticentromere
83950.0000    Oxytocinase
83955.0000    Hippuric Acid Paraamino
83960.0000    Apolipoprotein A1
83962.0000    Apolipoprotein B
83966.0000    Antichymotrypsin Alpha1
83967.0000    Antitrypsin Alpha1
83968.0000    Endorphin Beta
83969.0000    Hemoglobin A
83970.0000    Hemoglobin S
83971.0000    Red Blood Cell Ag A
83972.0000    Red Blood Cell Ag B
83973.0000    Red Blood Cell Ag H
83974.0000    Gonadotropin Chorionic alpha
83975.0000    Gonadotropin Chorionic B Qual
83976.0000    Gonadotropin Chorionic B Quant
83977.0000    Melanocyte Stimulating Horm a
83978.0000    Melanocyte Stimulating Horm b
83979.0000    Secretin
83980.0000    Somatostatin
83981.0000    Substance P
83982.0000    Vasoactive Intestinal Polypep
83983.0000    Lipotropin
83984.0000    Vasopressin Arginine
83985.0000    Vasopressin Lysine
83986.0000    Oxytocin
83987.0000    Somatomedin C (IGF 1)
83988.0000    C-Peptide
83989.0000    Preinsulin
83990.0000    Pancreatic Polypeptide
83991.0000    Gastrin 17
83992.0000    Gastrin 34
83993.0000    Cholecystokinin
83994.0000    Parathyroid Hormone C Terminal
83995.0000    Parathyroid Hormone N Terminal
83996.0000    Protein Total Electro
83997.0000    Vitamin D 25 Hydroxy
83998.0000    Vitamin D 1 25 Dihydroxy
83999.0000    Osteocalcin (GLA protein)
84000.0000    Enkephalin Leucine
84001.0000    Enkephalin Methionine
84002.0000    Bombesin
84003.0000    Neurotensin
84004.0000    Corticotropin Releasing Hormon
84005.0000    Luteinizing Releasing Hormone
84006.0000    Cardioexcitatory Peptide
84007.0000    Choline Acetyltransferase
84008.0000    Butyric Acid gamma Amino
84009.0000    Serotonin
84009.3035    Silicon~DU PONT ACA
84009.3103    Silicon~EKTACHEM 700
84009.8044    Silicon~LAB1 SENDOUT
84010.0000    SP 1 Chromagranin
84011.0000    Parathyroid Hormone Mid Molec
84012.0000    Parathyroid Hormone Intact
84013.0000    Chymopapain
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84014.0000    PTH Panel
84015.0000    Tubular Reabsorption PO4
84016.0000    Fractional Extraction NA
84017.0000    Fractional Extraction Nitrogen
84018.0000    Sandostatin
84019.0000    Cortisol Tolerence Test
84020.0000    Globulin Electro
84021.0000    Griseofulvin
84022.0000    Pimarcin
84023.0000    Clotrimazole
84024.0000    LDH Electrophoresis
84025.0000    CPK Electrophoresis
84026.0000    Protein Electro Urine
84027.0000    Protein Electro CSF
84028.0000    X*Glaidin Ab
84029.0000    Fat Stool
84030.0000    Phenylalanine
84031.0000    IgG Synthesis
84032.0000    Lymphocyte Absolute
84033.0000    LAP Score
84034.0000    Bleeding Time Surgicut
84035.0000    Mycoplasma Titer
84036.0000    HIV 1&2
84037.0000    Retinyl palitate
84038.0000    Interpretation
84039.0000    Parathyroid HRP
84040.0000    Phenylketone Urine (PKU)
84041.0000    Mercury/Creatinine
84042.0000    Copper 24H
84043.0000    Copper/Creatinine
84044.0000    Citric Acid
84045.0000    Citric Acid Urine
84046.0000    Cholinesterase Panel
84047.0000    6TG
84048.0000    6TG Metabolite
84049.0000    6MMP
84050.0000    6MMP Metabolites
84051.0000    B-Human Chorionic Gonadotropin
84060.0000    Phosphatase Acid Total
84061.0000    Phosphatase Acid Non Prost
84065.0000    Phosphatase Acid Prost Tart
84067.0000    Phosphatase Acid Prostatic
84075.0000    Phosphatase Alkaline
84075.3000    Phosphatase Alkaline Leukocyte
84075.3035    Phosphatase Alkaline Leukocyte
84080.0000    Phosphatase Alkaline Isoenz
84087.0000    Phosphohexose
84100.0000    Phosphate Inorganic
84100.3035    Photochromogenicity Test~DU PO
84101.0000    Alkaloids Screen
84103.0000    Phospholipids
84105.0000    Phosphorus Elemental
84110.0000    Porphobilinogen Quant Urine
84115.0000    Porphobilinogen Qual Urine
84120.0000    Porphyrin Quant Fraction
84123.0000    Protoporphyrin Free Erythro
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84125.0000    Porphyrin Qual Urine
84140.0000    Potassium
84141.0000    Fungal Ab
84142.0000    Mycotoxin Ab
84155.0000    Protein Total
84156.0000    Protein Total Urine Point
84157.0000    Protein Total Urine Timed
84158.0000    Protein/Creatinine Ratio
84159.0000    Beta 2 transferrin
84160.0000    Pt Temp Est
84161.0000    Pt Temp Obs
84162.0000    Pt Weight Est
84163.0000    Pt Weight Obs
84164.0000    Pt Height Est
84165.0000    Pt Height Obs
84166.0000    Date LMP
84167.0000    Specimen Weight
84168.0000    Specimen Volume
84169.0000    Specimen Volume Reported
84171.0000    Globulin
84180.0000    Protein Quant Urine Fluid
84181.0000    Southern Blot
84185.0000    Protein Bence Jones Heat
84210.0000    Pyruvate
84220.0000    Pyruvate Kinase
84235.0000    Endocrine Hormone
84263.0000    Hydroxyind Acet Acid 5 Screen
84265.0000    Hydroxyind Acet Acid 5 Quant
84295.0000    Sodium
84305.0000    Urobilinogen
84310.0000    Sorbitol Dehydrogenase
84315.0000    Specific Gravity Excl Urine
84330.0000    +Glucose Quant
84400.0000    Body Fluid Exam for Crystals
84408.0000    Charcot Marie Tooth Screen
84409.0000    Enterovirus Ab by PCR
84410.0000    Spirometry
84411.0000    Bronchospasm Eval
84412.0000    Pulse Oximetry
84413.0000    Fibrinogen Activity
84455.0000    Transferase Aspartate  SGOT
84455.3000    Urinalysis Micros only~MANUAL
84455.3035    Urinalysis Micros only~DU PONT
84456.0000    LDH1/LDH2 Ratio
84457.0000    Creatinine Random
84458.0000    Creatinine Random UA
84459.0000    LDH Total ISO
84465.0000    Transferase Alanine Amino  SGP
84465.3000    Transpeptidase Gamma Glut~MANU
84465.3035    Transpeptidase Gamma Glut~DU P
84466.0000    X*Drug Dependant
84476.0000    Itraconazole
84480.0000    Triglycerides w o extract
84481.0000    Desmethsuximide
84483.0000    Helicobacter Pylorii Breath
84484.0000    Tryptophan
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84485.0000    Trypsin Qual Duod or Gastric
84486.0000    Ethotoin
84487.0000    Ethinamate
84488.0000    Trypsin Qual Feces
84489.0000    Fatty Acid
84490.0000    Trypsin
84491.0000    Phosphatase Alkaline Heat Stab
84492.0000    Temperature
84494.0000    Temperature Observed
84495.0000    Temperature Body
84496.0000    Temperature Corrected
84497.0000    Phencyclidine
84498.0000    HDL/Cholesterol Ratio
84499.0000    Urine Microscopic
84500.0000    Legionella pneumophilia Ab EIA
84501.0000    Cyclic Citrulline Peptide Ab I
84502.0000    Calcium VG Channel Ab, N-Type
84503.0000    Calcium VG Channel Ab, P/Q Typ
84504.0000    Neuronal Ab Type 1 IFA
84505.0000    Purkinje Cell Cytoplasmic Ab T
84506.0000    Amphiphysin Ab
84507.0000    Levetiracetam
84508.0000    Nickel Urine
84509.0000    Nickel Urine 24Hr
84510.0000    Tyrosine
84511.0000    Nickel/Creatinine Ratio
84512.0000    Aminolevulinic Acid Urine 24Hr
84513.0000    N-Telopeptide/Creatinine Ratio
84514.0000    Lysozyme Urine
84515.0000    Microglobulin Beta 2 Urine
84520.0000    Urea Nitrogen
84550.0000    Uric Acid
84581.0000    Uroporphyrins
84582.0000    Urobilinogen Quant Feces
84583.0000    Urobilinogen Semiquant Urine
84584.0000    Porphyrin Uro
84586.0000    Viscosity Fluid
84588.0000    Vitamin B12
84590.0000    Vitamin A
84591.0000    Retinol Binding Protein
84592.0000    Retinoic Acid
84612.0000    PCA I
84613.0000    Glycophorin A
84614.0000    Glycophorin
84615.0000    Xanthurenic Acid
84619.0000    Xylose
84686.0000    Bromide Serum Quant VIS
84719.0000    Cholinesterase plus DN
84720.0000    Cholinesterase Pseudo Serum
84775.0000    Galactose Transferase
84902.0000    Heparin-Protamine Sulfate Tole
84906.0000    Parathion Urine Quant
84930.0000    Appearance
84931.0000    Urine Appearance
84988.0000    Misc Sendout 1
84989.0000    Misc Sendout 2
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84990.0000    Misc Sendout 3
84991.0000    Misc Sendout 4
84992.0000    Misc Sendout 5
84993.0000    Misc Sendout 6
84994.0000    Misc Sendout 7
84995.0000    Misc Sendout 8
84996.0000    Misc Sendout 9
84997.0000    Misc Sendout 10
84998.0000    Misc Sendout 11
84999.0000    Hemogram Manual
85000.0000    Bleeding Time Duke
85001.0000    Bleeding Time Template
85002.0000    Acquired Inhibitory Screen
85003.0000    Protein C
85004.0000    Autohemolysis Test
85005.0000    Antithrombin III Assay
85006.0000    Protein S
85007.0000    Coagulation Factor II Assay
85008.0000    Blood Film Examination
85009.0000    Russell's Viper Venom
85010.0000    Blood Smear(s)
85011.0000    Cytoplasmic Neutrophil Ab
85012.0000    D Dimer
85013.0000    Fibrin Monomers
85014.0000    Granulocyte Ab
85015.0000    Hemogram I
85016.0000    Hemogram II
85017.0000    Hemogram III
85018.0000    Hemogram IV
85019.0000    Hemogram V
85020.0000    Red Blood Cell Count
85021.0000    Heparin Aggregation
85022.0000    Platelet Ab
85023.0000    Platelet AB (Drug)
85024.0000    Platelet MAO Inhibition
85025.0000    Protein A Ag
85026.0000    Osmotic fragility
85027.0000    Glycosylated HGB, total
85028.0000    Factor VIII Related Ag
85029.0000    Ristocetin cofactor
85030.0000    White Blood Cell Count
85031.0000    Misc Hem Test 1
85032.0000    Misc Hem Test 2
85033.0000    Misc Hem Test 3
85034.0000    Misc Hem Test 4
85035.0000    Misc Hem Test 5
85036.0000    Instrument HE Setup
85037.0000    DIC Panel
85038.0000    Alpha2 Antiplasmin
85039.0000    Antithrombin 3 Ag
85040.0000    Beta Thromboglobulin
85041.0000    Factor 8 Inhibitor - QN
85042.0000    Factor 8 Related Ag
85043.0000    Lupus Inhibitor (PNP)
85044.0000    Lupus Inhibitor (TTI)
85045.0000    Platelet Neutralization Proced
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85046.0000    Tissue Thromboplastin Inhibiti
85047.0000    Plasminogen Activator
85048.0000    Plasminogen Ag
85049.0000    Prekallikrein (Fletcher) Assay
85050.0000    Hemoglobin RBC
85051.0000    Glycohemoglobin Fast Fraction
85052.0000    Glycohemoglobin A(1) C
85053.0000    Glycohemoglobin HbA 1c
85054.0000    Buffy Coat (prep smear&count)
85055.0000    Hematocrit Macro or Micro
85056.0000    Protamine Sulfate
85057.0000    Von Willebrand's Profile
85058.0000    Protein C Cofactor
85059.0000    Activated Clotting Time
85060.0000    Indices Hematologic
85061.0000    Acanthocyte
85062.0000    Anisochromic
85063.0000    Anisocytosis
85064.0000    Atypical Lymphocyte
85065.0000    Auer Rods
85066.0000    Band Neutrophil
85067.0000    Basophilic Stippling
85068.0000    Basophil
85069.0000    Basophil %
85070.0000    Blast
85071.0000    Burr Cells
85072.0000    Corrected WBC
85073.0000    Crenated RBC
85074.0000    Dohle Bodies
85075.0000    Elliptocyte
85076.0000    Eosinophil %
85077.0000    Granulocyte
85078.0000    Granulocyte %
85079.0000    Helmet Cell
85080.0000    Howell Jolly Bodies
85081.0000    Hypersegmented Neutrophil
85082.0000    Hypochromia
85083.0000    INR
85084.0000    Lymphocyte
85085.0000    Lymphocyte %
85086.0000    Macrocytes
85087.0000    MCD
85088.0000    MCH
85089.0000    MCHC
85090.0000    MCV
85091.0000    Megakaryocytes
85092.0000    Microcytes
85093.0000    Monocyte
85094.0000    Monocyte %
85095.0000    MPD
85096.0000    MPV
85097.0000    Myelocyte
85098.0000    Neutrophil
85099.0000    Neutrophil %
85100.0000    Nucleated RBC
85101.0000    Other Leukocytes
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85102.0000    Ovalocytes
85103.0000    Pappenheimer
85104.0000    Pelger Huet
85105.0000    Bone Marrow Diff Count
85106.0000    Plasma Cell
85107.0000    Bone Marrow Film Prep
85108.0000    Bone Marrow Stain Romanowski
85109.0000    Platelet Estimate
85110.0000    Bone Marrow Aspiration
85111.0000    Poikilocytosis
85112.0000    Polychromasia
85113.0000    Promyelocyte
85114.0000    RDW
85115.0000    RDW-CV
85116.0000    RDW-SD
85117.0000    Reactive Lymphocyte
85118.0000    Red Blood Cell
85119.0000    Rouleaux
85120.0000    Schistocytes
85121.0000    Sickle Cell
85122.0000    Neutrophil Segmented
85123.0000    Siderocyte
85124.0000    Smudge Cell
85125.0000    Stomatocyte
85126.0000    Target Cell
85127.0000    Teardrop Cell
85128.0000    Toxic Granulation
85129.0000    Spherocyte
85130.0000    Malaria Forms
85131.0000    Malaria Smear
85132.0000    Factor V Leiden-DNA
85133.0000    Prothrombin Fragment
85134.0000    Eosinophil Smear
85135.0000    Erythroblast
85136.0000    Eosinophil Urine
85137.0000    Eosinophil Sputum Smear
85138.0000    Eosinophil Urine Smear
85139.0000    Porcine FVIII C Inhibitor
85140.0000    Hemoglobin & Hematocrit
85141.0000    Hem Specimen
85142.0000    Chronic Lymphoid Leukemia
85143.0000    Huntington's Disease
85144.0000    Vaginal Discharge Panel
85145.0000    Thalassemia Panel
85146.0000    Plasma Mix 1:1
85147.0000    PT 1:1 Mix
85148.0000    Hemogram+Platelet
85149.0000    Hemogram+PLT+Diff
85150.0000    Misc Sendout 12
85151.0000    Misc Sendout 13
85152.0000    Misc Sendout 14
85153.0000    Misc Sendout 15
85154.0000    Misc Sendout 16
85155.0000    Misc Sendout 17
85156.0000    Misc Sendout 18
85157.0000    Misc Sendout 19
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85158.0000    Misc Sendout 20
85159.0000    Misc Stain 1
85160.0000    Misc Stain 2
85161.0000    Misc Stain 3
85162.0000    HLA B8
85163.0000    Eosinophil
85164.0000    Cells Other
85165.0000    Capillary Fragility
85166.0000    Chloroacetate Esterase Stain
85167.0000    Neutrophil Seg Fluid
85168.0000    Lymphocyte Fluid
85169.0000    Macrophage
85170.0000    Clot Retraction Qual
85171.0000    RBC Morphology
85172.0000    Euglobulin Lysis Time
85173.0000    Elapsed Time
85174.0000    PT w INR
85175.0000    Clot Lysis Time Whole Blood
85176.0000    von Willebrand's Factor Ag
85177.0000    Ristocetin Platelet Aggl
85178.0000    Plasma multimers
85179.0000    Plasminogen Activator Inhib
85180.0000    Report Hematology
85181.0000    Report Blood Bank
85182.0000    Kaolin Clotting Time
85183.0000    PT Mixing Study
85184.0000    PTT Mixing Study
85185.0000    Platelet Ag 1
85186.0000    Tumor Cells
85187.0000    Platelet Ag 2
85188.0000    Platelet Associated IgA Direct
85189.0000    Platelet Associated IgA Indire
85190.0000    Platelet Associated IgG Direct
85191.0000    Platelet Associated IgG Indire
85192.0000    Platelet Associated IgM Direct
85193.0000    Platelet Associated IgM Indire
85194.0000    Platelet Morphology
85195.0000    D Dimer Quant
85196.0000    MuSK Antibody
85201.0000    Biopsy
85202.0000    Bone Marrow, Flow Cyto, each m
85203.0000    Bone Marrow Aspirate Smear Int
85204.0000    Bone Marrow Core Touch Exam
85205.0000    Cytopath Flds,Brush,Wash w/out
85206.0000    Cytopath Fls,Wash,Brush w/out
85210.0000    Prothrombin Assay
85220.0000    Coagulation Factor V Assay
85223.0000    Mucin Clot
85230.0000    Coagulation Factor VII Assay
85240.0000    Coagulation Factor VIII Assay
85249.0000    Differential Count WBC
85250.0000    Coagulation Factor IX Assay
85251.0000    Factor IX Activity
85252.0000    Factor XI Activity
85260.0000    Coagulation Factor X Assay
85270.0000    Coagulation Factor XI Assay
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85280.0000    Coagulation Factor XII Assay
85290.0000    Coagulation Factor XIII Assay
85299.0000    Fibrinogen Ag/Fibrinogen Ratio
85300.0000    Coagulation Factor VIII Inhib
85301.0000    Fibrinogen Ag
85302.0000    Fibrinogen Ab
85303.0000    Protein C Ag
85304.0000    Protein C Ab
85305.0000    Anticoagulant Circulating Scre
85306.0000    Bethesda Inhibitor
85307.0000    Wintrobe ESR
85308.0000    Anticoagulant Circulating Titr
85309.0000    Liquification
85310.0000    Reticulocyte
85311.0000    Viscosity
85312.0000    Methylenetetrahydrofolate Redu
85313.0000    PT Control
85314.0000    PTT Control
85315.0000    Prothrombin (20210) Gene Mut
85316.0000    Reticulin IgA Ab
85317.0000    Reticulin IgG Ab
85320.0000    Thrombin III Ab
85321.0000    Osmotic Fragility,0.50 g/dL Na
85322.0000    Osmotic Fragility,0.60 g/dL Na
85323.0000    Osmotic Fragility,0.65 g/dL Na
85324.0000    Osmotic Fragility,0.75 g/dL Na
85336.0000    Eosinophil #
85345.0000    Clotting Time Lee White
85346.0000    Coagulation Factor Assay Panel
85350.0000    Eosinophil Count
85351.0000    Eosinophil Nasal Smear
85355.0000    Ethanol Gel Test
85370.0000    Fibrinogen Screening Test
85371.0000    Fibrin Degradation Prod Kit
85375.0000    Fibrinogen Chem Quant
85378.0000    Fibrinogen Semiquant
85379.0000    Zetacrit
85390.0000    Fibrinolysis Whole Clot
85394.0000    Von Willebrand Multimer
85395.0000    Fibrinolysis DIL or Plate
85397.0000    Plasmin
85490.0000    Heinz Bodies Smear for
85500.0000    Heinz Bodies Induction Test
85520.0000    Heparin Assay
85532.0000    Iron Stain for Siderocytes
85555.0000    Phosphatase Acid Leukocyte
85560.0000    Platelet Aggregation Substrate
85569.0000    Leukocyte Count
85570.0000    Platelet Count Whole Blood
85571.0000    Platelet Count Plasma
85572.0000    Platelet Count (Phase)
85573.0000    Factor VIII Activity
85574.0000    Factor VII
85576.0000    Factor VII Ab
85577.0000    Factor VII Ag
85581.0000    Blood Film Screen
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85582.0000    Beta Galactosidase
85586.0000    Plate Factor III PF III
85587.0000    Reptilase R Test
85588.0000    Hemolysin Acid
85590.0000    Plasminogen
85595.0000    LE Cell Preparation
85596.0000    Activated Protein C Resis
85600.0000    Platelet Adhesivity Salzman
85610.0000    Prothrombin Time
85613.0000    Prothrombin Time+PTT
85615.0000    Prothrombin Consumption
85620.0000    Red Blood Cell Fragility Qual
85621.0000    Platelet Aggreg Spon
85622.0000    Platelet Aggreg ADP 1:8
85623.0000    Platelet Aggreg ADP 1:4
85624.0000    Platelet Aggreg Rist
85625.0000    Platelet Aggreg Epinep
85626.0000    Platelet Aggreg Collagen
85627.0000    Platelet Aggreg Arach
85632.0000    Phosphatase Alkaline Leukocyte
85634.0000    Red Blood Cell Fragility Mech
85636.0000    Red Blood Cell Fragility Quant
85637.0000    Metamyelocyte
85638.0000    Normocytic
85639.0000    Normochromic
85640.0000    Aniocytosis
85641.0000    Microcytosis
85642.0000    Cryocrit
85643.0000    Aspartate Erythrocyte
85644.0000    Iron Panel Hem
85645.0000    Reticulocyte Count
85646.0000    Natural Killer Cell
85647.0000    Foscarnet
85648.0000    LSA Lymp Subset
85649.0000    Fibrinogen
85650.0000    Reticulocyte Absolute
85651.0000    Fibrinogen Fragments
85652.0000    Polymorphonuclear Neutrophil
85653.0000    Ivy Bleeding Time
85654.0000    Hemoglobin E
85655.0000    Sedimentation Rate
85656.0000    Protein C&S Panel
85657.0000    Hemoglobin NOS
85658.0000    Reticulocyte Index
85659.0000    Kennedy Disease
85660.0000    Sickle Cell Identification
85661.0000    Snovial Cell
85662.0000    Sucrose Water Test
85663.0000    Sezary Cell
85664.0000    Malignant Cell
85665.0000    Sudan Black B Leucocyte
85666.0000    Epstein Barr Ab
85667.0000    Hgb Phenotype
85668.0000    Lining Cell
85669.0000    Epithelial NOS
85670.0000    Thrombin Time
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85671.0000    PT-PTT Factor Assay
85672.0000    Hemoglobin C
85674.0000    PT Substitution
85675.0000    Thrombin Titer
85676.0000    Hemoglobin Phenotype
85678.0000    Ventricular Lining Cell
85679.0000    Columnar Epithelial Cell
85680.0000    Specimen Count
85681.0000    Mast Cell
85682.0000    Sperm Morphology
85683.0000    Ma Auto Ab
85684.0000    Ta Auto Ab
85685.0000    Metamyelocytes Absolute
85686.0000    Myelocyte Absolute
85687.0000    Promyelocyte Absolute
85688.0000    Plasma Cell Absolute
85689.0000    Red Blood Cells Nucleated Abso
85690.0000    PTT 1:1 MIX
85691.0000    PTT Mix 1Hr Incubation
85692.0000    PT Ratio
85693.0000    Prolymphocytes
85694.0000    PTT-Adsorbed
85695.0000    Prolymphocytes Percent
85696.0000    Promonocytes
85700.0000    Thromboplastin Screening H P
85725.0000    Thromboplastin Gen Defect ID
85730.0000    Thromboplastin Time Partial
85731.0000    Thromboplastin Time w Sub
86000.0000    HLA B27
86001.0000    B and T Cell Quant Ros
86002.0000    Misc BB Test 1
86003.0000    Misc BB Test 2
86004.0000    Misc BB Test 3
86005.0000    Misc BB Test 4
86006.0000    Misc BB Test 5
86007.0000    Instrument BB Setup
86011.0000    Phagocytic Bactericidal Assay
86045.0000    HLA Tissue Typing
86046.0000    HLA Tissue Typing A,B
86047.0000    HLA Class I II
86048.0000    Homocystein Genetic
86049.0000    4:1 Plasma Mix
86050.0000    Chlamydia Diff
86051.0000    Chlamydia Probe
86052.0000    Factor II
86053.0000    Factor II Ag
86054.0000    Factor II Activity
86055.0000    Factor II Mutation
86056.0000    Factor IX Ag
86057.0000    Factor IX Inh
86058.0000    Factor XI Inh
86059.0000    Factor XIII
86060.0000    Factor XIII Urea
86061.0000    Hepatitis A IgG/IgM
86062.0000    Hepatitis E Ab IgG
86063.0000    Hepatitis E Ab IgM
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86064.0000    Neutrophil Cytoplasm Ab
86065.0000    Coccidioides IgM
86066.0000    Cell Marker Panel
86067.0000    Triple Marker Panel
86069.0000    HIV 1 P24
86070.0000    HIV 1 P18
86071.0000    HIV 1 P55
86072.0000    Transglutaminase Tissue Ab
86073.0000    Charcot Marie Tooth
86074.0000    Parvovirus B19 IgG
86076.0000    Parvovirus B19 IgM
86077.0000    Phytohemagglutinin
86078.0000    Protease Gene Mutation
86079.0000    Coxsackie A 10
86080.0000    ABO Cell and Serum Typing
86081.0000    ABO Cell and Rh(D) Typing
86082.0000    ABO Cell Serum and Rh(D)
86083.0000    ABO Hemolysin Test
86084.0000    ABO Cell Typing Slide or Tube
86085.0000    ABO Cell,Serum & Rh Typing on
86086.0000    ABO Serum Typing Tube
86087.0000    ABO Cell & Rh Typing Unit
86088.0000    Rh(D) Typing
86089.0000    Coxsackie A 16
86090.0000    Coxsackie A 2
86091.0000    Coxsackie A 4
86092.0000    Coxsackie A 7
86093.0000    Coxsackie A 9
86094.0000    Coxsackie B 1
86095.0000    Coxsackie B 2
86097.0000    Coxsackie B 3
86098.0000    Coxsackie B 4
86099.0000    Coxsackie B 5
86100.0000    Rh(D) Typing Slide or Tube
86101.0000    Coxsackie B 6
86103.0000    Neutrophil Cytoplasmic Ab IgA
86104.0000    Neutrophil Cytoplasmic Ab IgM
86105.0000    Beryllium Lymphocyte Prolifera
86120.0000    Ag Blood Type
86121.0000    Red Cell Mass
86125.0000    Ag Blood Type w Antihuman
86129.0000    Blood Unit Labeling
86131.0000    Blood Component or Derivative
86132.0000    Blood Compon Deriv Exter Reloc
86133.0000    Donor Blood Collection
86134.0000    Blood Compon Deriv Inter Reloc
86135.0000    Ab Absorption Blood Bank
86136.0000    Donor Autologous  Schedul 1st
86137.0000    Warm Autoadsorption ZZAP
86138.0000    Donor Autologous  1 Unit
86139.0000    Ab Detection w Antihuman (1 st
86140.0000    Ab Detect w o antihuman (1 sta
86141.0000    Donor Autologou  Sched Add
86142.0000    Ab Detect w o Antihuman (2 sta
86143.0000    Ab Detection w AHG Donor
86144.0000    Ab Detect Antihuman (2 stage)
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86145.0000    Ab Detection w/o AHG Donor
86148.0000    Ab Detect Capillary Test
86150.0000    Ab Elution
86152.0000    Ab ID w Antihuman
86153.0000    Ab Identification w AHG Donor
86154.0000    Ab Ident w o Antihuman
86155.0000    Ab Identification w/o Donor
86156.0000    Ab ID Capillary Testing
86158.0000    Ab ID w o Antihuman
86160.0000    Ab ID Antihuman globulin
86161.0000    Ab Titration
86162.0000    HLA B7
86164.0000    Compatibility Crossmatch Salin
86165.0000    HLA Phenotype A B
86166.0000    Compatibility Test Crossmatch
86167.0000    Ab Detection Type & Scr
86168.0000    Ab Detect crossmatch
86169.0000    HBcAb Blood Donor EIA
86170.0000    HIV Ab Blood Donor
86171.0000    HBsAg Blood Donor RIA batch
86172.0000    HBsAg Blood Donor RIA
86173.0000    HBsAg Blood Donor RPHA
86174.0000    HLA B14
86175.0000    HBsAg Blood Donor ELISA batch
86176.0000    HCV Blood Donor EIA batch
86177.0000    HLA Ab Screen
86178.0000    HLA Single Ag Screening
86179.0000    HLA Compatibility Testing
86180.0000    Leukoagglutinin Compatibility
86181.0000    HLA Phenotype A B C Complete
86182.0000    HLA Phenotype A B C initial
86183.0000    Irradiation of Blood Component
86184.0000    Lymphocyte Separation T&B
86185.0000    HLA Typing Tray Production
86186.0000    Lymphocyte Separation fr Blood
86187.0000    Leukoagglutinin Screen
86188.0000    HLA Phenotype Dr (initial)
86189.0000    HLA Phenotype Dr by Lympho
86190.0000    Calibrating Centrifuge
86191.0000    HLA Phenotype A
86192.0000    Checking Centrifuge
86193.0000    HLA Phenotyping Donor
86194.0000    Checking Timer on Centrifuge
86195.0000    Lymphocyte Thawing
86196.0000    Alarm Activation Blood Storage
86197.0000    HLA Lymphocyte Cell Count
86198.0000    Blood Storage Recording Daily
86199.0000    Instrument Thermometer Reading
86200.0000    Blood Storage Chart Change
86201.0000    Reagent RBC Freeze Glycerol
86202.0000    HLA Lymphocyte Cell Ct & Adj
86203.0000    HLA Lymphocyte Viability
86204.0000    Reagent RBC Freeze Liq Nitro
86205.0000    HLA Phenotype B
86206.0000    Hemoglobin Fetal
86207.0000    Reagent RBC Thawing
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86208.0000    MaTa Auto Ab
86209.0000    CD3/CD7
86210.0000    DNA Mutation Analysis
86211.0000    Reagent RBC Prep A B O
86212.0000    Myotonic Dystrophy
86213.0000    Reagent RBC Prep Antihuman
86214.0000    Myotonic Dystrophy, DNA Mutati
86215.0000    T Cell Lymphocyte
86216.0000    Reagent RBC Prep Enzyme
86217.0000    Monocyte % Lymphocyte
86219.0000    Coagulation Concentrate Lyo
86220.0000    HTLV I Blood Donor
86221.0000    HLA DQW1
86222.0000    HLA DR(Ia)
86225.0000    DNA Ab
86226.0000    DNA Single Strand Ab
86227.0000    DNA Ab Native
86237.0000    JO-1 Ab
86250.0000    Antihuman Globulin Test
86252.0000    Autologous Unit Invent Blood o
86254.0000    Directed Unit Invent Blood or
86269.0000    Cryoprecipitate Prep (4+)
86270.0000    Platelet Administration
86271.0000    Cryoprecipitate Preparation
86272.0000    Cryoprecipitate Thawing
86273.0000    Blood Products Administration
86275.0000    Frozen Blood Preparation
86276.0000    Frozen Blood Thaw & Deglyc
86277.0000    Rejuvenation of Red Cells
86291.0000    Cardiolipin Ag Prep
86292.0000    Washed RBC for CF HA HAI
86293.0000    Sensitize RBC for CF
86294.0000    Complement Titration
86297.0000    Preparation of Gelatin Water
86299.0000    Hemolysin Titration
86380.0000    Factor V Leiden PCR
86381.0000    Campylobacter Ab
86382.0000    Leukocyte Poor Blood Prep
86383.0000    Leukapheresis Donor
86384.0000    Lymphocyte Storage Liq Nitroge
86385.0000    Plasma Exchange Therapeutic
86386.0000    Thrombocytapheresis
86387.0000    Plasmapheresis First Unit
86388.0000    Platelet Agglutinins
86389.0000    Plasmapheresis add Units
86390.0000    Platelet Concentrate Prep 4+
86391.0000    Platelet Rich Plasma Prep
86392.0000    Platelet Concentrate Prep
86393.0000    Platelet Concentrate Pool
86394.0000    Thrombocyte Leukapheresis Dono
86395.0000    Platelet Freezing DMSO
86396.0000    Platelet Thawing and DE DMSO
86397.0000    Red Cell Exchange
86398.0000    Dithiothreiotol Destruction
86399.0000    Prewarm Technique
86400.0000    Thrombocytapheresis Therap
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86401.0000    Leukapheresis Therapeutic
86402.0000    Separation of Red Cell Mix
86403.0000    Decontamination of Lymphocyte
86404.0000    Mixed Lymphocyte Culture Setup
86405.0000    Mixed Lymphocyte Culture Pulse
86406.0000    Mitogen Assay Setup
86407.0000    Mitogen Assay Pulse  Harvest
86408.0000    Transfusion Outpatient Setup
86409.0000    Lymphocyte Separation fr Sol
86410.0000    Transferase Alanine Amino BLD
86411.0000    Transfusion Outpatient Each
86412.0000    Transfusion Reaction Clerical
86413.0000    BB Specimen
86414.0000    Donor Specimen
86415.0000    Crossmatch Specimen
86416.0000    Sp BB Specimen
86430.0000    Blood Administration
86432.0000    Blood Products Admin Other
86472.0000    Influenza B Victoria Ab
86473.0000    Influenza B Panama Ab
86474.0000    Influenza Profile
86475.0000    Lymphocyte Stimulation NOS
86476.0000    Lymphocyte Stimulation Candida
86477.0000    Nitroblue Tetrazolium Dye
86478.0000    Chemotactic Study
86479.0000    Lymphocyte Stimulation Concan
86480.0000    Lymphocyte Stimulation Phyto
86481.0000    Lymphocyte Stimulation Poke
86482.0000    Surface Marker Alpha Chain
86483.0000    Surface Marker Gamma Chain
86484.0000    Surface Marker B1
86485.0000    Surface Marker B2
86486.0000    Surface Marker BA 1
86489.0000    Surface Marker Delta Chain
86490.0000    Surface Marker Epsilon Chain
86491.0000    Surface Marker Ia
86492.0000    Surface Marker J5 (CALLA)
86493.0000    Surface Marker Kappa Chain
86494.0000    Surface Marker Lambda Chain
86495.0000    Surface Marker Mu Chain
86496.0000    Surface Marker Leu Chain
86497.0000    Surface Marker Mo Chain
86498.0000    Surface Marker My Chain
86499.0000    Surface Marker T3
86500.0000    Surface Marker T4 Leu 3
86501.0000    Surface Marker T4 T8 Ratio
86502.0000    Surface Marker T6
86503.0000    Surface Marker T8 Leu 2
86504.0000    Surface Marker T10
86505.0000    Surface Marker T11
86506.0000    Surface Marker Tac
86507.0000    Surface Marker Leu 7
86508.0000    Surface Marker Leu 11
86509.0000    Surface Marker Leu 15
86510.0000    Surface Marker Mo 1
86511.0000    Surface Marker Mo 2
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86512.0000    Surface Marker My 4
86513.0000    Surface Marker My 7
86514.0000    Surface Marker My 8
86515.0000    Surface Marker My 9
86516.0000    Platelet Associated IgG
86517.0000    Neuronal Nuclear Ab
86518.0000    Neuronal Nuclear Ab Panel
86519.0000    Ri Ab IFA
86520.0000    Hu Ab
86521.0000    CD1a
86522.0000    CD1b
86523.0000    CD1c
86524.0000    CD2
86525.0000    CD2R
86526.0000    CD3
86527.0000    CD4
86528.0000    CD5
86529.0000    CD6
86530.0000    CD7
86531.0000    CD8
86532.0000    CD8beta
86533.0000    CD9
86534.0000    CD10
86535.0000    CD11a
86536.0000    CD11b
86537.0000    CD11c
86538.0000    CDw12
86539.0000    CD13
86540.0000    CD14
86541.0000    CD15
86542.0000    CD15s
86543.0000    CD16
86544.0000    CD16b
86545.0000    CDw17
86546.0000    CD18
86547.0000    CD19
86548.0000    CD20
86549.0000    CD21
86550.0000    CD22
86551.0000    CD23
86552.0000    CD24
86553.0000    CD25
86554.0000    CD26
86555.0000    CD27
86556.0000    CD28
86557.0000    CD29
86558.0000    CD30
86559.0000    CD31
86560.0000    CD32
86561.0000    CD33
86562.0000    CD34
86563.0000    CD35
86564.0000    CD36
86565.0000    CD37
86566.0000    CD38
86567.0000    CD39
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86568.0000    CD40
86569.0000    CD40L
86570.0000    CD41
86571.0000    CD42a
86572.0000    CD42b
86573.0000    CD42c
86574.0000    CD43
86575.0000    CD44
86576.0000    CD45
86577.0000    CD45R0
86578.0000    CD45RA
86579.0000    CD45RB
86580.0000    CD46
86581.0000    CD47
86582.0000    CD48
86583.0000    CD49a
86584.0000    CD49b
86585.0000    CD49c
86586.0000    CD49d
86587.0000    CD49e
86588.0000    CD49f
86589.0000    CD50
86590.0000    CD51
86591.0000    CD52
86592.0000    CD54
86593.0000    CD55
86594.0000    CD56
86595.0000    CD57
86596.0000    CD58
86597.0000    CD59
86598.0000    CDw60
86599.0000    CD61
86600.0000    CD62E
86601.0000    Cell Suspension from Solid
86602.0000    CD62P
86603.0000    CD63
86604.0000    CD64
86605.0000    CDw65
86606.0000    CD66a
86607.0000    CD66abce
86608.0000    CD66acd
86609.0000    CD66acde
86610.0000    CD66ace
86611.0000    CD66ae
86612.0000    CD66b
86613.0000    CD66be
86614.0000    CD66c
86615.0000    CDce
86616.0000    CD66d
86617.0000    CD66de
86618.0000    CD68
86619.0000    CD69
86620.0000    CD70
86621.0000    CD71
86622.0000    CD72
86623.0000    CD73
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86624.0000    CD74
86625.0000    CDw75
86626.0000    CDw76
86627.0000    CD77
86628.0000    CDw78
86629.0000    CD79a
86630.0000    CD79b
86631.0000    CD80
86632.0000    CD81
86633.0000    CD82
86634.0000    CD83
86635.0000    CDw84
86636.0000    CD85
86637.0000    CD86
86638.0000    CD87
86639.0000    CD88
86640.0000    CD89
86641.0000    CDw90
86642.0000    CD91
86643.0000    CDw92
86644.0000    CD93
86645.0000    CD94
86646.0000    CD95
86647.0000    CD96
86648.0000    CD97
86649.0000    CD99
86650.0000    CD99R
86651.0000    CD100
86652.0000    CDw101
86653.0000    CD102
86654.0000    CD103
86655.0000    CD104
86656.0000    CD106
86657.0000    CD107a
86658.0000    CD107b
86659.0000    CDw108
86660.0000    CDw109
86661.0000    CD115
86662.0000    CDw116
86663.0000    CD117
86664.0000    CDw119
86665.0000    CD120a
86666.0000    CD120b
86667.0000    CDw121a
86668.0000    CDw121b
86669.0000    CDw122
86670.0000    Washed RBCs for Transfusion
86671.0000    CD126
86672.0000    CDw127
86673.0000    CDw128
86674.0000    CDw130
86675.0000    Leukocyte Agglutinins
86676.0000    Factor V Mutation
86677.0000    CD8 Percent
86678.0000    CD4/CD8
86679.0000    CD4 Absolute
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86680.0000    Leukocyte Common Ag
86681.0000    CD8 Absolute
86682.0000    CD62L
86683.0000    CDw124
86684.0000    Strongyloides Ab
86685.0000    CD19 Percent
86686.0000    CD55/CD59
86687.0000    Ri Ab
86705.0000    Therapeutic Phlebotomy
86706.0000    Isohemagglutin Titer
86707.0000    Blood Salvage
86708.0000    Fetal Screen
86709.0000    Bone Marrow Freezing
86710.0000    Bone Marrow Conc.
86711.0000    Bone Marrow Modification
86712.0000    Rh Typing
86713.0000    Apheresis
86714.0000    Rh Recheck
86715.0000    Immediate Spin Crossmatch
86716.0000    DAT
86717.0000    Splitting of Blood Products
86718.0000    Leukodeplete in Lab
86719.0000    Concentrate
86720.0000    Prepare Frozen Blood
86721.0000    Thawing Frozen Blood
86722.0000    Freezing and Thawing Blood
86723.0000    Enzyme Treated Panel
86724.0000    Antibody Titer
86725.0000    Chloroquine Dissociation
86726.0000    Cold Autoabsorption
86727.0000    Complete Crossmatch Incub
86728.0000    Complete Crossmatch Antiglob
86729.0000    Density Gradient Sep
86730.0000    Dithiothreital Diff
86731.0000    Neutralization
86732.0000    Mucormycosis
86733.0000    RBC Antigen Type Other
86734.0000    Rh Phenotype
86735.0000    Serum Dilution
86736.0000    Unit Phenotype/Screen
86737.0000    ZZAP Autoabsorption
86738.0000    Mycoplasma
86739.0000    Plateletpheresis
86740.0000    Insulin Like Growth Factor
86741.0000    Protein S AB
86742.0000    Acetylcholine Receptor Ab Pane
86743.0000    Acetycholine Receptor Binding
86744.0000    Acetylcholinesterase
86745.0000    Protein S Ag
86746.0000    HLA Bw Phenotype
86747.0000    HLA Cw Phenotype
86748.0000    HLA DR Phenotype
86749.0000    HLA DQ Phenotype
86750.0000    HLA A Phenotype
86751.0000    HLA B Phenotype
86765.0000    Enterovirus Ab
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86790.0000    Packed Red Blood Sediment
86795.0000    Packed Red Blood Cells
86796.0000    Packed Red Blood (4 or more)
86798.0000    Fetal Hemoglobin Detection  F
86799.0000    Red Blood Cells Unit
86800.0000    Fresh Frozen Plasma Prep
86801.0000    Fresh Frozen Plasma (4+)
86802.0000    Red Blood Cells Leukocytes Red
86803.0000    Red Blood Cells Deglycerolized
86804.0000    Platelet Pack Unit
86805.0000    Fresh Frozen Plasma Thawing
86806.0000    Platelets Leukocytes Reduced
86807.0000    Platelet Pheresis Leukocytes R
86808.0000    Granulocyte Pheresis Irradiate
86809.0000    Fresh Frozen Plasma
86810.0000    Separation of Blood Unit
86811.0000    Fresh Frozen 24Hr
86812.0000    Cryoprecipitate Reduced Plasma
86813.0000    Plasma Solvent Detergent Treat
86814.0000    Cryoprecipitate AHF
86815.0000    HLA Typed Blood Product
86816.0000    Platelet Ag 1 Negative Product
86818.0000    Donor Recruitment In Hospital
86819.0000    Donor Recruitment In Comm
86820.0000    Blood Unit Credit Function
86821.0000    Compatibility Crossmatch Plate
86822.0000    Type + Screen Platelets
86823.0000    Neutrophil Ab
86824.0000    Leukocyte Ab
86825.0000    Donor Rejected
86826.0000    CMV Ab Negative Product
86827.0000    Pooling Products
86828.0000    Compatibility non RBC Crossmat
86829.0000    Washing Blood Products
86830.0000    Volume Reduction
86831.0000    Directed Donation
86832.0000    Transfusion
86833.0000    Transfusion Blood Products
86834.0000    Transfusion Leukocytes
86835.0000    Transfusion Procedure NOS
86836.0000    CD3+HLA-DR+ Percent
86837.0000    CD3+HLA-DR+ Absolute
86838.0000    CD 2 Absolute
86839.0000    CD20 Absolute
86840.0000    Phlebotomy Therapeutic
86841.0000    T3 OK Percent
86842.0000    T3 OK Absolute
86843.0000    Cytoplasmic Neutrophil Atypica
86844.0000    Richettsia Panel
86845.0000    Phlebotomy Therapeutic Bedside
86846.0000    Norwalk Agent Ab
86847.0000    Inhibition Neutralization
86848.0000    Microplate Hemagglutination
86849.0000    Microplate Hemagg Tech Serum
86850.0000    Inventory(1)
86851.0000    Red Blood Cells ACD-A
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86852.0000    Red Blood Cells Div Unit ACD-A
86853.0000    Red Blood Cells, Irrad ACD-A
86854.0000    Red Blood Cells Leuko Dep ACA-
86855.0000    Whole Blood ACD-A
86856.0000    Red Blood Cells CPD
86857.0000    Red Blood Cells Div Unit CPD
86858.0000    Red Blood Cell Irrad CPD
86859.0000    Red Blood Cell Leuko Dep CDP
86860.0000    Rh Immune Globulin
86861.0000    Squamous Cell CA Ag
86862.0000    C3 Nephritic Factor
86863.0000    BCR/ABL Gene
86864.0000    AutoImmune Ab Panel
86865.0000    Aspergillus Fumigatus Type 1 A
86866.0000    Aspergillus Fumigatus Type 2 A
86867.0000    Cytotoxic Ab Screen
86868.0000    HGE IgG Ab
86869.0000    Quinine Induced Ab
86870.0000    Toxocara Ab
86871.0000    Nabferon
86872.0000    CD138
86873.0000    CD125
86874.0000    CD NOS
86875.0000    IgG Subsets 1
86877.0000    IgG Subsets 4
86878.0000    Human Monocytic Ehrlichiosis A
86879.0000    Human Monocytic Ehrlichiosis A
86880.0000    Burkholderia pseudomallei Ab I
86881.0000    Burkholderia pseudomallei Ab I
86885.0000    Coombs Test
86886.0000    Coombs Test Indirect
86903.0000    Type + Screen Blood
86910.0000    Paternity Blood Typing
86960.0000    Hemochromatosis
86961.0000    Heparin Anti Xa Unfract
86994.0000    BKV ViActive qPCR
86995.0000    Adenovirus Ag,IF
86996.0000    Influenza A Ag,IF
86997.0000    Influenza B Ag,IF
86998.0000    Respiratory Syncytial Ag,IF
86999.0000    Rapid Respiratory Viral Panel
87000.0000    Bacteria Ab Coated
87001.0000    Fecal Leukocytes
87002.0000    Bacterium NOS
87003.0000    Legionella Culture
87004.0000    Bacteroides species
87005.0000    Bartonella species NOS
87006.0000    Bordatella Parapertussis
87007.0000    Bordetella Pertussis
87008.0000    Brucella species
87009.0000    Legionella DFA
87010.0000    Clostridium Difficile Toxin
87011.0000    Rapid Viral Smear
87012.0000    Clostridium Tetani Toxin
87013.0000    Corynebacterium species NOS
87014.0000    Corynebacterium Diptheriae
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87015.0000    Blood Culture Conventional
87016.0000    Escherichia coli Each Sero
87017.0000    Francisella tularensis
87018.0000    Haemophilus Influenzae
87019.0000    Feces Macroscopic Exam
87020.0000    Haemophilus influenzae Type A
87021.0000    Feces Microscopic Exam
87022.0000    Haemophilus Influenzae type B
87023.0000    Feces Pin Worm Examination
87024.0000    Legionella species NOS
87025.0000    Sodium Hydroxide Procedure
87026.0000    Legionella pneumophilia
87027.0000    Strep Grp A Coagglut
87028.0000    Listeria species
87029.0000    Neisseria species NOS
87030.0000    Neisseria Gonorrhoeae
87031.0000    Neisseria Meningitidis
87032.0000    Neisseria Meningitidis Typing
87033.0000    Norcardia species NOS
87034.0000    Proteus OX 2
87035.0000    Strep Grp A Enzyme Immun
87036.0000    Proteus OX 19
87037.0000    Strep Grp A  Latex Agglut
87038.0000    Proteus OX K
87039.0000    Wet Prep for Trichomonas
87040.0000    Pseudomonas Pseudomallei
87041.0000    Escherichia Coli 0157
87042.0000    Salmonella Each Grouping
87043.0000    Ziehl Neelsen Stain
87044.0000    Salmonella Paratyphi A
87045.0000    Zinc Sulfate Flotation
87046.0000    Salmonella Paratyphi B
87047.0000    Fluorochrome Type Stains
87048.0000    Salmonella Typhi H
87049.0000    Formalin Ether or Ethyl
87050.0000    Salmonella Typhi O
87051.0000    Iron Hematoxylin Stain
87052.0000    Salmonella Typhi Vi
87053.0000    Kinyoun's Acid Fast Stain
87054.0000    Salmonella Each Typing
87055.0000    Merthiolate Iodine Formalin
87056.0000    Shigella Each Grouping
87057.0000    NALC Procedure
87058.0000    Shigella Each Typing
87059.0000    Staphylococcus species NOS
87060.0000    Streptobacillus species
87061.0000    Trichrome Stain
87062.0000    Streptococcus Group A
87063.0000    Zephiran Trisodium Phosphate
87064.0000    Streptococcus Group B
87065.0000    Viral serology
87066.0000    Streptococcus Group C
87067.0000    India Ink prep
87068.0000    Streptococcus Group D
87069.0000    KOH prep, fungal
87070.0000    Streptococcus Group G
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87071.0000    Haemophilus influenza Type B b
87072.0000    Streptococcus Group MG
87073.0000    Neisseria meningitidis by Late
87074.0000    Streptococcus Pneumoniae
87075.0000    Streptococcus species NOS
87076.0000    Vibrio Cholera
87077.0000    Histoplasmosis Ab yeast/mycel
87078.0000    Yersinia Enterocolitica
87079.0000    Chlamydia culture
87080.0000    Yersinia Pestis
87081.0000    Misc Micro Test 1
87082.0000    Yersinia Pseudotuberculosis
87083.0000    Yersinia species NOS
87084.0000    Misc Micro Test 2
87085.0000    Misc Micro Test 3
87086.0000    Misc Micro Test 4
87087.0000    Misc Micro Test 5
87088.0000    Herpes Simplex Encephalitis
87089.0000    Culture GC
87090.0000    Coccidioides Precipitin
87091.0000    Enteroviral Ab
87092.0000    Chlamydia/GC Panel
87093.0000    API Etiology Rapid
87094.0000    Misc Culture 1
87095.0000    Misc Culture 2
87096.0000    Misc Culture 3
87097.0000    Misc Culture 4
87098.0000    Misc Culture 5
87099.0000    Misc Culture 6
87100.0000    Misc Culture 7
87101.0000    InHouse or Send Out Test
87102.0000    Etiology
87103.0000    Specimen Source
87104.0000    Instrument MI Setup
87105.0000    Acyclovir
87106.0000    Almecillin
87107.0000    Anantadine
87108.0000    Amoxicillin+Clavulanate
87109.0000    Ampicillin+Sulbactam
87110.0000    Betalactase
87111.0000    Azithromycin
87112.0000    Bacampicillin
87113.0000    Betalactase ext Spectrum
87114.0000    Butirosin
87115.0000    Cefatrizine
87116.0000    Cefepime
87117.0000    Cefixime
87118.0000    Cefemetazole
87119.0000    Cefodizime
87120.0000    Cefonicid
87121.0000    Cefotetan
87122.0000    Cefpirome
87123.0000    Cefpodoxime
87124.0000    Cefprozil
87125.0000    Ceftazindime
87126.0000    Ceftibuten
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87127.0000    Chlortetracycline
87128.0000    Cinoxacin
87129.0000    Clarithromycin
87130.0000    Colistimethate
87131.0000    Colinstin
87132.0000    Cyclacillin
87133.0000    Demeclocycline
87134.0000    Dirithromycin
87135.0000    Erythromycin+Sulfisoxazole
87136.0000    Fleroxacin
87137.0000    Floxacillin
87138.0000    FP-Amycetin
87139.0000    Fusidate
87140.0000    Ganciclovir
87141.0000    Gentamicin HP
87142.0000    Gramicidind
87143.0000    Hetacillin
87144.0000    Imipenem+Cilastatin
87145.0000    Kanamycin HP
87146.0000    Lincomycin
87147.0000    Lomefloxacin
87148.0000    Loracarbef
87149.0000    Lymecycline
87150.0000    Skin Test
87151.0000    Borrelia Burgdorferi
87152.0000    Meropenem
87153.0000    Borrelia Vincentii
87154.0000    TB Tine
87155.0000    Treponema carateum (pinta)
87156.0000    Tazobactam
87157.0000    Treponema pallidum (syphilis)
87158.0000    Neurogenic Viral Panel
87159.0000    Treponema pertenue (yaws)
87160.0000    Piperacillin+Tazobactam
87161.0000    Leptospira species NOS
87162.0000    Trichinella Ab
87163.0000    Spirochete NOS
87164.0000    Echinococcus Ab
87165.0000    Methacycline
87166.0000    Miocamycin
87167.0000    Mupirocin
87168.0000    Coccidiodes Ab
87169.0000    Coccidiodes Ag
87170.0000    Nalidixate
87171.0000    Ofloxacin
87172.0000    Oleandomycin
87173.0000    Mycoplama Ab
87174.0000    Oxytetracycline
87175.0000    Chlamydia Pneumoniae
87176.0000    Endotoxin
87177.0000    Chlamydia Psittaci
87178.0000    Pefloxacin
87179.0000    Penicillin G
87180.0000    Penicillin V
87181.0000    Phenethicillin
87182.0000    Chlamydia Trachomatis
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87183.0000    Pepemidate
87184.0000    Pepercil+Tazobactam
87185.0000    Pivampicillin
87186.0000    Ristocetin
87187.0000    Chlamydia NOS
87188.0000    Rolitetracycline
87189.0000    Rosoxacin
87190.0000    Roxithromycin
87191.0000    Sparfloxacin
87192.0000    Lymphogranuloma venereum
87193.0000    Streptomycin HP
87194.0000    Sulfadiazine
87195.0000    Sulfisoxazole
87196.0000    Ataxia Profile
87197.0000    Mycoplasma NOS
87198.0000    Talampicillin
87199.0000    Mycoplasma pneumoniae
87200.0000    Teicoplanin
87201.0000    Misc Culture 8
87202.0000    Actinomyces species
87203.0000    Temafloxacin
87204.0000    Temocillin
87205.0000    Tetracycline
87206.0000    Ticarcillin+Cavulanate
87207.0000    Aspergillus species NOS
87208.0000    Helicobacter Pylorii
87209.0000    Trimethoprim+Sulfamethoxazole
87210.0000    Troleandomycin
87211.0000    Viomycin
87212.0000    Aspergillus Fumigatus
87213.0000    Zidovudine
87214.0000    Giardia Ag
87215.0000    Giardia Ab
87216.0000    Giardia Ag EIA
87217.0000    Blastomyces Dermatitidis
87218.0000    Misc Culture 9
87219.0000    Misc Culture 10
87220.0000    Misc Immuno Test 6
87221.0000    Misc Immuno Test 7
87222.0000    Candida Albicans
87223.0000    Misc Immuno Test 8
87224.0000    Misc Immuno Test 9
87225.0000    Misc Immuno Test 10
87226.0000    Streptomycin Synergy Scr
87227.0000    Candida species NOS
87228.0000    IgA Quant Cardiolipin
87229.0000    Congo Red Stain
87230.0000    Acanthamoeba Culture
87231.0000    IgG Quant Cardiolipin
87232.0000    Coccidioides Immitis
87233.0000    IgG Qual Cardiolipin
87234.0000    Adenovirus Ab
87235.0000    Adrenal Ab
87236.0000    Acid Fast Org ID
87237.0000    Cryptococcus Neoformans
87238.0000    Fontana Masson Stain
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87239.0000    Brown Hopp Stain
87240.0000    Leptospira Ab
87241.0000    Leptospira Ag
87242.0000    Fungus NOS
87243.0000    Dengue Virus Ab
87244.0000    Voriconazole
87245.0000    Sjorgren Syndrome A
87246.0000    Sjorgren Syndrome B
87247.0000    Histoplasma capsulatum Mycelia
87248.0000    Cytomegalovirus Ag
87249.0000    Chlamydia Trachomatis DNA
87250.0000    Cardiolipin Ab Panel
87251.0000    Cardiolipin Ab
87252.0000    Histoplasma capsulatum Yeast
87253.0000    IgM Quant Cardiolipin
87254.0000    Hepatitis C EIA
87255.0000    IgM Qual Cardiolipin
87256.0000    IgA Qual Cardiolipin
87257.0000    Micropolyspora faeni
87258.0000    Herpes I&II
87259.0000    Sjorgren Syndrome A Quant
87260.0000    Sjorgren Syndrome B Quant
87261.0000    Influenza A&B
87262.0000    Paracoccidiodes Braziliensis
87263.0000    Axonal HMSN Eval
87264.0000    Platelet Associated Ab Dir
87265.0000    Platelet Associated Ab Ind
87266.0000    Herpesvirus-8 IgG
87267.0000    Saccharomonospora Viridis
87268.0000    Skin Dermal Epidermal Ab
87269.0000    Skin Intercellular Ab
87270.0000    Oxidase
87271.0000    Pipemidic Acid
87272.0000    Sporotrichum species
87273.0000    Pritstinamycin
87274.0000    Antibiotic NOS
87275.0000    Culture Clostridium Difficle
87276.0000    Cyclospora
87277.0000    Thermoactinomyces Candidus
87278.0000    Thermoactinomyces Candidus Ab
87279.0000    Mycobacterium Gordonea DNA
87280.0000    Mycobacterium Avium DNA
87281.0000    Neisseria Meninigitidis A
87282.0000    Thermoactinomyces Vulgaris
87283.0000    Misc Flow Test 1
87284.0000    Misc Flow Test 2
87285.0000    Misc Flow Test 3
87286.0000    Misc Flow Test 4
87287.0000    Misc Flow Test 5
87288.0000    Misc Flow Test 6
87289.0000    Misc Flow Test 7
87290.0000    Misc Flow Test 8
87291.0000    Misc Flow Test 9
87292.0000    Misc Flow Test 10
87293.0000    Staphlococcus Aures Meth Resis
87294.0000    Streptococcus Group A Scr
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87295.0000    Sarcoptes Scabiei
87296.0000    Culture Vibrio
87297.0000    Viral Smear
87298.0000    CH100
87299.0000    Friedreich Ataxia Mutation
87300.0000    Parvovirus AB IgM
87301.0000    Varicella Zoster AB IgM
87302.0000    Amoeba NOS
87303.0000    Cryptosporidium
87304.0000    Extractable Nuclear Ab
87305.0000    Fluoxetine+Norfluoxetine
87306.0000    Diasialyl Ganglioside Ab IgG
87307.0000    Tetrasialyl Gangloside Ab IgG
87308.0000    Cysticercus
87309.0000    Hepatitis C Superoxidase Eis A
87310.0000    Myelin Associated Glycoprotein
87311.0000    Neural Thread Protein
87312.0000    Hepatitis C NS5 Ab
87313.0000    Echinococcus species
87314.0000    Linezolid
87315.0000    Parainfluenza 2 Ab
87316.0000    Parainfluenza 3 Ab
87317.0000    Entamoeba species NOS
87318.0000    Entamoeba Histolytica
87319.0000    Neisseria Gonorrhoeae DNA
87320.0000    Trypsinogen
87321.0000    Leishmania Braziliensis
87322.0000    Lieshmania Braziliensis IgG
87323.0000    Filaria species
87324.0000    Leishmania Braziliensis IgM
87325.0000    Leishmania Donovani
87326.0000    Leishmania Donovani IgG
87327.0000    Leishmania Donovani IgM
87328.0000    Microfilarial Ag
87329.0000    Leishmania Mexicana
87330.0000    Leishmania Mexicana IgG
87331.0000    Leishmania Mexicana IgM
87332.0000    Leishmania Tropicalis
87333.0000    Leishmania species NOS
87334.0000    Leishmania Tropicalis IgG
87335.0000    Leishmania Tropicalis IgM
87336.0000    Basement Membrane Ab Titer
87337.0000    Basement Membrane Zone
87338.0000    Parasite NOS
87339.0000    BCL 2
87340.0000    Intercellular Structure
87341.0000    Intercellular Structure Ab
87342.0000    Intercellular Structure Titer
87343.0000    Plasmodium species (malaria)
87344.0000    Hevea Brazil
87345.0000    Melas MT DNA Mutation
87346.0000    Hereditary Familial Hemochroma
87347.0000    HEF CYS 282 TRY Mutation
87348.0000    Schistosoma species
87349.0000    HEF HIS 63 ASP Mutation
87350.0000    PR Gene Mutation
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87351.0000    Puumala Virus IgG
87352.0000    Puumala Virus IgM
87353.0000    Toxocara species
87354.0000    Prostrate Cancer Risk
87355.0000    Toxoplasma Gondii
87356.0000    RT Gene Mutation
87357.0000    Celiac Antibody Panel
87358.0000    Trichinella species NOS
87359.0000    Sulfatide ELISA IgM
87360.0000    Trypanosoma Cruzi
87361.0000    Sulfatide ELISA IgG
87362.0000    Trypanosoma Rhodesiensis
87363.0000    X25
87364.0000    Trypanosoma Gambiensis
87365.0000    X25 Allele1
87366.0000    Visceral Larval Migrans
87367.0000    X25 Allele2
87368.0000    Thyroid Stimulating Hormone Ab
87369.0000    Islet Cell Ag
87370.0000    Islet Cell Ab
87371.0000    Acanthamoeba Stain
87372.0000    Strongyloides Ab IgG
87373.0000    Cystic Fibrosis
87374.0000    Reticulin Ab
87375.0000    Smooth Muscle Ab
87376.0000    Arbovirus
87377.0000    Culture Varicella Zoster
87378.0000    Coxiella Burnetti
87379.0000    Herpes Virus VI
87380.0000    Rickettsia Akari
87381.0000    Influenza B Guandong
87382.0000    Rickettsia NOS
87383.0000    Influenza A Taiwan
87384.0000    Rickettsia Rickettsii
87385.0000    Influenza B Beijing
87386.0000    Rickettsia typhi (mooseri)
87387.0000    Intrinsic Factor Ag
87388.0000    Rickettsia Prowazekii
87389.0000    Pneumocystis
87390.0000    Rickettsia Tsutsugamushi
87391.0000    Precipitating Ab
87392.0000    Salmonella C H
87393.0000    Salmonella C O
87394.0000    Salmonella D O
87395.0000    Stain
87396.0000    Paraneoplastic Neuronal Ab
87397.0000    Hepatitis B e Ag
87398.0000    Hepatitis B e Ab
87399.0000    Endocrine Neoplasia Type 2 Mul
87400.0000    Cryptococcus Ag
87401.0000    Cryptococcus Ab
87402.0000    Adenovirus
87403.0000    Pregnancy Test
87404.0000    California Encephalitis
87405.0000    Hepatitis C Neutral
87406.0000    Colorado Tick Fever Virus
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87407.0000    Viro Specimen
87408.0000    Corona Virus
87409.0000    Myco Specimen
87410.0000    Coxsackie A
87411.0000    Parasite Specimen
87412.0000    Coxsackie B
87413.0000    Rubeola Ab
87414.0000    Cytomegalovirus
87415.0000    Rubeola Ag
87416.0000    Dengue Fever Virus
87417.0000    Rubeola Ab Quant
87418.0000    Eastern Equine Encephalitis
87419.0000    X*Hepatitis C RNA
87420.0000    Echovirus
87421.0000    Viral Load
87422.0000    Epstein Barr Capsid Ag
87423.0000    HIV Viral Load Ultra
87424.0000    Epstein Barr Early Ag
87425.0000    VRE Culture
87426.0000    Epstein Barr Nuclear Ag
87427.0000    Epstein Barr
87428.0000    Hepatitis A
87429.0000    Epstein Barr Ag
87430.0000    Hepatitis B Core
87431.0000    Diasialyl Ganglioside Ab
87432.0000    Hepatitis B Delta
87433.0000    Diasialyl Ganglioside Ag
87434.0000    Hepatitis B e
87435.0000    Myeloperoxidase Ab
87436.0000    Hepatitis B Surface
87437.0000    Hepatitis C
87438.0000    Herpes simplex I
87439.0000    Hepatitis C Ag
87440.0000    Herpes simplex II
87441.0000    Myeloperoxidase Ag
87442.0000    Herpes zoster
87443.0000    Herpesvirus NOS
87444.0000    HTLV I
87445.0000    Chancroid Culture
87446.0000    HTLV II
87447.0000    Parvovirus B19 Ag
87448.0000    HIV
87449.0000    Phosphatidylserine Ab
87450.0000    Influenza A
87451.0000    Phosphatidylserine Ag
87452.0000    Influenza B
87453.0000    HEp 2 Cells ANA
87454.0000    Influenza C
87455.0000    Parvovirus B19 Ab
87456.0000    Japanese B Encephalitis
87457.0000    Mouse Kidney ANA
87458.0000    Lymphocytic Choriomeningitis
87459.0000    Mysoline Ab
87460.0000    Mumps Soluble
87461.0000    Mysoline Ag
87462.0000    Mumps Viral
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87463.0000    Sarcolemma Ab
87464.0000    Papillomavirus
87465.0000    Sarcolemma Ag
87466.0000    Parainfluenza
87467.0000    Skeletal Muscle Ab
87468.0000    Poliomyelitis
87469.0000    Skeletal Muscle Ag
87470.0000    Q Fever Group
87471.0000    Arbovirus CALIF Titer
87472.0000    Reovirus
87473.0000    Arbovirus EEE Titer
87474.0000    Respiratory Syncytial Virus
87475.0000    Arbovirus SLE Titer
87476.0000    Rhinovirus
87477.0000    Arbovirus WEE Titer
87478.0000    Rotavirus
87479.0000    Clostridium Difficile Ag
87480.0000    Rubella
87481.0000    Clostridium Difficile Ab
87482.0000    Rubeola
87483.0000    Candida Complement Titer
87484.0000    St Louis Equine Encephalitis
87485.0000    Parvovirus Ab
87486.0000    Vaccinia
87487.0000    Histoplasmin Ag
87488.0000    Varicella Zoster
87489.0000    Histoplasmin Ab
87490.0000    Venezuelan Equine Encephalitis
87491.0000    Histoplasmin Titer
87492.0000    Virus NOS
87493.0000    HLA PRA
87494.0000    Yellow Fever
87495.0000    Influenza A Bangkok
87496.0000    Western Equine Encephalitis
87497.0000    Influenza A England
87498.0000    Influenza A Phillipine
87499.0000    Influenza A Singapore
87500.0000    Intrinsic Factor Ab
87501.0000    Bacteriology
87502.0000    Mycobacteriology
87503.0000    Mycology
87504.0000    Virology
87505.0000    Parasitology
87506.0000    Micro Misc
87507.0000    Thyperoxidase Ab
87508.0000    Aerobic Culture
87509.0000    Culture Fungus
87510.0000    Culture Chlamydia/GC
87511.0000    Blood Culture Manual
87512.0000    Blood Culture Automated
87513.0000    Gram Stain Blood Culture
87514.0000    Organism Identification Auto
87515.0000    Biochemical Test Automated
87516.0000    Organism ID MIC Automated
87517.0000    Body Fluid Culture Automated
87518.0000    Susceptibility MIC Automated
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87519.0000    Brucella Abortus
87520.0000    Urine Bacterial Screen Automat
87521.0000    Org ID & Susceptibility Auto
87522.0000    Yeast ID Automated
87523.0000    Salmonella E
87524.0000    Bacteria Ag
87525.0000    Culture Mycobacteria
87526.0000    Culture Virus
87527.0000    Shell Vial (Spin)
87528.0000    Culture Aerobic&Anerobic
87529.0000    Culture Aerobic Routine
87530.0000    Accession Specimen Bac Cul
87531.0000    Planting 1 Pc Media Bact
87532.0000    Planting 2 Pc Media Bact
87533.0000    Planting 3 Pc Media Bact
87534.0000    Planting 4 Pc Media Bact
87535.0000    Planting 5 Pc Media Bact
87536.0000    Planting 6 Pc Media Bact
87537.0000    Planting 7 Pc Media Bact
87538.0000    Planting 8 Pc Media Bact
87539.0000    Culture Campylobacter
87540.0000    Planting each add Pc Bact
87541.0000    Culture Verotoxin E. Coli
87542.0000    Reading Bact Culture Sterile
87543.0000    Culture Yersinia
87544.0000    Reading Bact Cult Non sterile
87545.0000    Culture Group B Strep
87546.0000    Reading Bact Culture Any Spec
87547.0000    Specimen Preparation
87548.0000    Reading Bact Culture 2+ Org
87548.7038    Reading Bact Culture Sterile~M
87549.0000    Amebiasis
87550.0000    Recording & Reporting Bact
87551.0000    Ehrlichia Chaffeensi
87552.0000    Babesia Microti
87553.0000    Urine Culture
87554.0000    CSF Culture
87555.0000    Blood Culture
87556.0000    Wound Culture
87557.0000    Stool Culture
87558.0000    Nose/Throat Culture
87559.0000    Misc Culture
87560.0000    Environmental Culture
87561.0000    Pertussis Culture
87562.0000    Thermoactinomyces Viridis Ab
87563.0000    Q Fever Phase 1 Ab
87564.0000    Q Fever Phase 2 Ab
87565.0000    Bacteriology Susc
87566.0000    Culture HIV 1 Qual
87567.0000    Cefdinir
87568.0000    Mycobacterium Susc
87569.0000    Coccidioides IgG
87570.0000    Bacteriology Organism
87571.0000    HIV Genotype PCR
87572.0000    Hepatitis C Genotype PCR
87573.0000    Niemann Pick Type C
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87574.0000    Tay Sach Dis Mutation
87575.0000    JC Virus
87576.0000    Parasite Organism
87577.0000    JC Virus Ab
87578.0000    Fungal Organism
87579.0000    Neural Tube Defect
87580.0000    Down Syndrome
87581.0000    Trisomy
87582.0000    Trisomy 18
87583.0000    Acid Fast Quantity
87584.0000    Bartonella quintana Ab IgM
87585.0000    Platelet Associated IgM
87586.0000    Lymphoma Phenotype
87587.0000    Fetoprotein Alpha Maternal
87588.0000    Acetylcholine Modulating Ab
87589.0000    Mycobacterium Organism
87590.0000    Viral Agent
87591.0000    Myocardium Ab
87592.0000    Neutrophil Oxidative Burst
87593.0000    Salmonella O
87594.0000    Culture Skin
87595.0000    Salmonella O Grp D
87596.0000    Salmonella Flg d
87597.0000    Salmonella Flg a
87598.0000    Salmonella Flg b
87599.0000    Salmonella O Grp A
87600.0000    Inoculation Blood culture
87601.0000    Salmonella O Grp B
87602.0000    Histoplasma Ag
87603.0000    Weil Felix Ag
87604.0000    Subculture Blood Culture
87605.0000    AFB Smear
87606.0000    HIV 1 Genotype (PRI)
87607.0000    HIV 1 Genotype (RTI)
87608.0000    Calcium VG Channel Ab
87609.0000    West Nile IgG
87610.0000    West Nile IgM
87611.0000    Culture HS Virus
87612.0000    Autologous Collection
87613.0000    SGPG Ag
87614.0000    West Nile Ab
87615.0000    ECHO 11
87616.0000    ECHO 30
87617.0000    ECHO 4
87618.0000    ECHO 6
87619.0000    ECHO 7
87620.0000    ECHO 9
87621.0000    Chlamydia Pneumoniae IgG
87622.0000    Chlamydia Pneumoniae IgA
87623.0000    Chlamydia Pneumoniae IgM
87624.0000    Chlamydia Trachomatis IgG
87625.0000    Chlamydia Trachomatis IgA
87626.0000    Chlamydia Trachomatis IgM
87627.0000    Chlamydia Psittaci IgG
87628.0000    Chlamydia Psittaci IgA
87629.0000    Chlamydia Psittaci IgM
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87630.0000    HU Ab
87631.0000    HU Ab Western Blot
87632.0000    Aspergillus Niger
87633.0000    Aspergillus Flavus
87634.0000    Neiseria Meningitis B
87635.0000    Neisseria Meningitis C
87636.0000    Neisseria Meningitis Y
87637.0000    Neisseria Meningitis W135
87638.0000    Coxiella Burnetti 1 IgG
87639.0000    CD3-CD19+ Percent
87640.0000    Aspergillus Flavus Ab
87641.0000    Aspergillus Fumigatus Type 6 A
87642.0000    Thermoactinomyces Sacchri Ab
87643.0000    Human Papillomavirus
87644.0000    Diasialyl Ganglioside Ab IgM
87645.0000    Aspergillus Ab IgA
87646.0000    Aspergillus Ab IgG
87647.0000    Aspergillus Ab IgM
87648.0000    Brucella Brugneri
87649.0000    Brucella Interpretation
87650.0000    Organism Identification ID Kit
87651.0000    Brucella Canis
87652.0000    Burcella Pertussis
87653.0000    Candida Species Ag
87654.0000    CAR Associated Retinopathy Ab
87655.0000    Endomysial Ab IgA
87656.0000    Cysticerus Ab
87657.0000    Interferon Beta Ab IgG
87658.0000    PMP22 Gene Mutation
87659.0000    Sporotrichosis
87660.0000    Sporotrichosis Ab
87661.0000    Staphlococcus Aureus Toxin Ab
87662.0000    Staphlococcus Aureus Toxin 1 A
87663.0000    TSH Immunoglobulin Panel
87664.0000    TSH Immunoglobulin Index
87665.0000    Cytoplasmic Neutrophil Pattern
87666.0000    Culture Skin,Hair,Nails
87667.0000    Fungal Identification
87668.0000    Fungal ID Mold
87669.0000    Fungal ID Yeast
87670.0000    Bacteriology Organism ID
87671.0000    Bacteriology Organism Aerobic
87672.0000    Bacteriology Organism Anaerobi
87673.0000    DNA Probe Culture ID
87674.0000    Clostridium Difficile
87675.0000    Concentration Infectious Agent
87676.0000    Gatifloxacin
87677.0000    Moxifloxacin
87678.0000    Saccharomyces cerevisiae Ab Ig
87679.0000    Saccharomyces cerevisiae Ab Ig
87680.0000    Babesia Ab, Total
87681.0000    Babesia microti IgG
87682.0000    Babesia microti IgM
87683.0000    Babesia microti DNA PCR
87684.0000    SCA 7 Allele 1
87685.0000    SCA 7 Allele 2
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87686.0000    HIV 1 Ab GP160
87687.0000    HIV 1 Ab GP120
87688.0000    HIV 1 Ab P66
87689.0000    HIV 1 Ab P65
87690.0000    HIV 1 Ab P51
87691.0000    HIV 1 Ab GP41
87692.0000    HIV 1 Ab P40
87693.0000    HIV 1 Ab P31
87694.0000    HIV 1 Ab P17
87695.0000    Arthropod Identification
87696.0000    Tick Identification
87697.0000    Cockroach Identification
87698.0000    Epstein Barr Nuclear Ab
87700.0000    Acridine Orange Stain
87701.0000    Digestion Decontam of Spec
87702.0000    Agglutination Slide
87703.0000    Anaerobic Jar Flushing
87704.0000    Autoclave Control Attest
87705.0000    Bactigen for Group B Strep
87706.0000    Biochemical Test Rapid
87707.0000    Bactigen Meningitis Panel
87708.0000    Conventional Micro Tube Test
87710.0000    Dark field Examination
87711.0000    Direct FA
87712.0000    Direct Fluorescent Ab
87713.0000    Disposal of Contaminated Matrl
87714.0000    Freezing Organisms
87715.0000    Gas Chromatography 1st inject
87716.0000    Gas Chromatography  subs inj
87717.0000    Gas Pak or Biobag
87718.0000    Gram Stain Direct from Spec
87719.0000    Colony Count
87720.0000    Gram Stain Organism
87721.0000    Calcofluor White Stain
87722.0000    Autoclave Control Killet
87723.0000    Colony Count Fungal
87724.0000    Media Preparation
87725.0000    Monitoring Incubator CO2
87726.0000    Phadebac
87728.0000    Phenylalanine Blood Guthrie
87730.0000    Single Disc for Identification
87732.0000    Autoclave Control Spordex
87734.0000    Streptex
87736.0000    Subculture PBT
87737.0000    Strep Grp B  Latex Agglut
87738.0000    Strep Grp B  Enzyme Immun
87740.0000    Giardia Lamblia
87741.0000    Strongyloides
87742.0000    XV Strips for Haemophilus
87744.0000    Washing Bench Top
87745.0000    Biochemical ID
87746.0000    Abbreviated ID
87747.0000    Species ID
87748.0000    Species Typing
87749.0000    Biochemical ID + Sero
87750.0000    Organism ID MIC Combo Manual
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87751.0000    Cellophane Tape Prep
87752.0000    Probe Test
87753.0000    Non-Immunologic ID
87754.0000    Gram Stain
87755.0000    Calcofluor Prep
87756.0000    Acid Fast Stain
87757.0000    Tzanck Prep
87758.0000    Giemsa Stain
87759.0000    Wet Prep w/o Iodine
87760.0000    Nucleic Acid Probe
87761.0000    Nucleic Acid Amplification
87762.0000    Darkfield
87763.0000    Agar Dilution
87764.0000    Diffusion Test
87765.0000    Disk Diffusion
87766.0000    Microtiter
87767.0000    Macrotube
87768.0000    Microtiter MBC
87769.0000    Macrotube MBC
87770.0000    Bactericidal Serum
87771.0000    Nuclear Molecular Diag
87772.0000    Enzymatic Digestion
87773.0000    Interpretation and Report
87799.0000    DNA Probe
87800.0000    Accession Specimen Mycol Cult
87801.0000    Planting 1 Pc Media Mycol
87802.0000    Planting 2 Pc Media Mycol
87803.0000    Planting 3 Pc Media Mycol
87804.0000    Planting 4 Pc Media Mycol
87805.0000    Planting each add Pc Mycol
87806.0000    Culture Urea Plasma
87810.0000    Reading Mycology Culture
87820.0000    Recording & Reporting Mycol
87830.0000    Germ Tube
87832.0000    Mycology Slide Test
87834.0000    Yeast Carbohydrate Assimil
87836.0000    Yeast Morphology Agar
87850.0000    Accession Specimen Mycob
87851.0000    Planting 1 Pc Media Mycobact
87852.0000    Planting 2 Pc Media Myco
87853.0000    Planting 3 Pc Media Myco
87854.0000    Planting 4 Pc Media Myco
87856.0000    Planting each add Pc Myco
87860.0000    Reading Mycobact Culture
87870.0000    Recording & Reporting Mycobac
87885.0000    Mycobacteriology Stains
87886.0000    Cryptosporidium Spec Stain
87888.0000    Arysulfatase 3 Day
87889.0000    TCH Sensitivity for Microact
87890.0000    Blastomyces Ab
87891.0000    Catalase
87892.0000    Sodium Chloride Tolerance
87893.0000    Niacin Test
87894.0000    Nitrate Reduction
87895.0000    Photochromogenicity Test
87896.0000    Growth on MacConkey Agar
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87897.0000    Tellurite Reduction
87898.0000    Tween Hydrolysis
87899.0000    Susceptibility Test Mycobact
87900.0000    Accession Specimen Parasitic E
87901.0000    Candida Species Ab
87902.0000    Fetoprotein Alpha Tumor
87903.0000    Micorsporidia Spore
87904.0000    GM1 IgA
87905.0000    Myelin Ab
87906.0000    Sulfatide Ab
87907.0000    p53 Tumor Suppressor Gene
87910.0000    Recording & Reporting Parasit
87920.0000    Concentration of Specimen Para
87925.0000    Parasitology Examination
87930.0000    Parasitology Stain
87942.0000    Extraction of Organism Ag
87943.0000    TB Specimen
87944.0000    Heat inactivation
87945.0000    Sputum Liquification
87946.0000    Tissue Grinding
87947.0000    Culture Herpes
87948.0000    Anaerobe Suscept Test Disk Elu
87949.0000    Culture Mycoplasma Pneumoniae
87950.0000    Antimicrobic Assay
87951.0000    Antimicrobic Assay tube
87952.0000    Bactericidal Activity
87953.0000    Hepatitis C Genotyping
87954.0000    Sensitivity Testing or MIC
87956.0000    Sensitivity Testing Broth
87958.0000    Sensitivity Testing Kirby
87960.0000    Accession Specimen for Viral C
87964.0000    Parvovirus B19
87965.0000    Recording & Reporting Viral Cu
87966.0000    Media Prep  Basal Medium
87967.0000    Media Prep  Each Additive
87968.0000    Media Prep  Basal Medium (500m
87969.0000    Virus Specimen Collection
87970.0000    Tzanck Test  Viral Inclusions
87971.0000    Shell Vial Technique
87972.0000    Decontamination of Specimen
87973.0000    Viral Neutralization
87974.0000    Tissue Culture Feeding
87975.0000    Cytomegalovirus Culture
87976.0000    Tissue Culture Passage
87978.0000    Tissue Culture Reading
87980.0000    Tissue Culture Specimen
87982.0000    Tissue Culture Viral
87984.0000    Clostridium Difficile Toxin A
87985.0000    Report Microbiology
87986.0000    Fluconazole MIC
87987.0000    Thermocatinomyces Sacchari
87988.0000    Chlamydia T + Neisseria G DNA
87989.0000    Thermoactinomyces Vulgaris Ab
87990.0000    Anerobe Identification
87991.0000    Micro Smear Prep
87992.0000    Micro Serology
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87993.0000    Micro Bacteriology Culture
87994.0000    Micro Mycology Culture
87995.0000    Micro Mycobacterium Culture
87996.0000    Micro Virology Culture
87997.0000    Micro Non Billable
87998.0000    Micro Anerobic Culture
87999.0000    Micro Misc Culture
88000.0000    SP Specimen
88001.0000    Alcoholic Hyaline Stain G3
88002.0000    Amido Black Hemoglobin Stain
88003.0000    Amyloid Stain Group1
88004.0000    Argentaffin Stain
88005.0000    Bielschowsky Stain Group 6
88006.0000    Bile Stain or Gmelin Stain
88007.0000    Bodian Stain Group2
88008.0000    Bowie Juxt Glom Stain
88009.0000    Calcium Stain Group1
88010.0000    Cone and Penfield Stain
88011.0000    Connective Tissue Masson
88012.0000    Crystal Violet Stain
88013.0000    DNA Feulgin Stain
88014.0000    Elastic Tissue Verhoeff Stain
88015.0000    Enzymes Stain Group3
88016.0000    Fat Neutral Nile Blue
88017.0000    Fatty Acid Fischler Stain
88018.0000    Acid Fast Incl Auromine O
88019.0000    Acridine Orange Fungus Stain
88020.0000    Fungus Gridley Stain
88021.0000    Fungus Silver Stain Group3
88022.0000    Giemsa Stain Group1
88023.0000    Glees and Marsland Stain
88024.0000    Glycogen Stain Group2
88025.0000    Gram Stain Group2
88026.0000    Halls Stain Group1 Anat
88027.0000    Hemosiderin Stain Group1
88028.0000    Holmes Stain Group4
88029.0000    Holzer Stain Group4
88030.0000    Mucin Mucicrum PAS or Alcian
88031.0000    Russell MOVAT Mod
88032.0000    Lendrums Phloxrin Tartrazine S
88033.0000    Lipofuscin Stain Group2
88034.0000    Manns Stain Group2
88035.0000    Masson Trichrome Stain
88036.0000    Mast Cells Stain Group1
88037.0000    Melanin Stain Group
88038.0000    PAS ALCIAN BLUE
88039.0000    Myelin Heidenhain Stain
88040.0000    Autopsy  Attendant
88041.0000    Myelin Luxol Fast Blue Stain
88042.0000    Myelin Marchi Stain
88043.0000    PTAH Stain Group1
88044.0000    PAS STAIN
88045.0000    Initial Handling Clerical Aut
88046.0000    Oil Red O Stain Group2
88047.0000    Orcein Giemsa Stain Group3
88048.0000    Spirochete Silver Stain
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88049.0000    PTAH Neuropath Stain Group2
88050.0000    Sections Paraffin Aut compl
88051.0000    Reticulin Stain Group3
88052.0000    Romanes Stain Group3
88053.0000    Saffron Stain Group2
88054.0000    Unna Pappenheim Stain Group1
88055.0000    Sections Paraffin Aut Slide
88056.0000    CY Specimen
88057.0000    EM Specimen
88058.0000    Immunoperoxidase Stain
88059.0000    Immunofluorescence Stain
88060.0000    Sections Paraffin  Aut (Cut)
88061.0000    Misc AP Test 1
88062.0000    Misc AP Test 2
88063.0000    Misc AP Test 3
88064.0000    Misc AP Test 4
88065.0000    Misc AP Test 5
88066.0000    Instrument AP Setup
88067.0000    Unstained Slide
88068.0000    Calreticulin
88069.0000    Cytokeratin 2D
88070.0000    Tissue Culture
88071.0000    Consultation and Report
88072.0000    Picornavirus
88073.0000    Filarial Ab
88074.0000    Leishmania Donovani Ab
88075.0000    Phosphoserine
88076.0000    Smith Ab
88077.0000    HLA A3
88078.0000    English Plantain
88079.0000    English Plantain IgE
88080.0000    Agar Dilution E Test
88081.0000    HFE C282Y
88082.0000    HFE H63D
88083.0000    Ribonucleoprotein Ab
88084.0000    Polio Type 1 Ab
88085.0000    Polio Type 1 Ag
88086.0000    Polio Type 2 Ag
88087.0000    Polio Type 2 Ab
88088.0000    Polio Type 3 Ab
88089.0000    Polio Type 3 Ag
88090.0000    Latex IgE
88125.0000    Forensic Cytopathology
88150.0000    PAP Smear
88151.0000    PAP Thin Prep Cyto Interp
88152.0000    PAP Thin Prep Phy Interp
88160.0000    Hormonal Evaluation Cytology
88161.0000    Sperm Isolation
88190.0000    Slides Cytology Preparation
88191.0000    Smear Cyto Prep Pick&Smear
88192.0000    Smear and or Cell Block Cytol
88200.0000    Electron Micro Preparation
88202.0000    Electron Micro Embedding
88204.0000    Electron Micro Scan and Photo
88206.0000    Electron Micro Thick Section
88208.0000    Electron Micro Thin Section
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88230.0000    Chromosome Karyotype Amni Comp
88231.0000    Chromosome Karyotype Amniot
88232.0000    Chromosome Karyotype Per Blood
88233.0000    Chromosome Karyotype Peri Bl
88234.0000    Chromosome Karyotype BM  Leuk
88235.0000    Chromosome Karyotype Bone Mar
88236.0000    Chromosome Karyotype Tiss 1st
88237.0000    Chromosome Karyotype Tissue
88238.0000    Chromosome Karyotype Tiss Com
88239.0000    Chromosome Karyotype AST
88240.0000    Fine Needle Aspirate
88241.0000    Chromosome Karyotype
88244.0000    PAI Genetics
88245.0000    Sex Chromatin Smears
88257.0000    Autoradiography
88282.0000    Cystine Urine
88300.0000    Stain Group1
88305.0000    Stain Group2
88306.0000    Brown & Brenin Stain
88307.0000    C Schenk Stain
88308.0000    Iron Stain Colloidal
88309.0000    Fite Stain
88310.0000    Stain Group3
88311.0000    Mallory Heidenhaim Stain
88312.0000    Mallory Collagen Stain
88313.0000    Methyl Green Stain
88314.0000    Maxwell Stain
88315.0000    Stain Group4
88316.0000    Papanicolaou Stain
88317.0000    Wilson Ezrin Stain
88318.0000    Pentachrome Movat Stain
88319.0000    Mucicarmine Stain
88320.0000    Stain Group5
88321.0000    Warthin Starry Stain
88322.0000    Myeloperoxidase Stain
88325.0000    Stain Group6
88326.0000    Stain Only H & E
88327.0000    Steiner Stain
88328.0000    B72.3
88329.0000    Ber-Ep4
88330.0000    GCDFP-15
88331.0000    Properdin
88332.0000    Dieterle Stain
88333.0000    Steiner&Steiner
88343.0000    Case Review Surg or Autopsy
88344.0000    Case Review Cytology
88350.0000    Frozen Section Rush Dx
88353.0000    Frozen Section Add Rush Block
88354.0000    Frozen Section Not Rush
88355.0000    Frozen Section Add Section
88356.0000    Body Brushing
88357.0000    Body Fluid Exam
88358.0000    Washing Fluid Exam
88360.0000    Frozen Section Add Cut
88363.0000    Sections Plastic  Complete
88365.0000    Sections Paraffin  SP  Cut
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88366.0000    Thyroid Transcription Factor
88375.0000    Tissue Processing Plastic Emb
88410.0000    Chromosome Karotype Stimulated
88420.0000    Decalcification Tissue
88430.0000    Photographs Gross Specimen
88435.0000    Photography Print Enlarge
88493.0000    Temperature Patient
88499.0000    Scanning EM Analysis
88500.0000    Gross Surgical Description Lev
88501.0000    Gross Surgical Tech Assistance
88502.0000    Tissue Preparation
88503.0000    Gross & Microscopic Pathology
88504.0000    Interpretation CytoPath
88505.0000    Cytopathology Procedures NOS
88506.0000    Buccal Smear
88507.0000    Consultation Referred Slides
88508.0000    Consultation Referred Specimen
88509.0000    Stain Cytology Extended
88510.0000    Pathology Surgery Consult
88511.0000    Gross & Microscopic Pathology
88512.0000    Gross & Microscopic Pathology
88513.0000    Gross & Microscopic Pathology
88514.0000    Gross & Microscopic Pathology
88515.0000    Surgical Pathology Procedures
88516.0000    Homogenization Tissue
88517.0000    Tissue Preparation Drug
88518.0000    Surgical Pathology Level II
88520.0000    Surgical Path Init Handling
88522.0000    Transcription File Search Retr
88524.0000    Transcription Report Prep only
88526.0000    Transcription Report Disp
88528.0000    Sections Paraffin  Surg Path
88529.0000    Autopsy Gross Only
88530.0000    Stain H&E Automated
88531.0000    Autopsy Complete w/o Brain
88532.0000    Autopsy Complete with Brain
88533.0000    Autopsy Complete with Brain/CN
88534.0000    Autopsy Limited
88535.0000    Sections Diagnostic Thick
88536.0000    Sections Thin EM
88537.0000    Fine Needle Consult
88538.0000    Cytogenetic
88539.0000    Specimen
88540.0000    History
88541.0000    Clinical History
88542.0000    Brief Clinical History
88543.0000    Diagnosis
88544.0000    Diagnosis PreOp
88545.0000    Findings
88546.0000    Findings PreOp
88547.0000    Findings PostOp
88548.0000    Description
88549.0000    Description Gross
88550.0000    Initial Handling Cytology (Gyn
88551.0000    Surgical Pathology Level I
88552.0000    Initial Handling Cyto (Non Gyn
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88553.0000    Surgical Pathology Level III
88554.0000    Stain Cytology  Routine
88555.0000    Surgical Pathology Level IV
88556.0000    Stain Cyto Membrane Filt Prep
88557.0000    Surgical Pathology Level V
88558.0000    Stain Cyto Rapid Pap or H&E
88559.0000    Surgical Pathology Level VI
88560.0000    Stain Cyto Romanowski Diff Qui
88561.0000    Cytology Misc
88562.0000    File Search Update Cytology
88563.0000    Description Micro
88564.0000    Report Record File Cytology
88565.0000    Section
88566.0000    Cell Block Cytology
88567.0000    Coccidioides IgM
88568.0000    Smear Cyto Prep of Spec Saccom
88569.0000    Frozen Section
88570.0000    Smear Cyto Prep of Fluid Centr
88571.0000    Diagnosis Pathology
88572.0000    Smear Cyto Cytocentrifugation
88573.0000    Report Pathology
88574.0000    Smear Cyto Simple Special Proc
88575.0000    Report Preliminary
88576.0000    Smear Cyto Complicated Sp Proc
88577.0000    Cytology Smear GYN
88578.0000    Screen Cyto Tech Interp Neg Gy
88579.0000    Cytology Smears
88580.0000    Screen Cyto Tech Interp Abn Gy
88581.0000    Nerve Tissue
88582.0000    Screen Cyto Tech Interp Memb F
88583.0000    Report Final
88584.0000    Screen Cyto NonGyn CMC<50%
88585.0000    Report Amended
88586.0000    Screen Cyto NonGyn CMC>50%
88587.0000    Report Partial
88588.0000    Screen Cyto Tech Interp Cell B
88589.0000    Report Supplemental
88590.0000    Screen Cyto Tech Interp Sp St
88591.0000    Diagnosis PostOp
88592.0000    Screen Cyto Tech. Interp. Sp.
88593.0000    Report Cytology
88594.0000    Differential Cell Count Cyto
88596.0000    Screen Cyto Rescreen Neg Gyn (
88597.0000    Report Electron Microscopy
88598.0000    Report Histology
88599.0000    FISH Interphase
88601.0000    Report Immunology
88602.0000    Report Laboratory
88603.0000    Consultation and Report, Compr
88605.0000    Cell Block Any Source
88606.0000    Autopsy Single Organ
88607.0000    Autopsy Forensic Exam
88608.0000    Autopsy Exam NOS
88609.0000    Cytology Smear GYN Auto Thin M
88610.0000    Cytology Smear GYN Phy Interp
88612.0000    Cytology Smear non GYN <5 Slid
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88613.0000    Cytology Smear non GYN >5 Slid
88615.0000    Sudan Black Stain
88616.0000    Fine Needle Aspirate Deep Guid
88617.0000    Estrogen/Progesterone Receptor
88618.0000    Coxsackie
88619.0000    Sacchromyces
88620.0000    Sacchromyces Ab
88621.0000    Sperm Ab
88622.0000    Sacchromyces Cerevisiae Ab
88623.0000    Spinocerebellar Ataxia 2
88624.0000    Proline Beta Alanine
88625.0000    Machado Joseph Disease
88626.0000    Myelin Associated Glycoprotein
88627.0000    Fascio Scapulo Humoral Dystrop
88628.0000    Creutzfeldt Jakob Disease
88629.0000    Echovirus 6 Ab
88630.0000    Echovirus 7 Ab
88631.0000    Ethidium Monoazide
88632.0000    Rast Profile
88633.0000    Pork
88634.0000    Wheat Bran Ab IgG
88635.0000    Milk (cow)
88636.0000    Milk (cow) Ab IgG
88637.0000    Wheat
88638.0000    Corn
88639.0000    Peanut
88640.0000    Soybean
88641.0000    Beef
88642.0000    Fish/Sea Food
88643.0000    Shell Fish
88644.0000    Fish/Shell
88645.0000    Egg
88646.0000    Egg White
88647.0000    Spinocerebellar Ataxia 3
88648.0000    Spinocerebellar Ataxia 7
88649.0000    Egg White Ab IgG
88650.0000    Bladder Tumor
88651.0000    Borrelia Pertussis
88652.0000    Leptospira Australis
88653.0000    Leptospira Australis Ab
88654.0000    Presenilin 1  Allele1
88655.0000    Presenilin 1 Allele2
88656.0000    Streptococcus Pneumoniae 1
88657.0000    Streptococcus Pneumoniae 2
88658.0000    Streptococcus Pneumoniae 19
88659.0000    Streptococcus Pneumoniae 14
88660.0000    Streptococcus Pneumoniae 23
88661.0000    Streptococcus Pneumoniae 51
88662.0000    IgG Subsets 2
88663.0000    IgG Subsets 3
88664.0000    Echovirus 2 Ab
88665.0000    Echovirus 3 Ab
88666.0000    Echovirus 8 Ab
88667.0000    Echovirus 16
88668.0000    Fitzgerald Factor
88669.0000    Fine Needle Aspirate Pathologi
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88670.0000    PAS Stain Micro
88671.0000    Orcein Giemsa Stain Micro
88672.0000    Giemsa Stain Micro
88673.0000    Fite Stain Micro
88674.0000    Cytology Smear Any Source
88675.0000    Cytology Smear Auto Rescreen b
88676.0000    Cytology Smear Computer Rescre
88677.0000    Cytology Smear Auto Man/Comput
88678.0000    Cytology Smear Auto by Phy
88679.0000    Cytology Smear Auto/Man Rescr
88680.0000    Cytology Smear Bethesda Rescr
88681.0000    Cytology Smear Bethesda Rescr
88682.0000    Cytology Smear Bethesda Rescr
88683.0000    GD1B Elisa
88684.0000    GQ1B Elisa
88685.0000    Sensorimotor Neuropathy Profil
88686.0000    Beta 2 Glycoprotein IgG Ab
88687.0000    Beta 2 Glycoprotein IgA Ab
88688.0000    Beta 2 Glycoprotein IgM Ab
88689.0000    EGFR-Paraffin
88690.0000    ER-IHC/Paraffin
88691.0000    PR-IHC/Paraffin
88692.0000    Micropolyspora faeni Ab
88693.0000    Aspergillus pullulans Ab
88694.0000    Toxoplasma IgG Ab, CSF
88695.0000    Toxoplasma IgM Ab, CSF
88696.0000    Spinocerebellar Ataxia 8
88697.0000    Spinocerebellar Ataxia 10
88698.0000    DRPLA DNA
88757.0000    Cytology Smear non GYN
88885.0000    Misc Stain 4
88886.0000    Misc Stain 5
88887.0000    Misc Stain 6
88888.0000    Misc Stain 7
88889.0000    Misc Stain 8
88890.0000    Misc Stain 9
88891.0000    Misc Stain 10
88978.0000    Febrile Agglutinins Panel
88979.0000    St Louis Equine Encephalitis I
88980.0000    St Louis Equine Encephalitis I
88981.0000    La Crosse Virus IGM
88982.0000    La Crosse Virus IGG
88983.0000    La Crosse Virus Ab
88984.0000    Eastern Equine Encephalitis IG
88985.0000    Eastern Equine Encephalitis IG
88986.0000    Dengue Virus Ab IGM
88987.0000    Dengue Virus Ab IGG
88988.0000    Galop Auto Ab
88989.0000    HIV 2
88990.0000    HIV Quant
88991.0000    HIV Qual
88992.0000    Herpes Virus VI IgG IgM
88993.0000    Rubella Titer
88995.0000    APC GENE MUTATION
88996.0000    Complement Total
88997.0000    Hepatitis G Ab
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88998.0000    Charcot Marie Tooth Profile
88999.0000    Interferon Alpha Receptor
89000.0000    Surface Marker Leu9
89001.0000    Surface Marker B4
89002.0000    Surface Marker My10
89003.0000    Surface Marker KC56
89004.0000    Neutrophil Cytoplasm
89005.0000    Farmer's Lung
89006.0000    Histone
89007.0000    Hypersensitivity Aspergillus
89008.0000    Hypersensitivity Pneumonitis
89009.0000    Alpha Pituitary G Hormone
89010.0000    Alpha1 Antitrypsin Clearance
89011.0000    Anti Adrenal Ab
89012.0000    Anti Dnase B
89013.0000    DS DNA Ab
89014.0000    Anti Single Stranded DNA
89015.0000    Anti Thyroglobulin Ab
89016.0000    Anti Diuretic Hormone
89017.0000    Antineuronal Nuclear Ab
89018.0000    Anti Streptolysin O
89019.0000    Aspergillus Complement Titer
89020.0000    Blastomyces Complement Titer
89021.0000    Legionella IFA Ab
89022.0000    Coccidiodes Complement Fix
89023.0000    Complement C9
89024.0000    Febrile Agglutinins
89025.0000    GM1 Autoantibody
89026.0000    Immunocytochemistry
89027.0000    Legionella Ag
89028.0000    Lupus Anticoagulant
89029.0000    Lyme Disease
89030.0000    Measles Rubeola titer
89031.0000    Monospot Screen
89032.0000    Polymyositis Ab
89033.0000    Purkinje Cell Ab
89034.0000    Rocky Mountain Spotted Fever
89035.0000    Tetanus Ab EIA
89036.0000    Tularmia Agglutination
89037.0000    Typhus Ab Titer
89038.0000    Anti Microsomal Ab
89039.0000    Anti Nuclear Ab
89040.0000    Oligoclonal bands
89041.0000    Psittacosis
89042.0000    Endomysial Ab
89043.0000    Surface Marker CD30
89044.0000    Surface Marker CD15 Leu M1
89045.0000    Surface Marker CD11c
89046.0000    Anti Myocardial Ab
89047.0000    Surface Marker CD25
89048.0000    Surface Marker FMC-7
89049.0000    Anti Mitochrondrial Ab
89050.0000    Cell Count Body Fluid
89051.0000    Cell Count with Film
89052.0000    Anti Parietal Cell Ab
89053.0000    Anti Glomerular Basement Membr
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89054.0000    Anti Smooth Muscle Ab
89055.0000    Anti Cardiolipin Ab
89056.0000    Anti Viral Ab
89057.0000    Anti Skin Ab
89058.0000    Histone Reaction Ab
89059.0000    Diptheria Antitoxoid ELISA
89060.0000    Pneumococcal IgG Vaccine Respo
89061.0000    Tetanus Antitoxoid ELISA
89062.0000    HLA DR2
89063.0000    Legionella Urinary Ag
89064.0000    Hepatitis A Ab
89065.0000    Hepatitis B Core Ab
89066.0000    Hepatitis B Core Ag
89067.0000    Hepatitis B Surface Ab
89068.0000    Hepatitis B Surface Ag
89069.0000    Hepatitis B Virus DNA
89070.0000    Hepatitis C Ab
89071.0000    HIV Ag
89072.0000    HIV Ab
89073.0000    CA-15-3
89074.0000    MAG Autoantibody
89075.0000    Protein S activity
89076.0000    Protein S, Total
89077.0000    Protein S, free
89078.0000    RAST test
89079.0000    Acetylcholine REC Blocking Ab
89080.0000    Acetylcholine receptor
89081.0000    T cell subsets
89082.0000    Cell surface markers
89083.0000    Hepatitis A IgM Ab
89084.0000    Immunodiffusion, histoplasmosi
89085.0000    Immunodiffusion, aspergillosis
89086.0000    Immunodiffusion, blastomycosis
89087.0000    Immunodiffusion, candidiosis
89088.0000    Immunodiffusion, coccidiodiosi
89089.0000    EIA Clostridium diff tox A or
89090.0000    Latex agglut Clostridium diffi
89091.0000    Direct FA, Chlamydia trachomat
89092.0000    EIA, Chlamydia trachomatis
89093.0000    Hepatitis B, early Ab
89094.0000    Hepatitis B, early Ag
89095.0000    Hepatitis B core IgM Ab
89096.0000    FTA ABS
89097.0000    MHA TP
89098.0000    HIV 1 by EIA
89099.0000    HIV 1 by Western Blot
89100.0000    HIV 1 by IFA
89101.0000    HIV 1 P24 Ag by EIA
89102.0000    HTLV 1 Ab by EIA
89103.0000    Lymes Ab by EIA
89104.0000    Lymes Ab by IFA
89105.0000    Nordoxepin done by GC
89106.0000    Rapid Plasma Reagin
89107.0000    Pneumococcal Ab
89108.0000    Rabies Ab
89109.0000    Poliovirus Ab
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89110.0000    Drug Dependent Ab
89111.0000    Mumps Immune Status
89112.0000    Chlamydia Titer
89113.0000    Helicobacter pylori Serology
89114.0000    Antitrypsin alpha 1 phenotype
89115.0000    Heparin dependent Ab
89116.0000    Viral serology panel
89117.0000    Striated Muscle Ab
89118.0000    Misc Immuno Test 1
89119.0000    Misc Immuno Test 2
89120.0000    Misc Immuno Test 3
89121.0000    Misc Immuno Test 4
89122.0000    Misc Immuno Test 5
89123.0000    Instrument IM Setup
89124.0000    Hepatitis C RNA by PCR
89125.0000    Myasthenia Gravis Panel
89126.0000    Heparin dependent Platelet Ab
89127.0000    Hepatitis B Delta Ab, IgG
89128.0000    Hepatitis B Delta Ab, IgM
89129.0000    Hepatitis B Delta Ag
89130.0000    Gastric Contents
89131.0000    Toxoplasma Ab CSF
89132.0000    Toxoplasma Ab IgG
89133.0000    Toxoplasma Ab IgM
89134.0000    Sulfatide Autoantibody
89135.0000    DNA Ploidy
89136.0000    Hantavirus
89137.0000    Multiple Sclerosis Panel
89138.0000    Complement C3/C4 Panel
89139.0000    Immunogloblin Panel NOS
89140.0000    Report Delivery
89141.0000    Interleukin 6 Receptor
89142.0000    Report Charting
89143.0000    Gowning Degowning
89144.0000    Specimen Rejection
89145.0000    Gowing Degowing Only
89146.0000    Surface Marker Panel
89147.0000    Gluten Sensitivity Eval
89148.0000    Hepatitis Immuno Panel
89149.0000    Varicella Immune Status
89150.0000    Gloving Degloving
89151.0000    Hepatitis A, IgG Ab
89152.0000    Kappa/Lambda Ratio
89153.0000    Candida Precipitan Ab titer
89154.0000    FMC7
89155.0000    VDRL
89156.0000    Hepatitis E Ab
89157.0000    Hepatitis E Ag
89158.0000    Sjorgren's Ab
89159.0000    Sjorgren's Ag
89160.0000    Ribonucleic Protein Ab
89161.0000    Ribonucleic Protein Ag
89162.0000    Serology Specimen
89163.0000    Immuno Specimen
89164.0000    Flow Specimen
89165.0000    Sp Flow Specimen
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89166.0000    Ehrlichosis Ab
89167.0000    Hemophilus Influenza
89168.0000    Ehrlichiosis Ag
89169.0000    TdT
89170.0000    HTLVI
89171.0000    TORCH Ab Panel
89172.0000    HTLVII
89173.0000    HTLVI/HTLVII
89174.0000    Brucella Ab
89175.0000    Herpes Ab
89176.0000    Helicobacter pylori Ab
89177.0000    Leishmania Ab
89178.0000    Listeria Ab
89179.0000    Skin Test NOS
89180.0000    HIV 1 RNA Quant
89181.0000    Tetanus Ab
89182.0000    Diptheria Ab
89183.0000    Toxoplasma Ab
89184.0000    CD14/CD45
89185.0000    CD2/CD20
89186.0000    CD19/CD10
89187.0000    CALLA
89188.0000    CD19/CALLA
89189.0000    CD3/CD8
89190.0000    CD3/CD4
89191.0000    CD19/CD5
89192.0000    CD22/CD3
89193.0000    CD10/CD34
89194.0000    CD7/CD13/CD33
89195.0000    Flow Cytometry
89196.0000    Fasciola Hepatica Ab
89197.0000    Anti Nuclear Ab Quant
89198.0000    Lyme Ab Quant
89199.0000    Immunoglobulin Heavy Chain Gen
89200.0000    HCV Ab Quant
89201.0000    Lyme Ab
89202.0000    Lyme Ab IgG
89203.0000    Lyme Ab IgG Quant
89204.0000    Lyme Ab IgM
89205.0000    Lyme Ab IgM Quant
89206.0000    Rubella Ab
89207.0000    Rubella Ab Quant
89208.0000    Extractable Nuclear Ag RNP Qua
89209.0000    Extractable Nuclear Ag Sci 70
89210.0000    Extractable Nuclear Ag Sm Qt
89211.0000    Mycoplasma Pneumoniea Ab IgG
89212.0000    Mycoplasma pneumoniae Ab IgM
89213.0000    Streptozyme Qt
89214.0000    Leukemia Panel Acute
89215.0000    Leukemia Panel Chronic
89216.0000    Leukemia Panel Hairy
89217.0000    Cancer Ag 27.29
89218.0000    Pneumonititis Hypersensitivity
89219.0000    Gardnerella Vaginalis
89220.0000    Scleroderma Ab Quant
89221.0000    Streptozyme Ab Quant
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89222.0000    T Cell Receptor
89223.0000    Beta 2 Glycoprotein 1 Ab
89224.0000    Western Blot
89225.0000    HIV Genotype
89226.0000    Complexed Prostate Specific Ag
89227.0000    Varicella Rapid Culture
89228.0000    HCV Genotyping
89229.0000    Cell Viability
89230.0000    Fat Stain
89231.0000    Tumor Necrosis Factor
89232.0000    HIV 1 Proviral DNA PCR
89233.0000    Toxoplasmosis Ab, IgA&IgM
89234.0000    Proteinase 3 Ab
89235.0000    HIV 1 and HIV 2
89236.0000    HIV 1
89237.0000    Epstein Barr Ab IgG
89238.0000    Signal Recognition Particle Au
89239.0000    Epstein Barr Ab IgM
89240.0000    Proliferating Cell Nuclear Ab
89241.0000    Herpes Virus VI IgG
89242.0000    Herpes Virus VI IgM
89243.0000    Centromere Ab
89244.0000    von Hippel Lindau
89245.0000    T Cell Receptor Alpha
89246.0000    T Cell Receptor Beta
89247.0000    T Cell Receptor Gamma
89248.0000    T Cell Receptor Delta
89249.0000    Centromere Ab Titer
89250.0000    GM1 IgG
89251.0000    Asialo GM1 IgG
89252.0000    GM1 IgM
89253.0000    Asialo GM1 IgM
89254.0000    GM1 Panel
89255.0000    X*Hypersensitive Pneumonitis
89256.0000    Neocerebellar Degeneration Pro
89257.0000    HCV 5-1-1 Ab
89258.0000    HCV C33C Ab
89259.0000    HCV C22-3 Ab
89260.0000    HCV NS5 Ab
89261.0000    HCV RIBA Panel
89262.0000    HCV Panel Interp
89264.0000    Lyme Ab IgG/IgM
89265.0000    Microspordin Stain
89266.0000    Mumps Ab
89267.0000    Mumps Ab IgM
89268.0000    CD3/CD16*CD56
89269.0000    Basement Membrane
89270.0000    Basement Membrane Ab
89272.0000    CD20 Percent
89273.0000    Lymphocyte B
89274.0000    Lymphocyte T Percent
89275.0000    CA 27 29
89276.0000    CA 72-4
89277.0000    CD2 Percent
89278.0000    CD3-CD16+CD56+ Absolute
89279.0000    CD3-CD16+CD56+ Percent
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89280.0000    Echovirus 4 Ab
89281.0000    Echovirus 9 Ab
89282.0000    Echovirus 11 Ab
89283.0000    Echovirus 30 Ab
89284.0000    Galop Ab
89285.0000    Hepatitis C Band c100-3
89286.0000    Hepatitis C Band c22p
89287.0000    Hepatitis C Band hSOD
89288.0000    Human Granulocytic Ehrlichiosi
89289.0000    Human Granulocutic Ehrlichiosi
89290.0000    Human Granulocytic Ehrlichiosi
89291.0000    HIV Log
89292.0000    HIV Log Ultra
89293.0000    HIV 2 gp105 Ab
89294.0000    HIV 2 gp120 Ab
89295.0000    HIV 2 gp34 Ab
89296.0000    HIV 2 p15 Ab
89297.0000    HIV 2 p26 Ab
89298.0000    HIV 2 p31 Ab
89300.0000    Semen Analysis Sperm
89301.0000    HIV 2 p58 Ab
89302.0000    HIV 2 p68 Ab
89303.0000    HIV 2 Ab Western Blot
89304.0000    HPV Hybrid Capture Inter High
89305.0000    HPV Typing, Biopsy
89306.0000    HPV Hybrid Capture Low Risk
89307.0000    Herpes Simplex Virus DNA
89308.0000    Herpes Simplex 1 DNA
89309.0000    Herpes Simplex 2 DNA
89310.0000    Herpes Simplex Ab
89311.0000    Herpes Simplex Ag
89312.0000    Parainfluenza 1 Ab
89313.0000    Parainfluenza Ag
89314.0000    Parainfluenza 1 Ag
89315.0000    Parainfluenza 2 Ag
89316.0000    Parainfluenza 3 Ag
89317.0000    Coxiella Burnetti 1 IgM
89318.0000    Coxiella Burnetti 2
89319.0000    Coxiella Bernetti 2 IgG
89320.0000    Semen Analysis Count Motil
89321.0000    Coxiella Bernetti 2 IgM
89322.0000    Thphus
89323.0000    Typhus IgG
89324.0000    Typhus IgM
89325.0000    Rocky Mountain Spotted Fever I
89326.0000    Rocky Mountain Spotted Fever I
89328.0000    RNA Polymerase 1,2,3 Ab
89329.0000    Varicella Zoster Ab IgG
89330.0000    Cervical Mucus
89331.0000    Yersina Enterocolitica Ab 0:3
89332.0000    Yersina Enterocolitica Ab 0:5
89333.0000    Yersinia Enterocolitica Ab 0:8
89334.0000    Yersinia Enterocolitica Ab 0:9
89335.0000    Capillary Puncture Out Lab
89336.0000    Capillary Puncture Collection
89337.0000    Hantavirus Ab
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89338.0000    Microbiological Specimen
89339.0000    Herpes Simplex 1 Ab
89340.0000    Urine (coll by lab)
89341.0000    +Venipuncture Travel Time
89342.0000    Prep Sterile Venipuncture
89343.0000    +Venipuncture Outpatient
89344.0000    Drainage
89345.0000    Venipuncture <3YR
89346.0000    Venipuncture (Scalp)
89347.0000    Venipuncture (Other)
89348.0000    Specimen Dispatch prep mail
89349.0000    Specimen Dispatch Ice
89350.0000    Arterial Puncture
89351.0000    Specimen Dispatch w data handl
89352.0000    Specimen Dispatch Nonal w dat
89353.0000    Specimen Dispatch w o Data Han
89354.0000    Specimen Dispatch Non w o data
89355.0000    Travel Time
89356.0000    Specimen Handling (Misc)
89357.0000    Venipuncture Transfusion
89358.0000    Arterial Catheterization
89359.0000    Specimen Collection Time
89360.0000    Chloride Sweat Test Quant
89361.0000    Tay Sach
89362.0000    Specimen Preprocessing Airfuge
89363.0000    Reverse Transcript Mutation
89364.0000    Specimen Preprocess Sphingo
89365.0000    Ward Collect Spec
89366.0000    LEDI Specimen
89367.0000    Referred Specimen
89368.0000    DoD Specimen
89369.0000    Research Specimen
89370.0000    Fee Basis Specimen
89371.0000    Contract Specimen
89372.0000    Hepatitis C RIBA
89373.0000    Pokeweed Mitogen
89374.0000    Concanavalin A Mitogen
89375.0000    Lymphocyte Mitogen Prolif
89376.0000    c100 5-1-1 Ab
89377.0000    c33c Ab
89378.0000    c22 Ab
89379.0000    NS5 Ab
89380.0000    Zea Mays Ab IgG
89381.0000    Arachis Hypogaea Ab IgG
89382.0000    Chronic Granulomatous Disease
89383.0000    Glycine Max Ab IgG
89384.0000    SOD1 DNA
89385.0000    Familial ALS
89386.0000    MA1 Ab
89387.0000    MA2 Ab
89388.0000    Satratoxin IgG
89389.0000    Satratoxin IgA
89390.0000    Satratoxin IgM
89391.0000    hSOD Ab
89392.0000    Satratoxin IgE
89393.0000    Aflatoxin IgG
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89394.0000    Aflatoxin IgA
89395.0000    Aflatoxin IgM
89396.0000    Aflatoxin IgE
89397.0000    Trichothecene IgG
89398.0000    Trichothecene IgA
89399.0000    Trichothecene IgM
89400.0000    Trichothecene IgE
89403.0000    Hepatitis GBV
89404.0000    Rh (D) Typing
89405.0000    HBs Ag
89406.0000    HBe Ag
89407.0000    HBe Ab
89408.0000    HBs Ab
89409.0000    HBV
89410.0000    HBc Ab
89411.0000    HCV Ab
89412.0000    HCV Ag
89413.0000    Cutaneous Ab
89414.0000    Extractable Nuclear Ag NOS
89415.0000    Herpes Simplex 2 Ab
89416.0000    Nuclear Matrix Protein Tumor M
89417.0000    Leptospira Grippo Ab
89418.0000    Leptospira Icterohaemorrhiae A
89420.0000    Leptospira Pomona Ab
89421.0000    CD1+ Percent
89422.0000    HLA -DR+DQ Ag
89423.0000    Mumps Skin Test
89424.0000    Spinocerebellar Ataxia 1
89425.0000    Molecular Cytogenetics Probe
89426.0000    FISH
89427.0000    HEREDITARY SPASTIC PARAPARESIS
89428.0000    Spinocerebellar Ataxia Type 17
89429.0000    Spinocerebellar Ataxia Type 1&
89430.0000    Lyme IB 21kDa
89431.0000    Lyme IB 23kDa
89432.0000    Lyme IB 28kDa
89433.0000    Lyme IB 30kDa
89434.0000    Lyme IB 39kDa
89435.0000    Lyme IB 41kDa
89436.0000    Lyme IB 45kDa
89437.0000    Lyme IB 58kDa
89438.0000    Lyme IB 66kDa
89439.0000    Lyme IB 93kDa
89440.0000    Hu Ab CSF
89441.0000    ANA-Atypical Speckled Pattern
89442.0000    B Cell Gene Rearrangement
89443.0000    ANA-Homogeneous Pattern
89444.0000    Inflammatory Bowel Disease Pan
89445.0000    ANA-Mitotic Spindle Pattern
89446.0000    ANA-Nuclear Pattern
89447.0000    ANA-Speckled Pattern
89448.0000    RET Proto Oncogene Mutations
89449.0000    Muscular Dystrophy Duchenne Be
89450.0000    Interleukin 5 Receptor
89451.0000    Presenilin-1 Analysis
89452.0000    ApoE Allele 1
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89453.0000    ApoE Allele 2
89454.0000    ApoE Genotype Analysis
89455.0000    BCL 1 Gene Translocation
89456.0000    ANA-Peripheral Pattern
89485.0000    Hepatitis C RNA
89486.0000    Heparin LMW
89496.0000    HCV Viral Load
89497.0000    Aureobasidium Pullans
89498.0000    HIV Viral Load
89499.0000    Immunoglobulin Lambda L Mon
89500.0000    Immunoglubulin Kappa L Mon
89501.0000    Helminth Ab
89502.0000    Rubeola Immune Status
89503.0000    Varicella Zoster Ab
89504.0000    VDRL Quant
89505.0000    HSV Ab IgG
89506.0000    HSV Ab IgM
89507.0000    PL-7 Autoantibodies
89508.0000    PL-12 Autoantibodies
89509.0000    Mi-2 Autoantibodies
89510.0000    Ku Autoantibodies
89511.0000    EJ Autoantibodies
89512.0000    OJ Autoantibodies
89513.0000    U2 SnRNP Autoantibodies
89530.0000    CA-125 Cancer Ag
89531.0000    Complement C1 Esterase Inhib
89532.0000    Complement C1q
89533.0000    Complement C1r
89534.0000    Complement C1s
89535.0000    Complement C2
89536.0000    Complement C3
89536.3035    Complement C3b Inhibitor~DU PO
89537.0000    Complement C3b Inhibitor
89538.0000    Complement C3c
89539.0000    Complement C3 Mobility
89540.0000    Complement C4
89540.3035    Complement C5~DU PONT ACA
89541.0000    Complement C4 Allotypes
89542.0000    Complement C5
89543.0000    Complement C6
89544.0000    Complement C7
89545.0000    Complement C8
89546.0000    Complement Activation Products
89547.0000    Complement Decay Rate
89548.0000    Complement Factor B (C3PA)
89549.0000    Complement Properidin
89550.0000    Complement Total (CH50 CH100)
89551.0000    Immunoglobulin A
89552.0000    Immunoglobulin D
89553.0000    Immunoglobulin E
89554.0000    Immunoglobulin G
89555.0000    Immunoglobulin G Albumin Index
89556.0000    Immunoglobulin G Synthesis Rt
89557.0000    Immunoglobulin G1
89558.0000    Immunoglobulin G2
89559.0000    Immunoglobulin G3
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89560.0000    Immunoglobulin G4
89561.0000    Immunoglobulin J Chain
89562.0000    Immunoglobulin Kappa Light Ch
89563.0000    Immunoglobulin Lambda Light Ch
89564.0000    Immunoglobulin M
89565.0000    Immunoglobulin Oligoclonal
89566.0000    Immunoglobulin G Low Level
89567.0000    Delta Ab
89568.0000    Heparin Induced Ab
89569.0000    HLA DR
89570.0000    Multiple Serum Proteins
89571.0000    Molecular Diag Separation
89572.0000    Helicobacter pylori Ab IgA
89573.0000    Helicobacter pylori Ag
89574.0000    EBV-VCA, IgM Quant
89575.0000    EBV-VCA, IgM
89576.0000    EBV-VCA, IgG
89577.0000    EBV-VCA, IgG Quant
89578.0000    EBV-VCA
89579.0000    CMV Ab, IgM Quant
89580.0000    CMV Ab, IgM
89581.0000    CMV Ab, IgG Quant
89582.0000    CMV Ab, IgG
89583.0000    CMV Ag
89584.0000    CMV Ab
89585.0000    Parietal Cell Ab Quant
89586.0000    Parietal Cell Ab
89587.0000    Smooth Muscle Ag
89588.0000    Smooth Muscle Ab Quant
89589.0000    Gliadin Ab IgA
89590.0000    DNA Ab Quant
89591.0000    Varicella Immune status Quant
89592.0000    Immune Status
89593.0000    Varicella Ab Quant
89594.0000    Varicella Ag
89595.0000    Varicella Ab
89596.0000    Toxoplasma Ab IgM Quant
89597.0000    Toxoplasma Ab IgG Quant
89598.0000    Sulfoglucuronyl paragloboside
89599.0000    T Cell Receptor Gene
89600.0000    Deoxyribonucleoprotein Ag
89601.0000    Deoxyribonucleoprotein Ab
89602.0000    Acetylcholine Receptor Binding
89603.0000    Chagas Disease
89604.0000    Acetylcholine Receptor Blockin
89605.0000    Polymavirus
89606.0000    Actin
89607.0000    Helicobacter pylori Ab IgG
89608.0000    Adenocarcinoma Surface Ag
89609.0000    Acute Myeloid Leukemia Panel
89610.0000    Adrenal Cortex
89611.0000    Lymphoma Panel
89612.0000    Bile Canaliculus
89613.0000    Chronic Leukemia Panel
89614.0000    Bile Duct
89615.0000    Acute Leukemia Panel
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89616.0000    Blood Species Specific
89617.0000    Cat Scratch Fever
89618.0000    Bovine Milk
89619.0000    Histochemistry Panel
89620.0000    Breast Carcinoma Surface Ab
89621.0000    Lupus Panel
89622.0000    Brush Border
89623.0000    Carcinoembryonic Ag Polyclonal
89624.0000    CA 19 9 Carbohydrate Ag
89625.0000    Lupus Erythematosus
89626.0000    CA 125 Ovarian Cancer Ag
89627.0000    Delta Ag
89628.0000    Carcinoembryonic Ag
89629.0000    Genetics Study
89630.0000    Cardiolipin
89631.0000    Helicobacter pylori Ab IgM
89632.0000    Centriole
89633.0000    Tiech Acid Ab
89634.0000    Centromere
89635.0000    Gliadin Ab IgG
89636.0000    Cold Agglutinins
89637.0000    Gliadin Ab Panel
89638.0000    Cold Hemolysins Donath Land
89639.0000    Fetoprotein Alpha Stain
89640.0000    C Reactive Protein
89641.0000    Herpes I&II Stain
89642.0000    Cystic Disease Protein (CDP)
89643.0000    West Nile Virus
89644.0000    Cytokeratin
89645.0000    c-erB-2(HER-2/neu)
89646.0000    Deoxyribonuclease B
89648.0000    Deoxyribonucleic Acid Double
89650.0000    Deoxyribonucleic Acid Quant
89652.0000    Deoxyribonucleic Acid Single
89654.0000    Desmin
89656.0000    Desmosome
89658.0000    Extractable Nuclear Ag H
89660.0000    Extractable Nuclear Ag Jo
89661.0000    Microsomal Ab
89662.0000    Extractable Nuclear Ag Ku
89663.0000    Extractable Nuclear Ag MA
89664.0000    Extractable Nuclear Ag Mi
89666.0000    Extractable Nuclear Ag PM
89668.0000    Extractable Nuclear Ag RA
89670.0000    Extractable Nuclear Ag RNP
89672.0000    Extractable Nuclear Ag Scl 70
89674.0000    Extractable Nuclear Ag Sm
89676.0000    Extractable Nuclear Ag SS
89677.0000    Extractable Nuclear Ag SSA
89678.0000    Extractable Nuclear Ag SSB
89680.0000    Epithelial Membrane Ag
89682.0000    Fetoprotein Alpha
89684.0000    Fibronectin
89686.0000    Gliadin
89688.0000    Glial Fibrillary Acidic Prot
89690.0000    Glomerular Basement Membrane
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89691.0000    Glycoprotein Beta1 Pregnancy
89692.0000    IgA
89693.0000    Histone DNA Complex IgG Ab
89694.0000    Heterophile
89695.0000    Machado Joseph Panel
89696.0000    Hyaluronidase
89697.0000    Prostatic Specific Ag Free
89698.0000    Immune Complex Clq Binding
89699.0000    Hepatitis B Surface Ab Quant
89700.0000    Immune Complex Polyethylene G
89701.0000    Rapid Plasma Reagin Quant
89702.0000    Immune Complex Raji Cell
89703.0000    Interleukin 2 Receptor
89704.0000    Intrinsic Factor
89705.0000    Rheumatoid Factor Quant
89706.0000    Islet Cell
89707.0000    Viral Titer
89708.0000    Keratin Squamous
89709.0000    DNA Binding
89710.0000    Keratin Nonsquamous
89711.0000    Hepatitis D Ag
89712.0000    Lactalbumin Alpha
89713.0000    Hepatitis D Ab
89714.0000    Lactoferrin
89715.0000    Rochaumaea Ag
89716.0000    Lung Carcinoma Surface Ag
89717.0000    Rochaumaea Ab
89718.0000    Melanoma Surface Ag
89719.0000    Microsomes Liver and Kidney
89720.0000    Microsomes Thyroid
89721.0000    Schistosoma Ab
89722.0000    Mitochondria
89723.0000    Heamophilus Pylorii Stain
89724.0000    Myelin
89725.0000    Thyroid Peroxidase Ab
89726.0000    Myelin Basic Protein
89727.0000    Hu Auto Ab
89728.0000    Myocardium
89729.0000    Yo Auto Ab
89730.0000    Myosin
89731.0000    Chlamydia Ab
89732.0000    Nuclear
89734.0000    Neurofilament Triplet Pro 200
89736.0000    Neurofilament Triplet Pro 160
89738.0000    Neurofilament Triplet Protein
89740.0000    Neuroleptic Receptor
89742.0000    Neuron Specific Enolase
89744.0000    Neurophysin
89746.0000    Panfilament
89748.0000    Pancreatic Carcinoma
89750.0000    Pancreatic Onofetal Ag
89752.0000    Parietal Cell
89754.0000    Pigeon Serum
89756.0000    Prekeratin
89758.0000    Prostatic Carcinoma Surface
89760.0000    Prostate Specific Ag
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89762.0000    Reticulin
89764.0000    Rheumatoid Factor
89766.0000    Ribonuclease
89768.0000    Ribosome
89770.0000    S 100 Neural Ag
89772.0000    Salivary Gland
89773.0000    Mumps Ab Titer
89774.0000    Sarcolemma
89776.0000    Skin
89778.0000    Smooth Muscle
89780.0000    Sperm
89782.0000    Streptokinase
89784.0000    Anti Streptolysin O (ASO)
89786.0000    Streptozyme
89788.0000    Striated Muscle
89790.0000    Tamm Horsfall Protein
89792.0000    Thyroglobulin
89794.0000    Thyroid Stimulating Immunoglob
89796.0000    Tubulin
89798.0000    Vimentin
89801.0000    Percent Recovery
89802.0000    Thyroglobulin Panel
89803.0000    CD3 Absolute
89804.0000    CD3 Percent
89805.0000    CD4 Percent
89806.0000    Bermuda Grass
89807.0000    Bermuda Grass IgE
89808.0000    Scleroderma Ab
89809.0000    Johnson Grass
89810.0000    Johnson Grass IgE
89811.0000    Timothy Grass
89812.0000    Timothy Grass IgE
89813.0000    Alternaria tenuis
89814.0000    Elm Tree
89815.0000    Mountain Cedar
89816.0000    Oak Tree
89817.0000    Sycamore Tree
89819.0000    Pecan Tree
89820.0000    Ash Tree
89821.0000    Privet
89822.0000    Ragweed Common
89823.0000    Lamb's Quarters
89824.0000    Russian Thistle
89825.0000    Marsh Elder
89826.0000    Cat Dander
89827.0000    Dog Dander
89828.0000    Mites
89829.0000    Allergy Panel
89830.0000    Endomysial Ab Titer
89831.0000    Giardia Ab IFA
89832.0000    Ribosomal P Protein Ab
89833.0000    Pneumococcal Sero 3
89834.0000    Pneumococcal Sero 7F
89835.0000    Pneumococcal Sero 9N
89836.0000    Pneumococcal Sero 14
89837.0000    Pneumococcal IgG
```

```
89838.0000    IGF 3 Binding Protein
89839.0000    Glomerular Basement Membrane A
89840.0000    Glomerular Basement Membrane A
89841.0000    Glomerular Basement Membrane A
89842.0000    Pneumococcal IgG Type 08
89843.0000    Pneumococcal IgG Type 12
89955.0000    Grass Allergens
89960.0000    Tree Allergens
89965.0000    Mold Allergens
89970.0000    Weed Allergens
89975.0000    Epithelial Allergens
89980.0000    Food Allergens
89981.0000    Chocolate Ab IgG
89982.0000    Lycopersicon Lycopersicum Ab I
89985.0000    House Dust Allergens
89990.0000    House Dust Mite Allergens
89995.0000    Venom Allergens
91941.0000    Acetazolamide
```

APPENDIX – C
Health Level Seven (HL7) Protocol

Appendix C - Health Level Seven (HL7) Protocol

The EPI Rollup Modification patch LR*5.2*281, utilizes the V*ist*A Laboratory, PIMS, Pharmacy, Clinical Reminders, and Social Work databases for the EPI Rollup Modification criteria. The V*ist*A HL7 software is used to transmit EPI Rollup Modification data to the AITC database.

3. General Specifications

3.1 Communication Protocol
The electronic V*ist*A Mailman software application is used as the communications protocol for sending the EPI HL7 mailman messages between V*ist*A database and AITC database.

3.2 Application Processing Rules
The HL7 protocol itself describes the basic rules for application processing by the sending and receiving systems. The HL7 Version 2.2 protocol is used. The Observational Results Unsolicited (ORU) message is sent using the HL7 batch protocol.

3.3 Message
The following HL7 mail message is used to support the exchange of data:

ORU Observational Results Unsolicited

3.4 Segments
The following HL7 segments are used to support the exchange of data:

HL7 segments	Exchange of Data
DG1	Diagnosis
DSP	Display Data
MSH	Message Header
NTE	Notes and Comments
OBR	Observation Request
OBX	Observation Results
PID	Patient Identification
PV1	Patient Visit
ZXE	Pharmacy Prescription Order

3.5 Fields

The following HL7 fields are used to support the exchange of data for each of the segments listed in the 3.4 Segments:

SEGMENT	FIELD SEQUENCE NUMBER	Data Type/Length HL/7	FIELD ELEMENT NAME	USER/HL7 DEFINED
DG1	1	4/SI	Set ID-Diagnosis (Sequence #)	HL7
	3	60/CE	Diagnosis Code (Code(id) ~Text (St.) ~Name of coding system (st)	HL7
	4	19/TS	Admission Date	HL7
	6	2/IS	Diagnosis Type (PR=DXLS)	HL7
MSH	1	1/ST	Field Separator	HL7
	2	4/ST	Encoding Characters	HL7
	3	180/HD	Sending Application	HL7
	4	180/HD	Sending Facility	HL7
	5	180/HD	Receiving Application	HL7
	6	180/HD	Receiving Facility	HL7
	7	19/TS	Date/Time of Message	HL7
	8	40/SY	Security	HL7
	9	7/CM	Message Type	HL7
	10	20/ST	Message Control ID	HL7
	11	3/PT	Processing ID	HL7
	12	8/ID	Version ID	HL7
OBR	1	4/SI	Set ID-Observation Request (Seq #)	HL7
	4	200/CE	Universal Service ID (identifier ~ text ~ name of coding system ~ alt id ~ alt text ~ alt coding system)	HL7
	7	19/TS	Observation Date/Time	HL7
	15	300/CM	Specimen Source (Specimen source code (CE) ~~ text (TX))	HL7 (Table 0070)
	26	400/CM	Parent Results (OBX observation id of parent ^OBX sub ID	HL7

3.5 Fields continued

SEGMENT	FIELD SEQUENCE NUMBER	Data Type/Length HL/7	FIELD ELEMENT NAME	USER/HL7 DEFINED
NTE	1	4/SI	Set ID (seq. #)	HL7
	3	64K/FT	Comment (five formats exist for this segment, see Note #2)	HL7
OBX	1	4/SI	Set Id-Observational Simple (seq. #)	HL7
	2	2/ID	Value Type	HL7
New LOINC	3	80/CE	Observation Identifier (identifier ~ text ~ name of coding system ~ alt id ~ alt text ^ alt coding system)	HL7
	4	20/ST	Sub Id	HL7
New MIC value	5		Observation Value (Result)	HL7
	6	60/CE	Units (Units)	HL7
	8	10/ID	Abnormal Flags	HL7 (Table 0078)
	14	60/CE	Date/Time of the Observation (Verified Date/Time)	HL7
PID	1	4/SI	Set ID – Patient ID	Hl7
	2	16/CK	Patient ID (External ID)	HL7
New MPI	3	20/CM	Patient ID (Internal ID)	HL7
	5	48/PN	Patient Name	HL7
	7	19/TS	Date of Birth	HL7
	8	1/ID	Sex	HL7 (Table 0001)
New Race	10	1/ID	Race	HL7 (Table VA07)
	11	106/AD	Address (Homeless{where applicable}~Zip Code)	HL7
New County Code	12	4/IS	County Code	HL7
	19	16/ST	SSN	HL7

3.5 Fields continued

SEGMENT	FIELD SEQUENCE NUMBER	Data Type/Length HL/7	FIELD ELEMENT NAME	USER/HL7 DEFINED
New Ethnic Group	22	80/CE	Ethnic Group	HL7
	27	60/CE	Veteran's Military Status	HL7 (Table Va011)
PV1	1	4/SI	Set ID - Patient Visit	HL7
	36	3/ID	Discharge Disposition (Type of Disposition {Code}~Type of Disposition {Text}~Source ID {VA45=VA File 45})	HL7
Servicing Facility	39	2/SI	Servicing Facility	HL7
	44	19/TS	Admit Date/Time (Event Date/Time)	HL7
	45	19/TS	Discharge Date/Time	HL7
DSP	1	2/ID	Set ID	HL7
	3	80/FT	Date~Text Term~Resolved Term~Result~Sourceid	USER
	5	2/ID	Result ID (linking DSP and ZXE)	HL7
ZXE	1	20/FT	NDC	USER
	2	75/FT	Drug Name~Coding System	USER
	3	4/NM	Days Supply	USER
	4	19/TS	Release Date/Time	USER
	5	19/TS	Fill Date/Time	USER
	6	19/TS	Stop Date/Time	USER
	7	2/ID	Result ID (linking DSP and ZXE)	USER

NOTE: The NTE segment is present in four forms. EPI only items tagged with (EPI).

a. NTE||manual/automatic indicator (Null for automatic, R for Manual)~REPORTING DATE FROM from date TO to date~message number~~software version number (blank for original system/V2 for new system(epi)~Negative Input Indicator (null if input is present, N if negative)

b. NTE|sequence number|reference number from field .05 (reference number) in 5 (LAB SEARCH/EXTRACT file (#69).

c. NTE||Totals indicator (T if NTE describes totals for run)~National Lab Test Code~Test Name from LAB TEST file (#60) or (ETIOLOGY FIELD file (#61.2)~Total number of tests performed

d. NTE||Totals indicator (T if NTE describes totals for run)~National Lab Test Code~ "PATIENTS WITH"_Test Name from LAB TEST file (#60) or ETIOLOGY FIELD file (#61.2)~Number of unique patients receiving this test

Definitions from Austin

Field Name	Start	End	Length	Properties	
DG1 SEGMENT					
SET-ID	94	97	4	alphanumeric	
DIAG-CODING-METHOD	98	99	2	alphanumeric	
DIAG-CODE	100	106	7	alphanumeric	
DIAG-TEXT	107	146	40	alphanumeric	
DIAG-CODING-SYT	147	156	10	alphanumeric	
FILLER	157	467	311	alphanumeric	
NTE-SEGMENT					
SET-ID	94	97	4	alphanumeric	
ACTION-IND	98	99	2	alphanumeric	valid total indicator T
NATIONAL-LAB-TEST-NUM	100	109	10	alphanumeric	
BACTERIA	110	144	35	alphanumeric	
TOTAL-COUNT	145	149	5	alphanumeric	
FILLER	150	467	318	alphanumeric	
NTE-SEGMENT (alternate type)					
SET-ID	94	97	4	alphanumeric	
ACTION-IND	98	99	2	alphanumeric	
FILLER	100	119	20	alphanumeric	
FROM-DATE	120	127	8	alphanumeric	
FILLER	128	131	4	alphanumeric	
TO-DATE	132	139	8	alphanumeric	
MSG-SEQ-NUM	140	142	3	alphanumeric	
NEGATIVE-INPUT-IND	143	143	1	alphanumeric	
FILLER	144	467	324	alphanumeric	

Continued

Field Name	Start	End	Length	Properties	
OBR-SEGMENT					
SET-ID	94	97	4	alphanumeric	
PATHOGEN-NAME	98	132	35	alphanumeric	
UNIV-SERVICE-ID	133	142	10	alphanumeric	
UNIV-SERVICE-TEXT	143	172	30	alphanumeric	
UNIV-SERVICE-CODE	173	187	15	alphanumeric	
ALT-UNIV-SERVICE-ID	188	202	15	alphanumeric	
ALT-UNIV-SERVICE-TEXT	203	232	30	alphanumeric	
ALT-UNIV-SERVICE-CODE	233	247	15	alphanumeric	
OBSER-DATE	248	255	8	yyyymmdd	
OBSER-TIME	256	261	6	hhmmss	
OBSER-DATE-A	262	269	8	alphanumeric	
SPECIMEN-CODE	270	273	4	alphanumeric	
FILLER	274	274	1	alphanumeric	
SPECIMEN-CODE-TEXT	275	304	30	alphanumeric	
ACCESSION-NUM	305	324	20	alphanumeric	
PARENT-OBSER-ID	335	334	10	alphanumeric	
PARENT-OBSER-SUB-ID	355	340	6	alphanumeric	
PARENT-TEST-SYS	361	350	10	alphanumeric	
PARENT-LAB-NUM	371	360	10	alphanumeric	

Continued

Field Name	Start	End	Length	Properties	
FILLER	381	458	98	alphanumeric	
OBX-SEGMENT					
OBR-SET-ID	94	97	4	alphanumeric	
OBX-SET-ID	98	101	4	alphanumeric	
VALUE-TYPE	102	103	2	alphanumeric	
OBSERVATION-ID	104	113	10	alphanumeric	
OBSERVATION-TEXT	114	143	30	alphanumeric	
OBSERVATION-CODE	144	158	15	alphanumeric	
OBSERVATION-ID-ALT	159	168	10	alphanumeric	
OBSERVATION-TEXT-ALT	169	198	30	alphanumeric	
OBSERVATION-CODE-ALT	199	213	15	alphanumeric	
OBSERVATION-SUB-ID	214	219	6	alphanumeric	
OBSERVATION-NAT-LAB	220	229	10	alphanumeric	
OBSERVATION-VALUE	230	274	45	alphanumeric	
OBSERVATION-UNITS	275	289	15	alphanumeric	
OBSERVATION-REF-RANGE	290	304	15	alphanumeric	
ABNORMAL-FLAGS	305	314	10	alphanumeric	
FINAL-RESULT-DATE	315	322	8	yyyymmdd	
FILLER	323	450	128	alphanumeric	
PID-SEGMENT					
SET-ID	94	97	4	alphanumeric	

Continued

Field Name	Start	End	Length	Properties	
PATIENT-EXTERNAL-ID	98	114	17	alphanumeric	
PATIENT-INTERNAL-ID	115	135	21	alphanumeric	
PATIENT-NAME	136	220	85	alphanumeric	
PATIENT-BIRTH-DATE	221	228	8	yyyymmdd	
PATIENT-SEX	229	229	1	alphanumeric	
PATIENT-RACE	230	230	1	alphanumeric	
PATIENT-ADDRESS	231	231	1	alphanumeric	valid patient address H
ZIP	232	240	9	alphanumeric	
FILLER	241	241	1	alphanumeric	
PATIENT-SSN	242	250	9	alphanumeric	
PATIENT-PSEUDO	251	251	1	alphanumeric	valid pseudo space or P
PATIENT-VETERAN-STATUS	252	253	2	alphanumeric	
FILLER	254	450	197	alphanumeric	
PV1-SEGMENT					
SET-ID	94	97	4	alphanumeric	
PATIENT-CLASS	98	98	1	alphanumeric	valid patient class I or O or U
DISCHARGE-DISPOSITION	99	133	35	alphanumeric	
ADMIT-DATE	134	141	8	yyyymmdd	
ADMIT-TIME	142	147	6	hhmmss	
DISCHARGE-DATE	148	155	8	yyyymmdd	
DISCHARGE-TIME	156	161	6	hhmmss	
FILLER	162	450	289	alphanumeric	

4.0 Transaction Specifications

4.1 General

The VistA software sends an Observational Result Unsolicited (ORU) result type HL7 message whenever one or more of the defined emerging pathogen initiatives are identified.

4.2 Specific Transaction

A. Identified Encounter

When EPI data are identified an EPI Observational Result Unsolicited (ORU) message is sent to the AITC. The EPI ORU message consists of the following segments:

Example: EPI ORU Message

```
ORU          OBSERVATIONAL RESULT UNSOLICITED
MSH          Message Header
NTE          Notes and Comments
PID          Patient Identification
PV1          Patient Visit
NTE          Notes and Comments
DG1          Diagnosis
DSP          Display Data
ZXE          Pharmacy Prescription
OBR          Observation Report
OBX          Results


MSH|~|\&|EPI-XXX|170|EPI-XXX|170|19961018113521||ORU~R01|107|P|2.2|||||USA
NTE||REPORTING DATE FROM 19850101 TO 19961018
PID|1|000-00-
0008~0~M10|5~5~M10||LABPATIENT~EIGHT||19220912|M||7|||||||||052167946
PV1|1|O|||||||||||||||||||||||||||||||||||||||19950315151907
NTE|1|Vanc-Res Enterococcus
DG1|1| |451.19^DEEP PHLEBITIS-LEG NEC~I9
DG1|2| |511.9^PLEURAL EFFUSION NOS~I9
DG1|3| |670.02^MAJOR PUERP INF-DEL P/P~I9
DG1|4| |331.0^ALZHEIMER'S DISEASE~I9
DG1|5| |500.^COAL WORKERS' PNEUMOCON~I9
OBR|1|||^CHEMISTRY TEST^VANLT|||19950315151907|||||||SER^^SERUM
OBX|1|ST|84330.0000^Glucose Quant^VANLT^260^GLUCOSE1^VA60||25|mg/dL|70-125|L*
NTE|2|2^Hepatitis C antibody
OBR|2|||^CHEMISTRY TEST^VANLT|||19950315151907|||||||SER^^SERUM
OBX|1|ST|84330.0000^Glucose Quant^VANLT^260^GLUCOSE1^VA60||25|mg/dL|70-125|L*
PID|2|000-00-
0009~8~M10|7~7~M10||LABPATIENT~NINE||19591229|F||7|||||||||023456666
PV1|1|O|||||||||||||||||||||||||||||||||||||||19950315152721
NTE|1|1^Vanc-Res Enterococcus
OBR|1|||87999.0000^MICRO CULTURE^VANLT|||198612100835|||||||^^BLOOD
OBX|1|CE|87993.0000^BACTERIOLOGY CULTURE^VANLT|1|^ESCHERICHIA COLI
OBR|2||^ANTIBIOTIC
MIC^VANLT||||198612100835|||||||^^BLOOD||||||||||87993.0000^1
OBX|1|ST|81812.0000^Neomycin^VANLT^18^NEOMYCN^VA62.06|||||R
OBX|2|ST|^^^35^BACTRCN^VA62.06|||||R
OBX|3|ST|81852.0000^Penicillin^VANLT^23^PENICLN^VA62.06|||||R
OBX|4|ST|81676.0000^Clindamycin^VANLT^3^CLINDAM^VA62.06|||||S
```

Table VA011 - Period of Service

Value	Description
0	KOREAN
1	WORLD WAR I
2	WORLD WAR II
3	SPANISH AMERICAN
4	PRE-KOREAN
5	POST-KOREAN
6	OPERATION DESERT SHIELD
7	VIETNAM ERA
8	POST-VIETNAM
9	OTHER OR NONE
A	ARMY--ACTIVE DUTY
B	NAVY, MARINE--ACTIVE DUTY
C	AIR FORCE--ACTIVE DUTY
D	COAST GUARD--ACTIVE DUTY
E	RETIRED, UNIFORMED FORCES
F	MEDICAL REMEDIAL ENLIST
G	MERCHANT SEAMEN--USPHS
H	OTHER USPHS BENEFICIARIES
I	OBSERVATION/EXAMINATION
J	OFFICE OF WORKERS COMP.
K	JOB CORPS/PEACE CORPS
L	RAILROAD RETIREMENT
M	BENEFICIARIES-FOREIGN GOV
N	HUMANITARIAN (NON-VET)
O	CHAMPUS RESTORE
P	OTHER REIMBURS. (NON-VET)
Q	OTHER FEDERAL - DEPENDENT
R	DONORS (NON-VET)
S	SPECIAL STUDIES (NON-VET)
T	OTHER NON-VETERANS
U	CHAMPVA--SPOUSE, CHILD
V	CHAMPUS
W	CZECHOSLOVAKIA/POLAND SVC
X	PERSIAN GULF WAR
Y	CAV/NPS
Z	MERCHANT MARINE

Table 0070 - Specimen Source Codes *(continued)*

Abbreviations	Descriptions	Abbreviations	Descriptions	Abbreviations	Descriptions
ABS	Abscess	FLU	Body fluid, unsp	SER	Serum
AMN	Amniotic fluid	GAS	Gas	SKN	Skin
ASP	Aspirate	GAST	Gastric fluid/contents	SKM	Skeletal muscle
BPH	Basophils	GEN	Genital	SPRM	Spermatozoa
BIFL	Bile fluid	GENC	Genital cervix	SPT	Sputum
BBL	Blood bag	GENV	Genital vaginal	SPTT	Sputum tracheal aspirate
BLDC	Blood capillary	HAR	Hair	STON	Stone (use CALC)
BPU	Blood product unit	IHG	Inhaled Gas	STL	Stool = Fecal
BLDV	Blood venous	IT	Intubation tube	SWT	Sweat
BON	Bone	ISLT	Isolate	SNV	Synovial fluid (Joint fluid)
BRTH	Breath (use EXHLD)	LAM	Lamella	TEAR	Tears
BRO	Bronchial	WBC	Leukocytes	THRT	Throat
BRN	Burn	LN	Line	THRB	Thrombocyte (platelet)
CALC	Calculus (=Stone)	LNA	Line arterial	TISS	Tissue
CDM	Cardiac muscle	LNV	Line venous	TISG	Tissue gall bladder
CNL	Cannula	LIQ	Liquid NOS	TLGI	Tissue large intestine
CTP	Catheter tip	LYM	Lymphocytes	TLNG	Tissue lung
CSF	Cerebral spinal fluid	MAC	Macrophages	TISPL	Tissue placenta
CVM	Cervical mucus	MAR	Marrow	TSMI	Tissue small intestine
CVX	Cervix	MEC	Meconium	TISU	Tissue ulcer
COL	Colostrum	MBLD	Menstrual blood	TUB	Tube NOS
CBLD	Cord blood	MLK	Milk	ULC	Ulcer
CNJT	Conjunctiva	MILK	Breast milk	UMB	Umbilical blood
CUR	Curettage	NAIL	Nail	UMED	Unknown medicine

Table 0070 - Specimen Source Codes *(continued)*

Abbreviations	Descriptions	Abbreviations	Descriptions	Abbreviations	Descriptions
CYST	Cyst	NOS	Nose (nasal passage)	URTH	Urethra
DIAF	Dialysis fluid	ORH	Other	UR	Urine
DOSE	Dose med or substance	PAFL	Pancreatic fluid	URC	Urine clean catch
DRN	Drain	PAT	Patient	URT	Urine catheter
DUFL	Duodenal fluid	PRT	Peritoneal fluid ascites	URNS	Urine sediment
EAR	Ear	PLC	Placenta	USUB	Unknown substance
EARW	Ear wax (cerumen)	PLAS	Plasma	VOM	Vomitus
ELT	Electrode	PLB	Plasma bag	BLD	Whole blood
ENDC	Endocardium	PLR	Pleural fluid (thoracentesis fld)	BDY	Whole body
ENDM	Endometrium	PMN	Polymorphonucle arneutrophils	WAT	Water
EOS	Eosinophils	PPP	Platelet poor plasma	WICK	Wick
RBC	Erythrocytes	PRP	Platelet rich plasma	WND	Wound
EYE	Eye	PUS	Pus	WNDA	Wound abscess
EXHLD	Exhaled gas (breath)	RT	Route of medicine	WNDE	Wound exudate
FIB	Fibroblasts	SAL	Saliva	WNDD	Wound drainage
FLT	Filter	SEM	Seminal fluid	XXX	To be specified in another part of the message
FIST	Fistula				

Table 0005 – Race:
1ST RACE COMPONENT Identifier comes from table 0005.
2ND COMPONENT Text- comes from table 0005.

IDENTIFIER	TEXT
0000-0-SLF	Declined to answer
9999-4-SLF	Unknown by patient
1002-5-SLF	American Indian or Alaska Native (self-identified)
1002-5-PRX	American Indian or Alaska Native (proxy identified)
1002-5-OBS	American Indian or Alaska Native (observer identified)
1002-5-UNK	American Indian or Alaska Native (unknown identifier)
2028-9-xxx	Asian (xxx identified)
2054-5-xxx	Black or African American (xxx identified)
2076-8-xxx	Native Hawaiian or other Pacific Islander (xxx identified)
2106-3-xxx	White (xxx identified)

Table CDC – Race:
3rd RACE COMPONENT Identifier - comes from table CDC.
4th COMPONENT Text - comes from table CDC.

IDENTIFIER	TEXT
null	Unknown by patient or Declined to answer
1002-5	American Indian or Alaska Native
2028-9	Asian
2054-5	Black or African American
2076-8	Native Hawaiian or other Pacific Islander
2106-3	White

Table 0189 - Ethnic Group
1ST ETHNICITY COMPONENT Identifier - comes from table 0189.
2ND COMPONENT Text - comes from table 0189.

IDENTIFIER	TEXT
0000-0-SLF	Declined to answer
9999-4-SLF	Unknown by patient
2135-2-SLF	Hispanic or Latino (self-identified)
2135-2-PRX	Hispanic or Latino (proxy identified)
2135-2-OBS	Hispanic or Latino (observer identified)
2135-2-UNK	Hispanic or Latino (unknown identifier)
2186-5-xxx	Not Hispanic or Latino (xxx identified)

Table CDC - Ethnic Group
3rd ETHNICITY COMPONENT Identifier - comes from table CDC.
4th ETHNICITY COMPONENT Text - comes from table CDC.

Value	Description
Null	Unknown by patient or Declined to answer
2135-2	Hispanic or Latino
2186-5	Not Hispanic or Latino

Table 0001 - Sex

Value	Description
F	FEMALE
M	MALE
O	OTHER

Table 0078 - Abnormal flags

Value	Description
L	Below low normal
H	Above high normal
LL	Below lower panic limits
HH	Above upper panic limits
For microbiology sensitivities only	
S	Sensitive
R	Resistant
I	Intermediate
MS	Moderately sensitive
VS	Very sensitive

Table Specimen Source ID Code

Value	Description
Problem List	1
Encounter Dx	2
Discharge DX	3

Table Hepatitis Risk Assessment Resolutions

Value	Description
Declined Hep C Risk Assessment	1
No Risk Factors for Hep C	2
Prev Positive Test for Hep C	3
Risk Factor for Hepatitis C	4
Hep C Virus Antibody Positive	5
Hep C Virus Antibody Negative	6
Hepatitis C Infection	7

NOTE: Term other than Hepatitis C National Risk Assessment Clinical Reminders resolution term 00

APPENDIX – D
VHA DIRECTIVE 2001-039
JUNE 27, 2001
IMPLEMENTATION OF LOGICAL OBSERVATION IDENTIFIERS NAMES AND CODES (LOINC®) FOR LABORATORY DATA

APPENDIX – D

Department of Veterans Affairs	VHA DIRECTIVE 2001-039
Veterans Health Administration	
Washington, DC 20420	June 27, 2001

IMPLEMENTATION OF LOGICAL OBSERVATION IDENTIFIERS NAMES AND CODES (LOINC®) FOR LABORATORY DATA

NOTE: *LOINC® is a registered trademark symbol.*

1. PURPOSE: This Veterans Health Administration (VHA) Directive defines policies on the need for consistent laboratory test names across the national system within the Veterans Health Information Systems Technology Architecture (VistA) software.

2. BACKGROUND

a. Improving health data is also a high priority that is consistent with VHA's goal of improving the quality and accessibility of medical information for clinicians and veterans. In order to provide optimal clinical care, accurate, comprehensive, accessible, and timely data is necessary. Improvements in the provision and outcomes of VHA health care can only be measured by consistent and valid information.

b. LOINC® is a data system that provides a standard set of universal names and codes for identifying individual laboratory results. Developed as a collaborative effort including VHA's Office of Information (OI) staff, LOINC® codes were first released in April 1996 and have since been formally endorsed by the American Clinical Laboratory Association, the association of large referral laboratories whose membership is responsible for over 60 percent of outpatient laboratory testing in the United States. Numerous private commercial laboratories, health plans and health care provider systems have since adopted this system. LOINC® codes have been incorporated into the National Library of Medicine's Unified Medical Language System and are the basis of the Health Care Financing Administration's (HCFA) proposed International Classification of Diseases, 10th edition (ICD-10), laboratory codes. The codes have been incorporated into HCFA's quality assurance testing pilot programs and adopted by the Centers for Disease Control and Prevention to test reporting of communicable disease information electronically. VHA is represented on the committee responsible for introducing new codes.

c. The primary benefit to the Department of Veterans Affairs (VA) health care is having a system that integrates data across inpatient and outpatient settings and across facilities, allowing easy and timely retrieval of clinically useful information needed to provide efficient, high quality individual patient care. LOINC® allows the aggregation of clinical laboratory data within Veterans Integrated Service Networks (VISNs), and nationally, efforts that are currently encumbered by the high rates of variation in local laboratory test naming. Such mapping provides a way to support multiple, normal ranges based on test, method, specimen, sex, and patient age.

d. Hepatitis C infection, an important public health and medical problem for many veterans, is a high priority for VHA. The Under Secretary for Health has requested the creation of an electronic database to monitor the clinical outcomes of patients in the VA system with Hepatitis C infection and information needed for the oversight and management of the national hepatitis C program. A prerequisite for the implementation of such a registry is the availability of standardized laboratory test result data across VHA.

THIS VHA DIRECTIVE EXPIRES JUNE 30, 2006

e. Patch LR*5.2*215, to Version 5.2 of the Laboratory software application, was released in April 1999. This patch provides a mapping process for linking VA National Laboratory Test (NLT) codes to LOINC®.

3. POLICY: It is VHA policy that VISN and facility Directors must provide a national system for laboratory test names by ensuring the installation, set-up, and maintenance of each facility's laboratory software mapping to LOINC®.

4. ACTION

a. By June 30, 2001, each facility must install Patch LR*5.2*215 to laboratory software version 5.2.

b. By July 16, 2001, each VISN Director must have designated one lead person, to be known as the VISN LOINC® Coordinator, who will be responsible for ensuring that, at each VistA site, the appropriate mapping of NLT to LOINC® codes will be performed. In addition, the VISN LOINC® Coordinator will serve as a VistA corporate liaison between the VISN and VHA Information Technology team responsible for providing training on the use of the mapping tool. ***NOTE:*** *The VISN LOINC® Coordinators will work to ensure complete implementation of LOINC® coding within their respective VISNs.*

(1) The LOINC® Coordinator needs to have a broad-based knowledge of clinical laboratory medicine, an overall understanding of the VistA Laboratory Service software package, experience using general VistA applications (i.e., FileMan, MailMan), and be able to grasp the analytical concepts to properly encode test results in all areas of laboratory (i.e., serology, chemistry, microbiology, blood bank, and immunology).

(2) VISN LOINC® Coordinators will receive training on the lab linking process and orientation to their roles as LOINC® Coordinators through a series of teleconferences for that purpose. Training will be coordinated through the OI National Training and Education Office. Specific information on the LOINC® training is available at: <REDACTED. Training and support through teleconferences and audio question and answer sessions will be made available to the VistA site clinical laboratory VistA liaison (Laboratory Information Manager (LIM) or Automated Data Processing Application Coordinator (ADPAC)). ***NOTE:*** *It is requested that facilities do not initiate the mapping process until they have been appropriately trained.*

c. By July 16, 2001, each VISN Director must forward the name and contact information for each VISN LOINC® Coordinator to the National Pathology Enforcement Officer (115), Veterans Health Administration, 810 Vermont Avenue, NW, Washington, DC 20420, or fax to (202) 273-7561.

d. By September 30, 2001, each VISN LOINC® Coordinator must ensure the linking of Hepatitis C-related laboratory tests at each facility and report completion to the VISN Director. ***NOTE**: The actual mapping will be performed by the LIM or ADPAC at all facilities.*

e. By December 31, 2001, VISN LOINC® Coordinators must have completed the full mapping of LOINC® codes within all facility clinical laboratories and report completion of the task to the VISN Director as well as the Pathology Regional Commissioners. Complete mapping for all laboratory test names is required.

5. REFERENCES

a VHA Executive Decision memorandum approved by the Under Secretary for Health on September 20, 2000. REDACTED

b. Logical Observation Identifier Names and Codes (LOINC®) User's Guide, January 5, 2001, c/o Regenstrief Institute, Indianapolis, IN. The LOINC® is copyrighted (1995-2001) by Regenstrief Institute and the LOINC® Committee. The Department of Veterans Affairs abides by all copyright restrictions. For further information go to REDACTED>.

c. National Laboratory Test (NLT) Mapping to Logical Observation Identifier Names and Codes (LOINC®) Patch LR*5.2*215, Technical, Installation and User Guides, Version 5.2, April 1999, Department of Veterans Affairs, Software Service, Clinical Ancillary Product Line. Further information is at REDACTED.

6. FOLLOW-UP RESPONSIBILITY: The Chief Consultant for Public Health, Strategic Healthcare Group (SHG), and Chief Consultant, Diagnostic Services SHG, are responsible for the contents of this Directive. Technical support for the preceding actions will be provided by the OI Software Design and Development Group. Content support will be provided by the Chief Consultant, Diagnostic Services SHG.

7. RECISSIONS: None. This VHA Directive expires June 30, 2006.

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