



Laboratory Quality Assurance Procedure: Specimen Referral to CDC Reference  
Laboratories

Date: 1/26/2015

Supersedes: New

Ohio Department of Health, Bureau of Public Health Laboratory

## Specimen Referral to CDC Reference Laboratories

**Purpose:** This procedure provides instructions on recording and monitoring Ohio Department of Health Laboratory (ODHL) specimen referrals made to Centers for Disease Control and Prevention (CDC) reference laboratories.

**Principle:** In the course of normal analysis at ODHL, some specimens will require further testing be performed at the CDC. The specimens are entered into a database in order that the referral process is documented and can be monitored and evaluated.

### 1. Notification of Specimen Referral

1.1. ODHL specimen submission information for the referral is provided to the Quality Assurance Unit. May be submitted electronically by email, network database (Excel) posting, or by scans of associated submission forms:

1.1.1. Information required:

1.1.1.1. ODHL Specimen ID;

1.1.1.2. Testing Requested;

1.1.1.3. Category and specific organism requested; (if known)

1.1.1.4. Date sent to Reference Laboratory; and

1.1.1.5. Name of Laboratory Staff submitting specimen.

### 2. Database Entry

2.1. QA staff will link the referral with the corresponding LITS data and enter the required information into the Specimen Referral Database located on \\LABAUTHDC2\Shared\Micro\Orders\Specimen Referral Database within five days of receipt.

2.1.1. Open Specimen Referral Database to access the Start Screen.

2.1.2. Select New Entry to access the Specimen Referral Log Data Entry Form.  
(Figure 1)

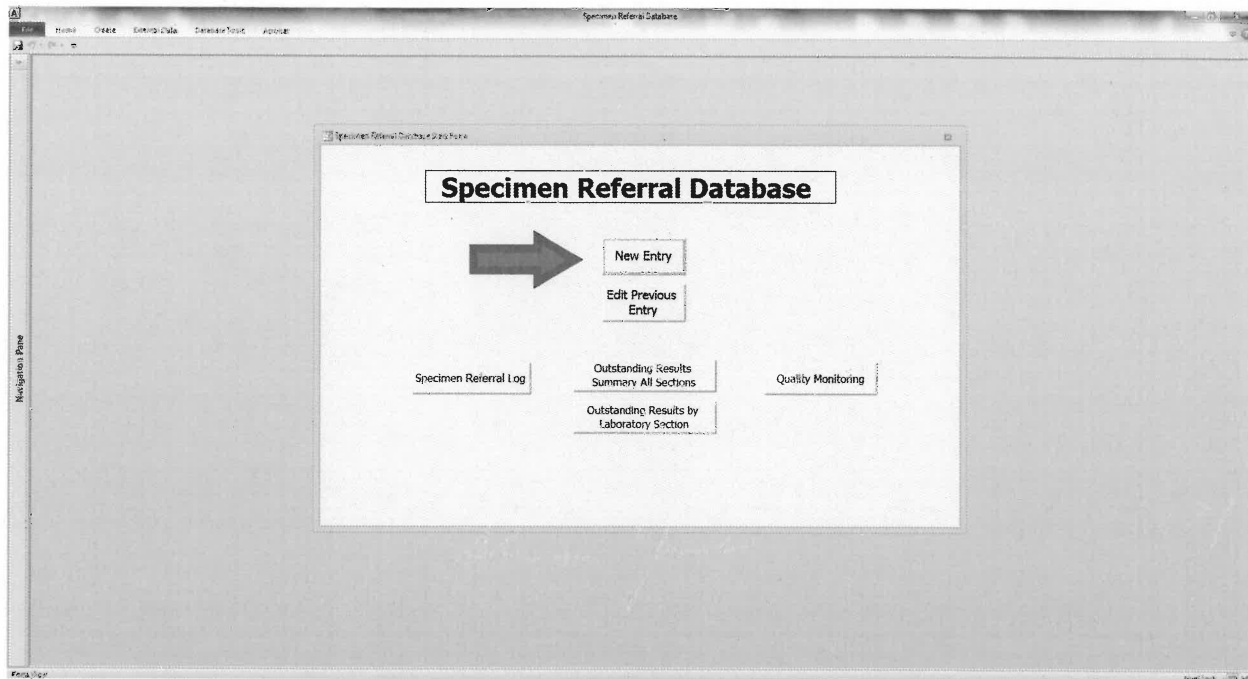


Figure 1.

2.1.3. Enter the appropriate data into the Database. (Figure 2)

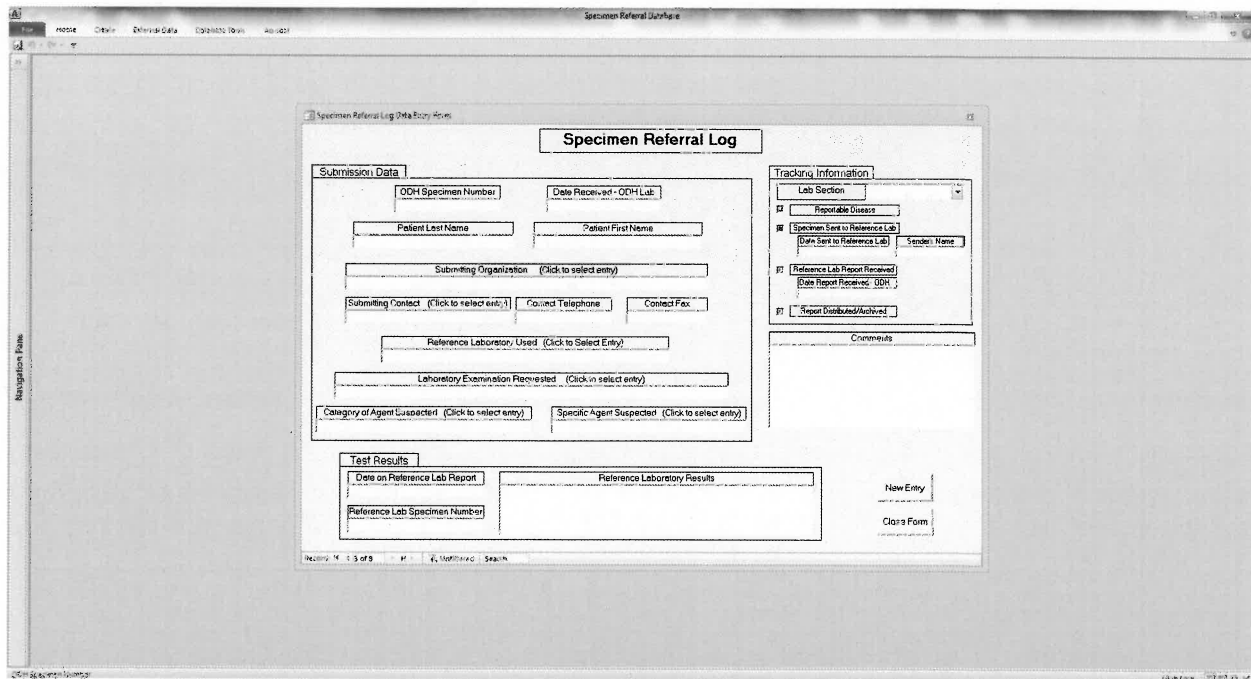


Figure 2.

- 2.1.4. If any required information is missing, contact the Lab staff or section responsible for the send out. If not indicated, information on reportable diseases may be found at <http://www.odh.ohio.gov/pdf/IDCM/intro1.pdf>. (Figure 3)

Know Your ABCs (Alphabetical Order) Effective January 1, 2009			
Name	Class	Name	Class
Amebiasis	B2	Malaria	B1
Anthrax	A	Measles	A
Arboviral neuroinvasive and non-neuroinvasive disease	B1	Meningitis, aseptic (viral)	B1
Botulism, foodborne	A	Meningitis, bacterial	B1
Botulism, infant	B2	Meningococcal disease	A
Botulism, wound	B2	Mumps	B1
Brucellosis	B2	Mycobacterial disease, other than tuberculosis (MOTT)	B2
Campylobacteriosis	B2	Other arthropod-borne disease	B1
Chancroid	B1	Outbreaks: Community, Foodborne, Healthcare-associated, Institutional, Waterborne, and Zoonotic	C
Chlamydia infections (urethritis, epididymitis, cervicitis, pelvic inflammatory disease, neonatal conjunctivitis, pneumonia, and lymphogranuloma venereum (LGV))	B2	Pertussis	B1
Cholera	A	Plague	A
Coccidioidomycosis	B1	Poliomyelitis (including vaccine-associated cases)	B1
Creutzfeldt-Jakob disease (CJD)	B2	Powassan virus disease	B1
Cryptosporidiosis	B2	Psittacosis	B1
Cyclosporiasis	B1	Q fever	B1

Figure 3.

2.1.5. Copies of the Submission form and STAT form will be stored in a Specimen Referral binder in the QA Office for tracking purposes until the completed final report is generated.

### 3. Monitor ODHLABS Email for Electronic Results

3.1. Reports from most CDC laboratories are now sent electronically to the ODHL. The QA staff responsible for maintaining the Specimen Referral Database should check the laboratory email address [ODHLabs@odh.ohio.gov](mailto:ODHLabs@odh.ohio.gov) using the Outlook mail client. (Figure 4)

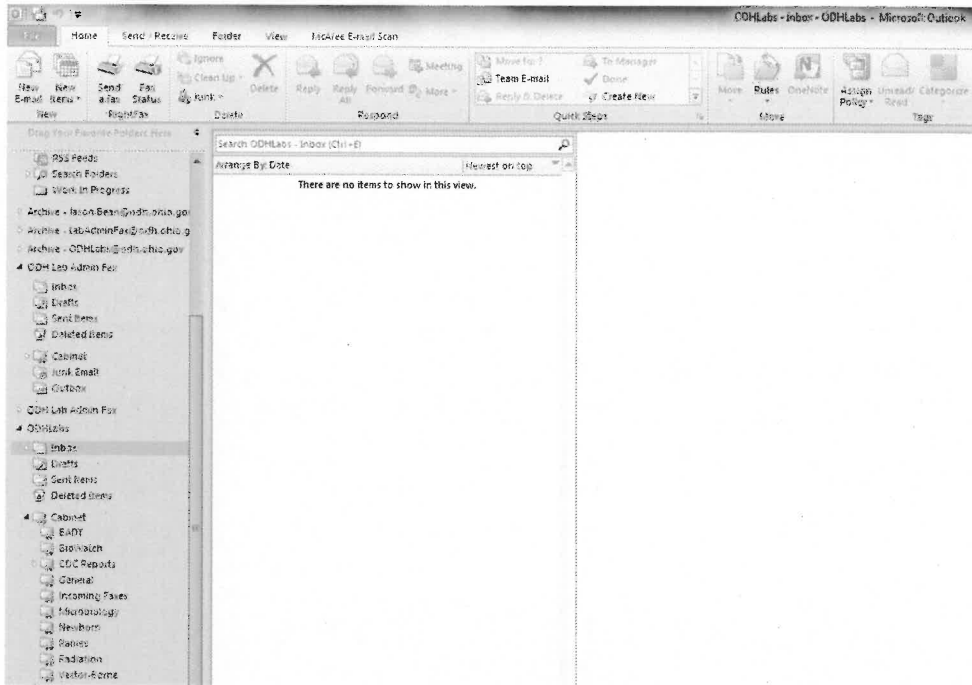


Figure 4.

- 3.2. The ODHLabs email should be checked on a daily basis. Any new CDC results should be forwarded to the LS3 of the appropriate lab section and then moved to CABINET-> CDC Reports -> [Appropriate Section]. (Figure 5)

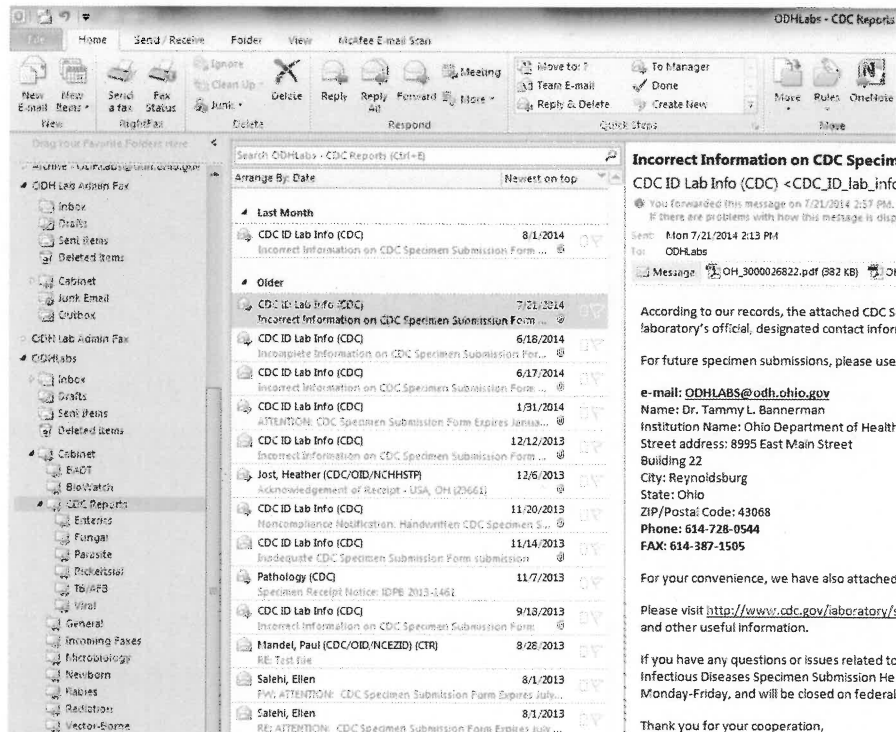


Figure 5.

## 4. Entry of Final Results

- 4.1. When final results are received from CDC, the lab section will generate and send a final report to the original submitter.
  - 4.1.1. The final report is matched and filed by submitting laboratory section staff with the original STAT form and laboratory requisition.
- 4.2. QA staff will enter the information from the electronic CDC report into the Specimen Referral Database located on \\LABAUTHDC2\Shared\Micro\Orders\Specimen Referral Database within five days of receipt.
  - 4.2.1. Open Specimen Referral Database to access the Start Screen. (Figure 6)
  - 4.2.2. Select Edit Previous Entry to open the Specimen Referral Log Data Entry Form. (Figure 7)

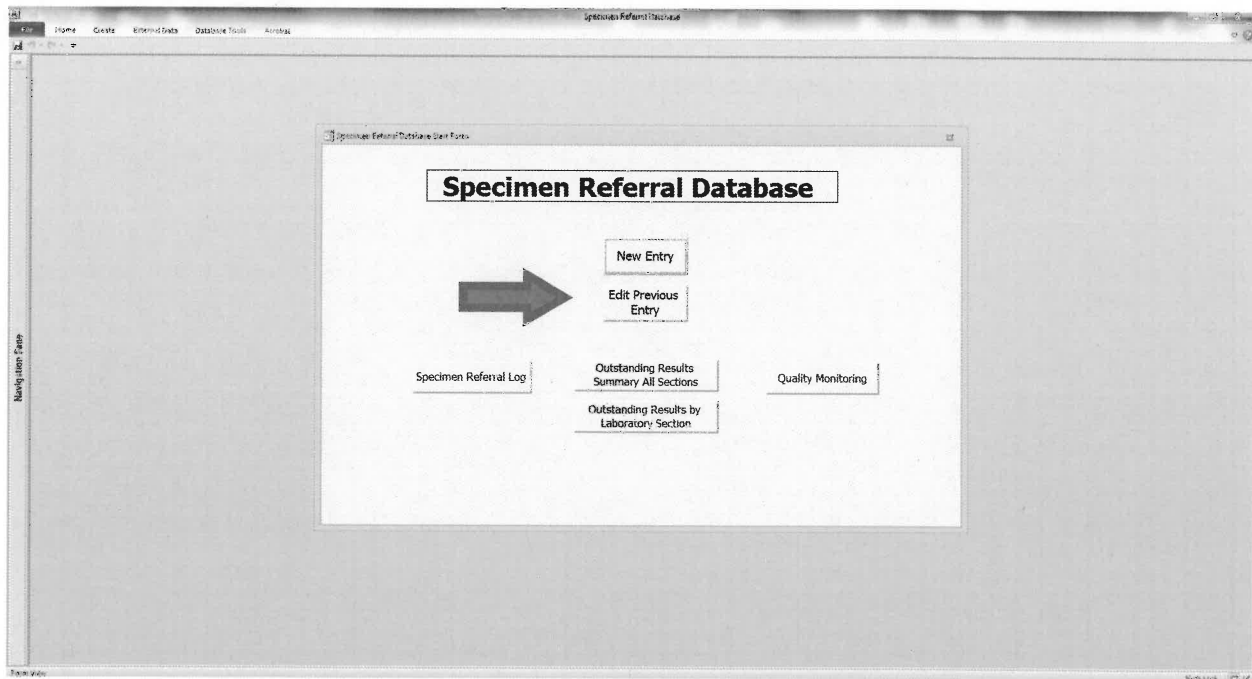


Figure 6.

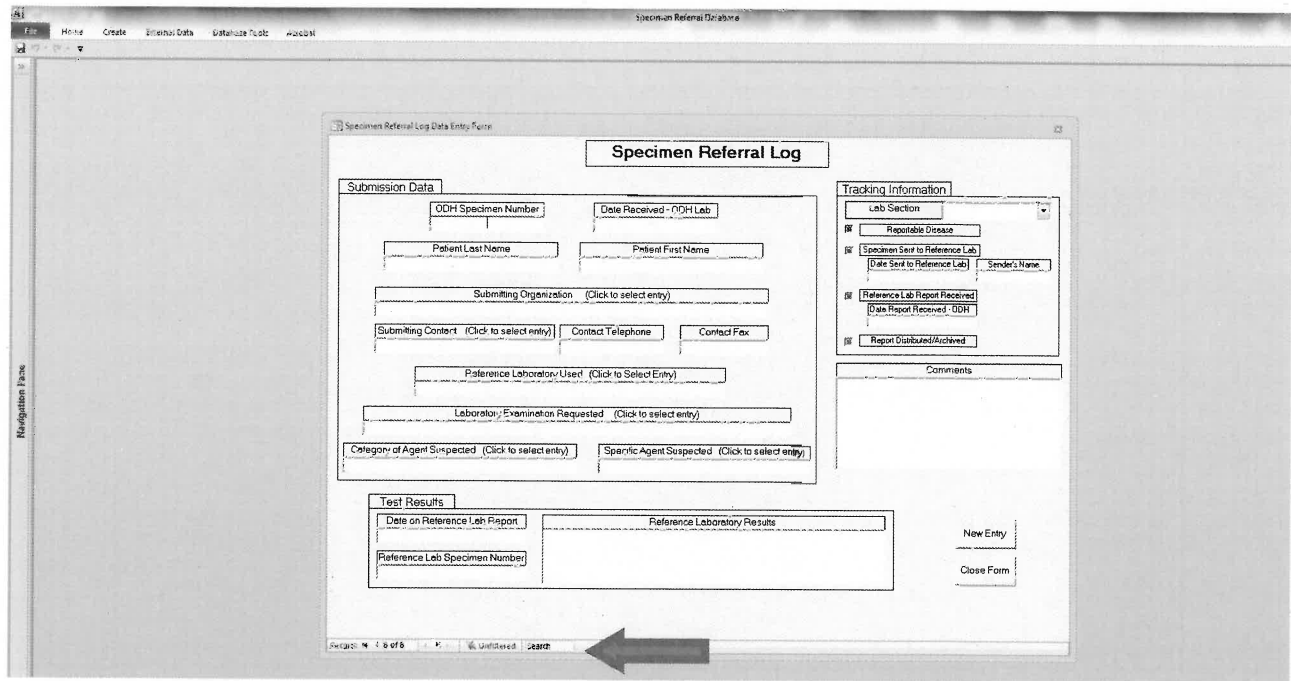


Figure 7

- 4.2.3. Enter the ODHL Specimen ID into the search field to locate the record. (Figure 7).
- 4.2.4. Enter the final report information. (Figure 8)
  - 4.2.4.1. Reference Lab Report Date;
  - 4.2.4.2. Reference Lab Specimen Number;
  - 4.2.4.3. Date Received from Reference Lab; and
  - 4.2.4.4. Final ID or other Reference Lab Results.

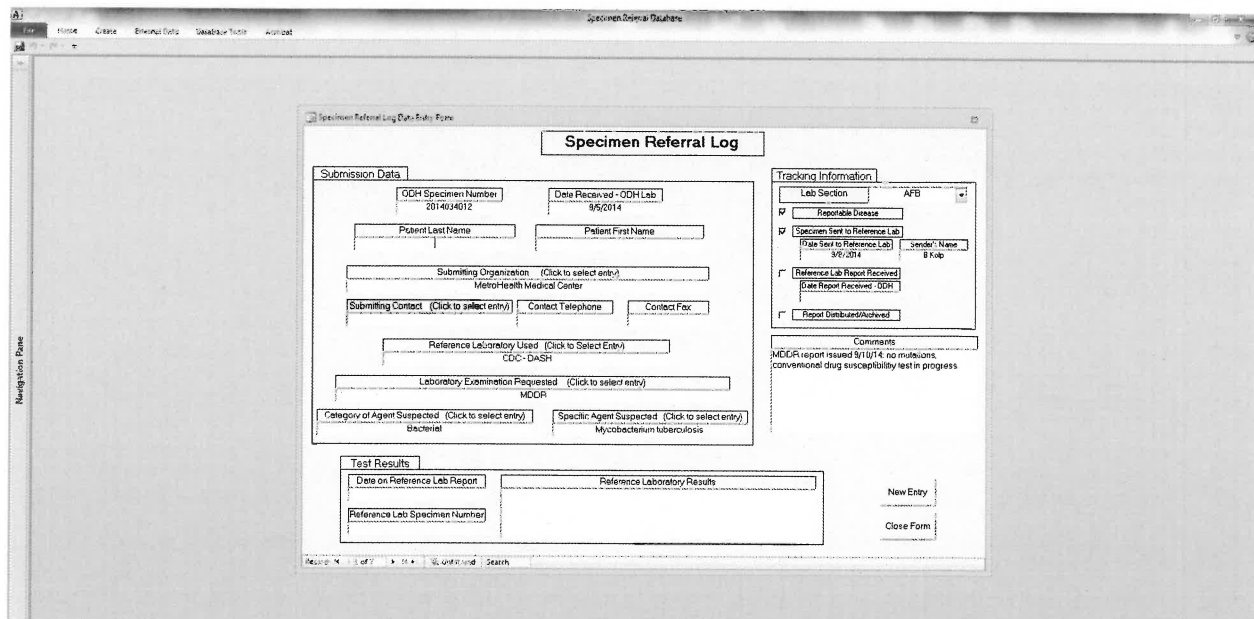


Figure 8.

## 5. Monitoring Outstanding Referred Specimens

5.1. The Specimen Referral Log for all submissions currently in the database may be generated by clicking the Specimen Referral button on the database Start Screen. (Figure 9)

5.1.1. This Log may be printed in all or part if needed. (Figure 10)

5.1.2. Right click on the report to open the shortcut menu. Click "Close" to exit the report screen. (Figure 11)

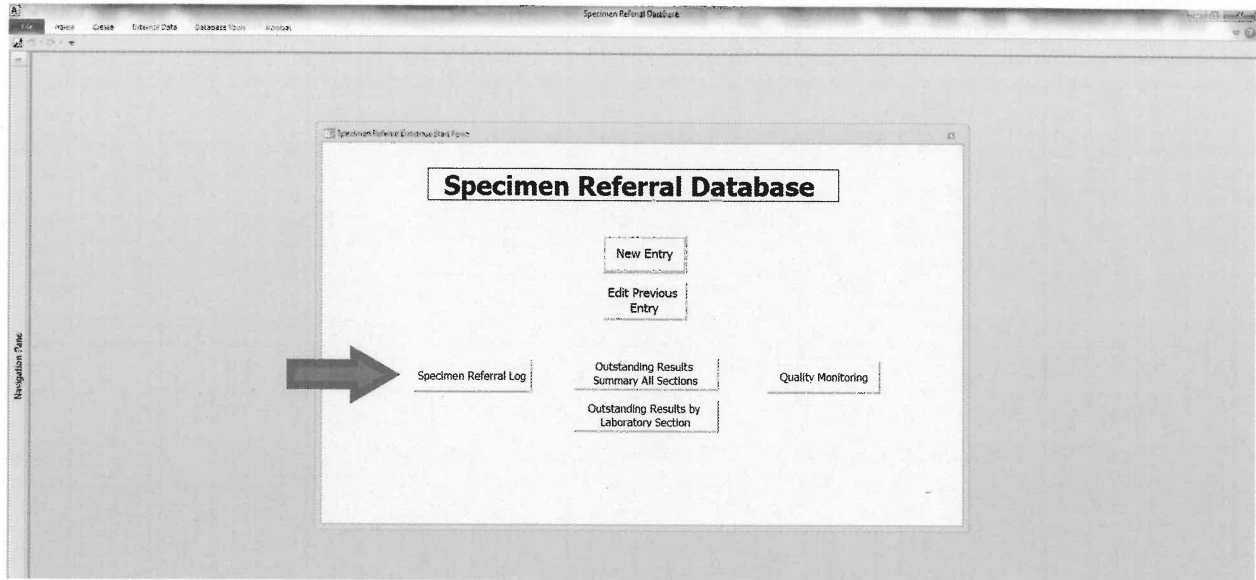


Figure 9

Specimen ID	Date Rec'd for Analysis	Patient Name	Submitting Organization	Reference Lab	Testing Required	Category of Agent	Specific Agent Suspected	Date Sent	Date Report Rec'd	Reportable	Specimen	Report Rec'd	Report	Report Overdue
2014034234	8/27/2014		Cleveland Clinic Foundation	CCC - DASH	Antimicrobial Susceptibility	Bacterial	Stycolactobacterium tuberculosis	8/8/2014	10/7/2014	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2014034587	8/29/2014		Lab Corp (NI)	CCC - DASH	Identification	Bacterial	actinomyces	8/18/2014	8/19/2014	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2014034690	8/20/2014		Lab Corp (NI)	CCC - DASH	Identification	Bacterial	actinomyces	8/28/2014	9/19/2014	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2014033012	9/5/2014		Met-Health Medical Center	CCC - DASH	MDR	Bacterial	Mycobacterium tuberculosis		9/5/2014	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2014034123	9/16/2014		TriHealth Laboratories (all address)	CCC - DASH	serotyping	Bacterial	Mycobacterium tuberculosis	6/14/2014	9/26/2014	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2014034345	8/19/2014		Cleveland Clinic Foundation	CCC - DASH	MDR	Bacterial	Mycobacterium tuberculosis		8/19/2014	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2014034478	8/29/2014		Cleveland Clinic Foundation	CCC - DASH	MDR	Bacterial	Mycobacterium tuberculosis		9/29/2014	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Figure 10

CDC Referral Log - Specimen Referral Database

Specimen #	Date Rec'd for Specimen	Patient Name	Submitting Organization	Reference Lab	Testing Method	Category of Agent	Specific Agent	Date Rec'd	Date Report Rec'd	Reportable	Test at Ref Lab	Report Dismissed
2014034214	8/27/2014		Cleveland Clinic Foundation	CDC - DASH	Antimicrobial Susceptibility	Bacterial	Mycobacterium tuberculosis	8/28/2014	9/10/2014	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2014034567	8/28/2014		Lab Corp (MI)	CDC - DASH	Identification	Bacterial	Aeromonas	8/28/2014	9/10/2014	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2014034690	8/28/2014		Lab Corp (MI)	CDC - DASH	Identification	Bacterial	Aeromonas	8/28/2014	9/10/2014	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2014034012	9/5/2014		HealthHealth Medical Center	CDC - DASH	MDDR	Bacterial	Mycobacterium tuberculosis	9/5/2014		<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2014034123	9/19/2014		TriHealth Lab (at address)	CDC - DASH	Serotyping	Bacterial	Haemophilus influenzae	9/24/2014	9/29/2014	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2014034345	9/19/2014		Cleveland Clinic Foundation	CDC - DASH	MDDR	Bacterial	Mycobacterium tuberculosis	9/19/2014		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2014034678	9/25/2014		Cleveland Clinic Foundation	CDC - DASH	MDDR	Bacterial	Mycobacterium tuberculosis	9/25/2014		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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- Print...
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- Export
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- Close

Specimen Referral Log

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Figure 11

5.2. An Outstanding Results Summary Report for All Laboratory Sections will be generated at the start of each month by the QA Unit. (Figure 12)

5.2.1. This report will be provided to the section supervisors and staff for follow up. (Figure 13)

5.2.2. Right click on the report to open the shortcut menu. Click "Close" to exit the report screen.

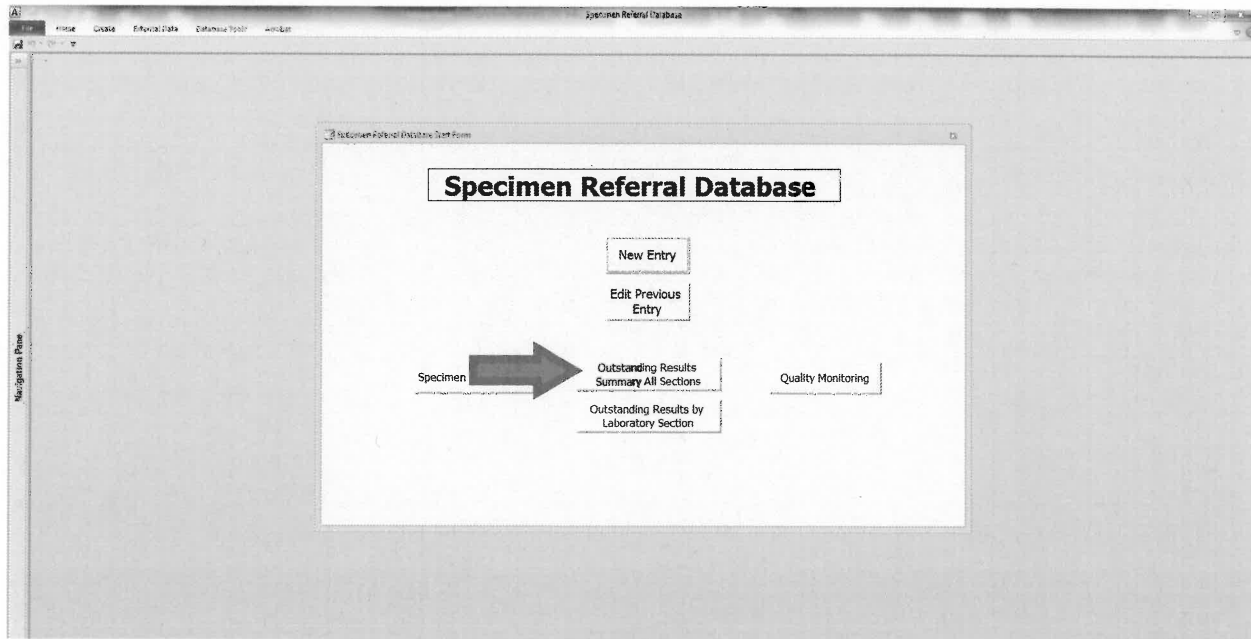


Figure 12



Outstanding Results Summary Report - All Lab Sections

*This report is the property of the Ohio Department of Health and is not to be distributed or reproduced without the Department of Health's written authorization.*

ODH Specimen #	Patient First Name	Patient Last Name	Submitting Organization	Date Rec'd ODH	Date Sent to Reference Lab	Specimen Agent Suspected
2014034912			Metropolitan Medical Center	9/5/2014	9/8/2014	Mycobacterium tuberculosis
2014034345			Cleveland Clinic Foundation	9/18/2014	9/18/2014	Mycobacterium tuberculosis
2014034578			Cleveland Clinic Foundation	9/16/2014	9/16/2014	Mycobacterium tuberculosis

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Figure 13.

5.3 Laboratory section staff may also generate this report for pending results at any time as follows:

- 5.3.1. Open Specimen Referral Access Database to access the Start Screen.
- 5.3.2. Select Outstanding Results by Laboratory Section. (Figure 14)

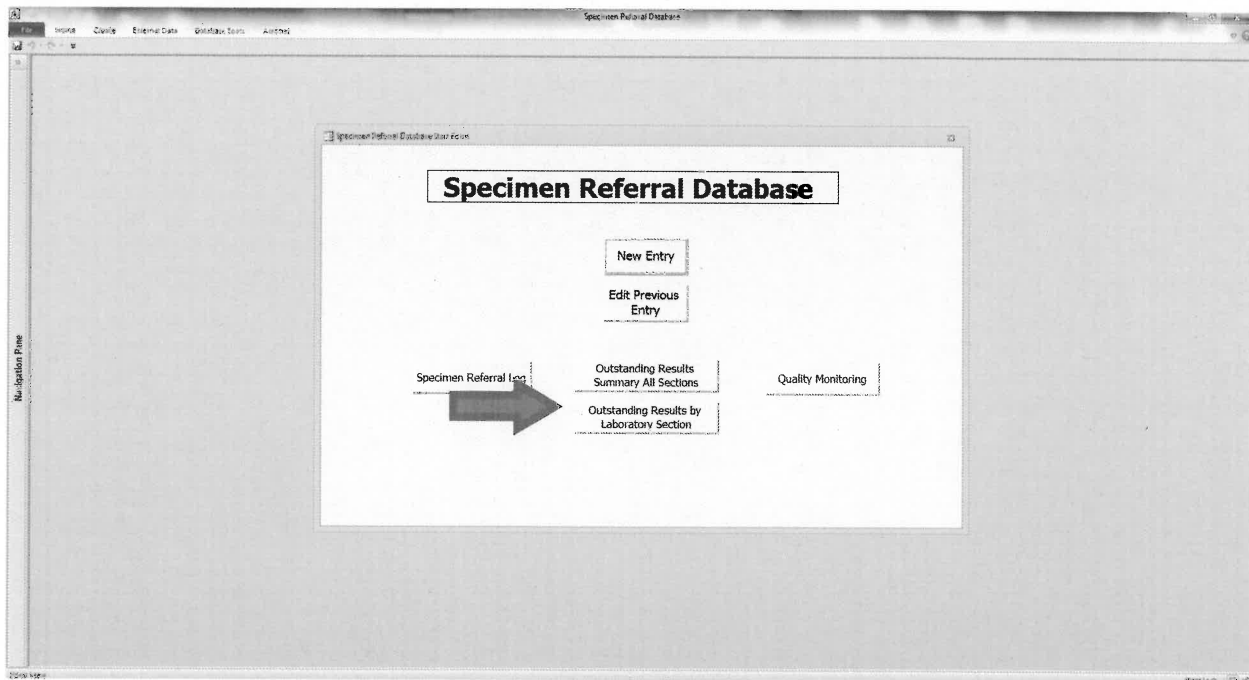


Figure 14.

### 5.3.3. Select Lab Section. (Figure 15)

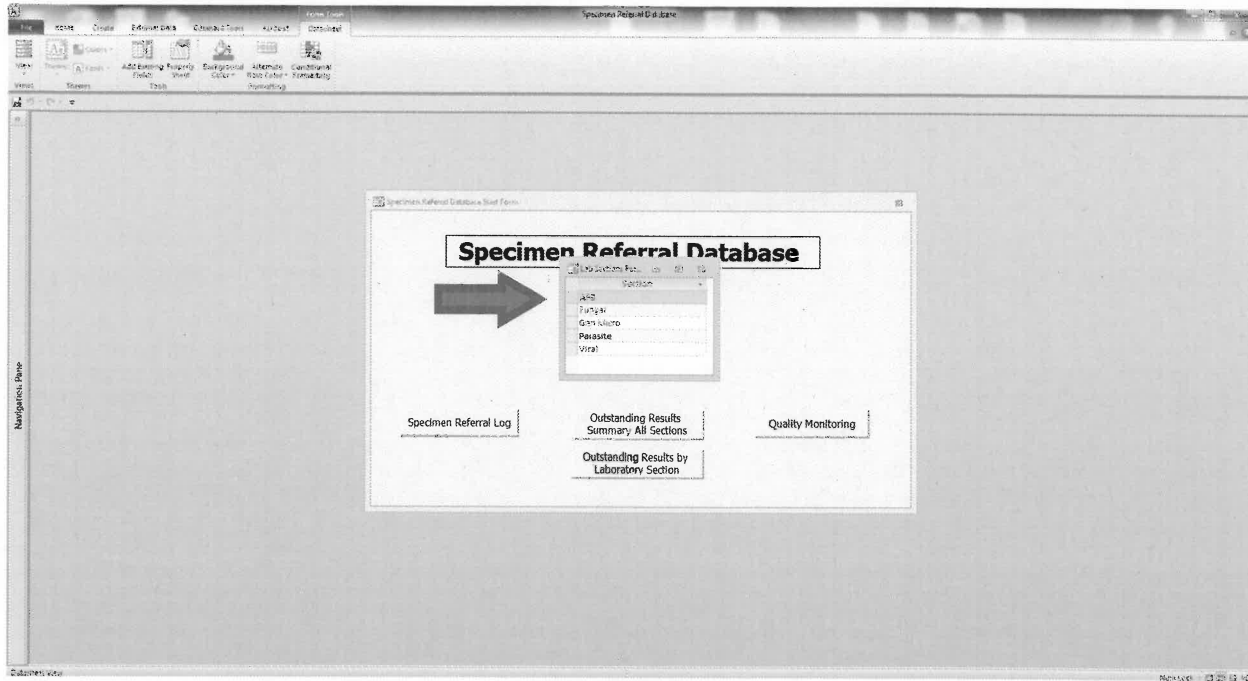


Figure 15

- 5.3.4. A report showing all specimens for the selected Lab Section for which results are pending is displayed. (Figure 16)
- 5.3.5. Right click on the report to open the shortcut menu. Click "Close" to exit the report screen.

**Outstanding Results by Lab Section**  
**Lab Section:** AFB

This report is for internal use of the Ohio Department of Health and is not to be released to the public.

ODH Specimen #	Patient First Name	Patient Last Name	Submitting Organization	Date Rec'd ODH	Date Sent to Reference Lab	Specific Agent Suspected
2014034012			Metz Health Medical Center	5/5/2014	9/8/2014	Mycobacterium tuberculosis
2014034345			Cleveland Clinic Foundation	8/18/2014	9/18/2014	Mycobacterium tuberculosis
2014034678			Cleveland Clinic Foundation	9/26/2014	9/30/2014	Mycobacterium tuberculosis

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Figure 16.

## 6. Quality Monitors

6.1. A Sendout Monitoring Report compiled by Specific Agent Suspected and Submitting Agency is generated semiannually by the QA Unit.

6.1.1. Open Specimen Referral Database to access the Start Screen.

6.1.2. Select Quality Monitoring. (Figure 17)

6.1.3. Click Open Sendout Monitoring Report. (Figure 18)

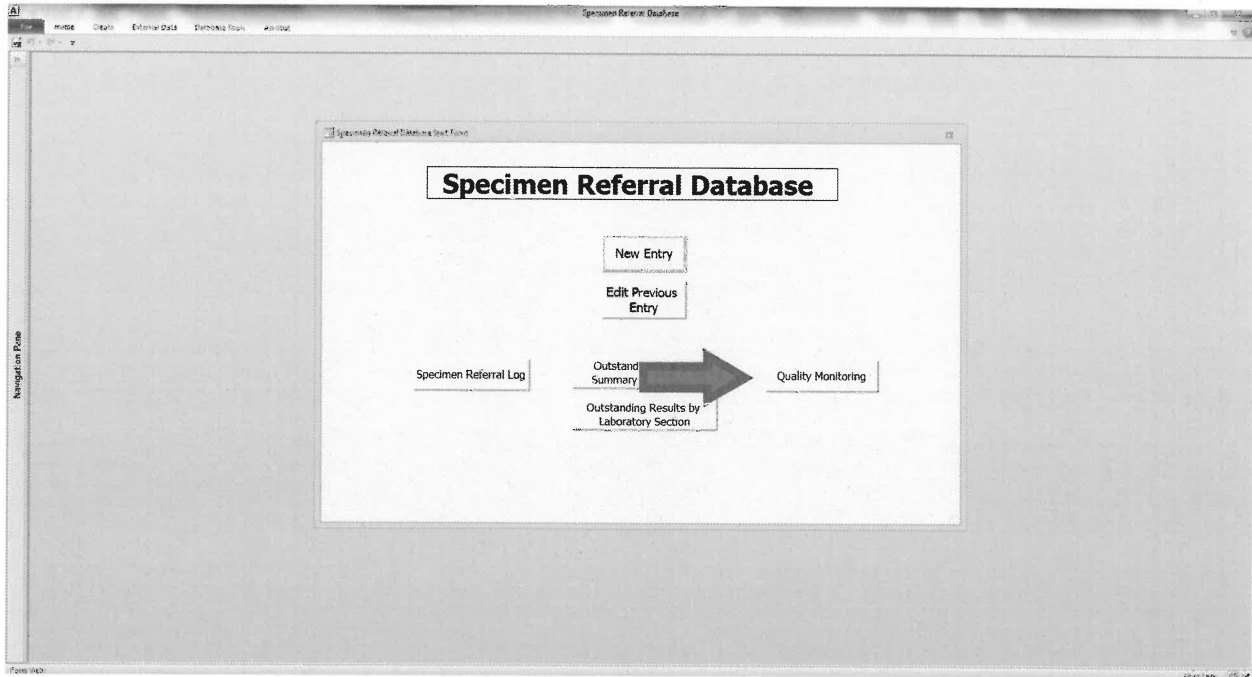


Figure 17

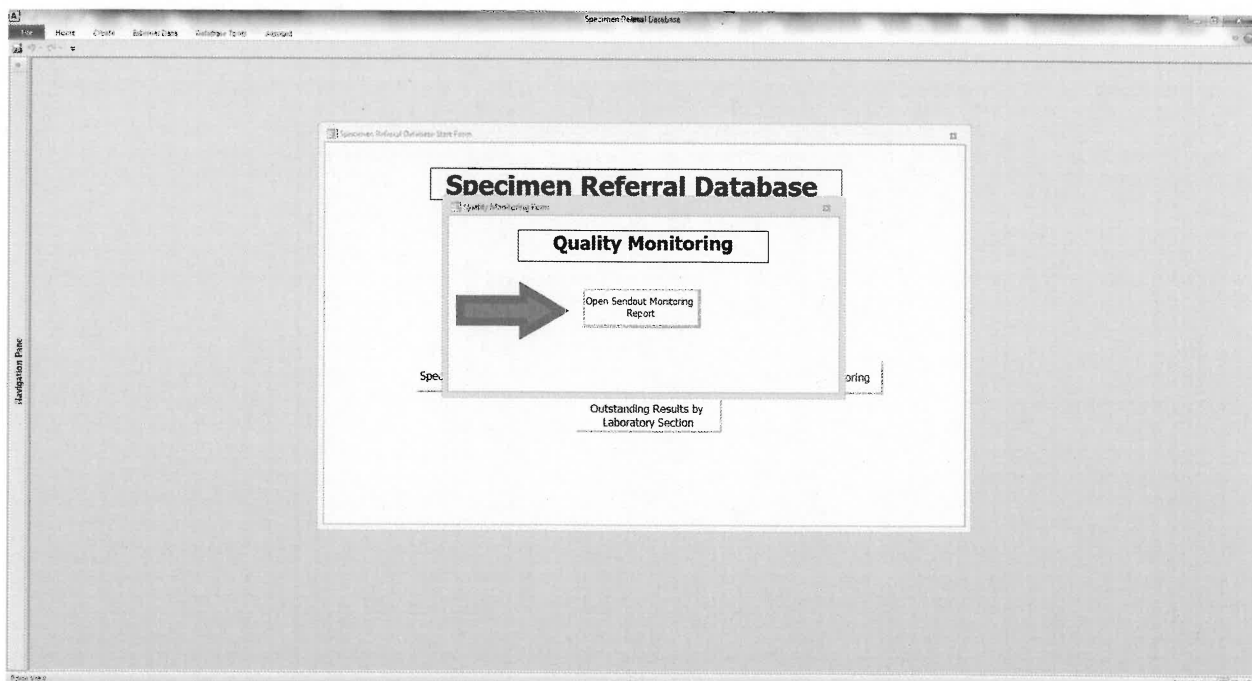


Figure 18

6.2. This report is used by the QA Unit to monitor for differences in preliminary findings and reference results, to establish median testing time expectations for reference sendouts, and to evaluate any trends observed in submitting agency submissions. (Figure 19)

6.2.1. Summary results will be provided to the Laboratory Director for additional action as needed.

6.2.2. Right click on the report to open the shortcut menu. Click “Close” to exit the report screen.

Specific Agent Suspected	Submitting Organization	Laboratory Examination	ODH Specimen #	Date Sent	Date Report Recd	Reference Lab Results	Comments	Days to Report
Influenza	Lab Corp (NA)	Identification	2014084567	8/28/2014	9/20/2014	Flu A (H3N2) Positive, Influenza A (H3N2) Positive		13
Hemophilus influenzae	Triples to Laboratories (in address)	Serotyping	2014081225	8/20/2014	8/29/2014	M. influenzae Non-typable		5
Mycoplasma tuberculosis	Cleveland Clinic Foundation	Antigenic/serologic Susceptibility	2014084134	9/8/2014	10/7/2014	Please see original report for susceptibilities		29

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Figure 19.

**Signature Approvals**

Jason Bean / 1/26/15  
Originator Date

Steve York / 1/26/2015  
Reviewer Date

Sammy Banner / 2/2/2015  
Laboratory Director Date