



Laboratory Update

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Overview

- Helpful Reminders
- Updates to Testing/Policies
- Future Goals

Helpful Reminders

Quantiferon Fill Level

- QFT tubes coated with a concentration of antigens specific for 0.8 to 1.2 mL of blood.
- Too much/too little blood can affect the accuracy of results.
- Use a purge tube with butterfly needle.
- Please be sure patient labels do not cover fill line.

Fill level:



Acceptable Transport Temperatures

- Mandated by Federal law (CLIA).
- 2° to 30°C (36° to 86°F) for specimens for smear/culture; 4° to 27°C (40° to 80°F) for QuantiFERON.
- Temperature taken by Accessioning Lab staff using infrared thermometers at time of receipt.

Temperature (cont'd)

- The Laboratories Administration has formed a task force to monitor rejections, provide educational materials, and brainstorm further solutions.
- 0 specimens rejected due to receipt temperature for the month of January 2024.

Suggestions

- Use cooler packs based on outside temperature.
- Do not place specimens directly on/under cooler packs.
- Try refrigerating cooler packs as opposed to freezing them.

Updates to Testing/Policies

New Lab Equipment

- Recently verified a new plate washer and plate reader for Quantiferon testing.
- In the process of acquiring two new MGIT instruments for culturing/DSTs.

Quantiferon Tube Availability

- TB Lab will make a limited number of QFT tubes available for LHDs testing <25 patients annually.
- Ordered through Outfits Room.
- Be conservative when ordering tubes to avoid expiration.
- Prioritize at risk populations vs routine employee health screening.

Quantiferon Tube Availability (cont'd)

- Tubes for large contact investigations will be available.
- Be aware it may take 4 to 6 weeks to receive tubes.
- Notify the lab ASAP!

Lab Web Portal

- Electronic system for submitting specimens and viewing reports.
- LWP will contain approximately 2 years of historical data.
- MyLIMS no longer functional as of March 1, 2025 - all users migrated to LWP.
- Contact the lab about being set up as a user.

LWP:

The screenshot displays a user interface for a laboratory or healthcare system. At the top left is the Maryland Department of Health logo. To its right is a hamburger menu icon followed by the text "Dashboard".

The main content area features three summary cards:

- MY PATIENTS:** A card showing the number "27".
- PUBLISHED REPORTS:** A card showing the number "4" and a progress bar labeled "VIEWED" at "25%".
- NEW ORDERS:** A card showing the number "0".

A dark sidebar on the left contains the following navigation items:

- Dashboard
- Incomplete Orders
- In Transit Orders
- All Orders
- News
- My Patients
- Help

Below the navigation items are three blue buttons:

- ORDER TESTS
- BATCH ORDER
- VIEW REPORTS

GeneXpert Testing Data

- In 2024, approximately 79% (523 out of 662) of all GeneXpert tests run were on smear-negative specimens by submitter request.
- Only about 2.5% of smear-negative requests yielded a positive confirmatory result for TB.
- GeneXpert testing is currently expending approximately 10 to 15% of the supply budget for the Division of Public Health Microbiology.

GeneXpert Allocation

- July 1st, 2025.
- All new smear positive specimens will continue to be tested automatically.
- All local health departments will receive an allocated number of GX tests based on prevalence in population/testing history.
- Any tests needed beyond allocation will require consultation/review.

Future Goals

PCR

- Nested real-time PCR to identify TB complex and M. avium complex from positive MGIT broths.
- Inactivation procedure for removing isolates from BSL-3 approved by Director.
- Work on PCR validation in process.

Moxifloxacin DST

- Would provide more rapid results for fluoroquinolones.
- Easily accommodated with existing workflow and equipment.
- Source for drug and procedure for producing stocks as well as evaluation isolates need to be identified.

Sensititre DST for Second Line Drugs

- Commercially produced panel, eliminates in-house production.
- Reduces incubation time to 1 to 2 weeks.
- Offers a wider panel of drugs and yields MIC results.
- No standardized susceptible vs resistant interpretation for many second line drugs.

Expanding Molecular DSTs

- Concern for supporting the 4-month drug regimen.
- Completed inactivation study for TB and extraction protocol for PCR will be utilized for sequencing.
- Testing protocol to be established by Core Sequencing Lab.

Educational Lab Tours

- 2 planned per year – probably Spring/Fall.
- Will include discussion of all testing performed at the lab.
- Announcements coming soon with more specifics.

Questions?

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