

Quality Improvements in QuantiFERON Testing (QFT-TB Gold in Tube)

QuantiFERON-TB Gold in tube is an in-vitro diagnostic test for *Mycobacterium tuberculosis* infection (including disease) and is intended for use in conjunction with patient risk assessment, radiography and other medical evaluations.



The test results are highly dependent on sample collection and handling techniques. In an effort to ensure standardization of the preanalytical phase of testing, the Public Health Laboratory is updating the instructions that come with the QuantiFERON collection tubes to provide a check list of important steps in the collection process.

We are asking all collection sites to pay particular attention to the following important points:

1. All collection tubes should be stored at 4°C to 25°C prior to use (avoid high temperatures that may result from direct sunlight or storage near a heat outlet). Tubes MUST BE at room temperature for specimen collection.
2. Tubes should be drawn in the correct order: grey, red, then purple capped tubes.
3. Tubes should be filled to the black mark (1 ml) on the label. They fill slowly so be sure they are completely filled before switching tubes or extracting the needle. If you use a butterfly make sure to use a purge tube or the first tube will have insufficient volume.
4. Immediately after collection, tubes should be shaken firmly 10 times in an upright position.
5. Tubes must be incubated within 16 hours of collection at 37 +/- 1°C. If specimens cannot be received at MTPHL for incubation within this time frame, tubes must be incubated on site.
6. If the tubes are not incubated immediately after drawing, they should be re-mixed by inverting them 10 times immediately before incubation. Do NOT refrigerate or freeze the tubes prior to incubation.
7. Tubes must be incubated in an upright position for 16 to 24 hours. Incubation times outside this range will invalidate the test.
8. After incubation, tubes are stable at room temperature or refrigerated for three days without centrifugation. If centrifuged, be certain the gel plug completely separates the plasma from the red blood cells.
9. Do not decant the plasma. Plasma is stable in its original tube for 28 days if refrigerated.
10. Prior to shipment to MTPHL, Please mark the requisition with the time and date of collection and whether or not the tubes have been incubated. Tubes should be transported under cold conditions.

Please help us to provide more meaningful QuantiFERON results by following the above collection steps. If you have any questions contact MTPHL at 800-821-7284 or mtphl@mt.gov.

TB Educational Opportunity

The Association of Public Health Laboratories (APHL) in collaboration with the Centers for Disease Control and Prevention (CDC) is excited to present a new training tool, "[Essentials for the Mycobacteriology Laboratory: Promoting Quality Practices](#)". The training modules are designed to enhance competency and address issues of common mycobacteriology laboratory practices affecting quality testing and the safety of the laboratorian. These modules and other valuable TB resources are available through APHL's TB homepage:

<http://www.aphl.org/aphlprograms/infectious/tuberculosis/pages/default.aspx>.

Montana Communicable Disease Weekly Update

Release date: 11/22/2013



DISEASE INFORMATION

Summary – MMWR Week 46 - Ending 11/16/2013 Preliminary disease reports received at DPHHS during the reporting period November 10–16, 2013 included the following:

- **Vaccine Preventable Diseases:** Influenza* (2), Pertussis (5)
- **Invasive Diseases:** (0)
- **Enteric Diseases:** Campylobacteriosis (5), Giardiasis (1), Salmonellosis (1), Shigellosis (1)
- **Hepatitis:** (0)
- **HIV Disease**:** (0)
- **Vector-borne Diseases:** (0)
- **Animal Rabies:** (0)
- **Travel Related Conditions:** (0)

* Cases confirmed by MTPHL only. Weekly updated Montana Flu information will now be included as an attachment to the weekly update.

** A case is included if a new confirmatory test or report was received by DPHHS. Cases include both persons who were newly diagnosed and persons newly reported in Montana who may have been diagnosed in another state or country.

NOTE: The attached reports have multiple pages reflecting the following information: (1) cases for the past reporting week; (2) communicable diseases YTD; (3) clusters and outbreaks; and (4) a quarterly HIV/STD summary.

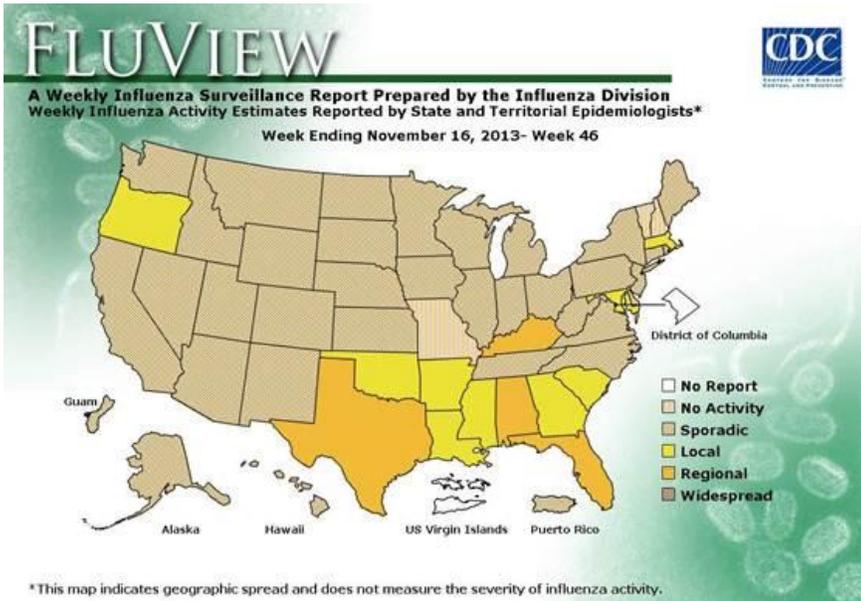
HOT TOPICS

Seasonal Influenza: Two jurisdictions reported a total of ten confirmed influenza cases for the week of November 10–16, 2013. To date, there has been one hospitalization and zero deaths attributed to influenza. The maps on the attached Montana Influenza Summary demonstrate influenza activity by case counts for the most recent reporting week, case counts for the flu season to date, and rates for the season to date (per 10,000 persons).

CDC Influenza Media Tool Kit AND CDC What’s New Web Page: [NEW! 2013 NIVW Media Toolkit](#) and [CDC Whats NEW Flu](#) provide information, recommended strategies, and resources to help engage media and encourage seasonal flu vaccination. “What’s New” have key points to support National Influenza Vaccination Week (Dec. 8-14) and other supporting information for local communication efforts.

Weekly national update:

- Increases in influenza activity across the U.S. are expected to continue in the coming weeks. The geographic spread of influenza in four states was reported as regional; nine states reported local influenza activity. (See [FluView Activity Update](#).)
- If you have not gotten your flu vaccine yet this season, you should get one now. It takes about two weeks after vaccination for antibodies to develop in the body that protect against influenza virus infection.



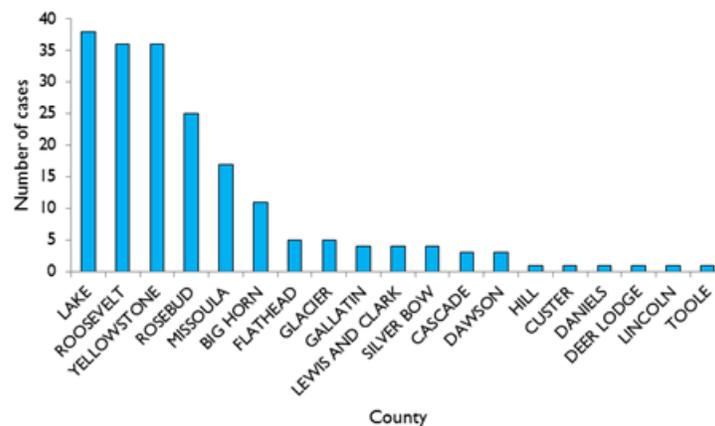
Respiratory Syncytial Virus (RSV): This week is the seventh reporting week for laboratories performing in-house RSV testing. We are seeing non-seasonal activity in the Northwestern, Eastern, and South Central regions of Montana. Weekly updates and additional RSV and RSV prophylaxis information can be found at:

- www.rsv.mt.gov
- <http://www.dphhs.mt.gov/publichealth/rsv/>

Gonorrhea update: (as of November 21, 2013):

- 197 gonorrhea cases have been reported in Montana, surpassing the 108 cases reported in 2012 and the recent high of 191 cases reported in 2006
- 36 cases have been reported thus far in Quarter 4 of 2013; 75 cases were reported in Quarter 3 of 2013
- Counties reporting an increased number of cases in 2013 are Lake (38 cases), Roosevelt (36), Yellowstone (36), Rosebud (25), Missoula (17), and Big Horn (11)

Gonorrhea cases by county — Montana, Jan 1–Nov 21, 2013*



* County case counts may include cases belonging to tribal health jurisdictions that lie within the county's borders

INFORMATION/ANNOUNCEMENTS

CDC's "Predict the Influenza Season" challenge: Get your calculators out and perhaps contact your best friends in academia as there is \$75,000 at stake for the winners.

This is a competition designed to foster innovation in flu activity modeling and prediction. The registrant who most successfully predicts the timing, peak and intensity of the 2013-14 flu season using social media data (e.g., Twitter, internet search data, web surveys) will receive an award of \$75,000 and recognition on the CDC Influenza website. Full details of the contest requirements—including eligibility rules, how to enter the contest, and scoring criteria—are available via the official contest announcement at <https://federalregister.gov/a/2013-28198>.

CDC monitors flu activity each year using routine flu surveillance systems that do not utilize social media data or predict flu activity. With this challenge, CDC hopes to encourage exploration into how social media data can be used to predict the timing, peak, and intensity of flu activity and supplement CDC's routine systems for monitoring flu. Early insights into the timing and intensity of the flu season could be very useful to public health officials for vaccination campaigns, communicating to the public, allocating resources, and implementing strategies to combat the spread of flu disease.

Disease Reporting in MIDIS, Sharepoint and You: "MIDIS Tips and Tricks" newsletters for MIDIS Reporting can be found on the Sharepoint site under the CDEpi tab. On the left hand menu and click on "MIDIS Program." Find the answers to some of those pesky quirks in the system that frustrate you.

Q3 Reconciliation: As of today, approximately 50% of jurisdictions have reconciled cases for the third quarter of 2013. You should have received your report from ePass within the last two weeks. If you have any questions on reconciliation, please contact Stacey Anderson at sanderson@mt.gov or call 406-444-3012.

National Influenza Vaccination Week (NIVW): NIVW is December 8-14, 2013. This national observance serves as a reminder that a yearly flu vaccination is recommended for everyone age 6 months and older. The Immunization Program is sending vaccine posters and you should have received them or will be receiving them in the next week. The mailing will go out to the following providers: family practice, pediatric, obstetric and local health departments. Poster messages are targeted to the following groups:

- Seniors 65+ Years, Grandparents
- Diabetics
- Asthmatics
- Pregnant Women
- Native Americans
- Young Adults
- Family and Children
- General Population

For more information contact the Immunization Program at (406) 444-5580

24/7 AVAILABILITY

The Communicable Disease Epidemiology (CDEpi) Program is available 24 hours a day, 7 days a week, 365 days a year, primarily to assist local health jurisdictions. Local providers should call, including after normal business hours, their local health jurisdiction. The CDEpi 24-hour line is available as a back-up to the local health jurisdiction's 24-hour line. If you need CDEpi assistance, please call 406.444.0273. Phone calls to this number outside of normal business hours will be answered by the answering service. The answering service will immediately forward the message to CDEpi, and we will respond as quickly as possible.

Local health jurisdictions, please ensure that your local providers have your 24/7/365 contact information. And please inform CDEpi or the Public Health Emergency Preparedness Program of updates to your required 24/7 contact information.

This update is produced by the Montana Communicable Disease Epidemiology Program. Questions regarding its content should be directed to 406.444.0273 (24/7/365). For more information: <http://cdepi.hhs.mt.gov>