

# Montana Laboratory Sentinel



Updates from the MT Laboratory Services Bureau  
800-821-7284 [www.lab.hhs.mt.gov](http://www.lab.hhs.mt.gov)

12/14/12

## ***Clostridium difficile* Real-Time PCR Now Available at MTPHL**

*Clostridium difficile*, a Gram-positive, spore forming anaerobic bacillus, was first linked to disease in 1978. The spectrum of *C. difficile* infection (CDI) ranges from diarrhea to severe life-threatening pseudomembranous colitis. Mature colonic bacterial flora in a healthy adult is generally resistant to *C. difficile* colonization. However, if the normal colonic bacterial flora is altered, resistance to colonization is lost. The most common risk factor is exposure to antibiotics.

The diagnosis of *Clostridium difficile* infection (CDI) has been traditionally based on the detection of toxin and/or glutamate dehydrogenase antigen in an EIA plate format or lateral flow device. These methods have lacked sensitivity and/or specificity. As CDI testing algorithms have evolved over the past few years, Polymerase Chain Reaction (PCR) has become the test of choice because of its improved performance and rapid turnaround time. MTPHL is pleased to announce that a real-time PCR test for *Clostridium difficile* using Cepheid® Xpert methodology has been added to our test menu. This PCR assay provides rapid detection of Toxin B gene sequences as well as the presumptive identification of the 027/NAP1/B1 strain of toxigenic *Clostridium difficile*. The 027/NAP1/B1 strain exhibits increased toxin production and has been linked to production of more spores, leading to enhanced persistence in the environment. In the last several years, reports of outbreaks of CDI have been attributed to these emerging fluoroquinolone resistant “hypervirulent” strains.

Beginning January 1, 2013, *C. difficile* testing will be performed by PCR only. The cost for the *C. difficile* PCR test is \$95.00 and the CPT code is 87493. Submit at least one milliliter of unformed liquid or soft stool specimens in a sterile container and transport it in a cold condition (2-8°C). Testing is performed each work day, and specimens received in the morning should have results available the same day.

If you are interested in more details about the *C. difficile* assay, please contact us at 800-821-7284.

## **Influenza Testing 2012-13**



Influenza laboratory surveillance is being performed a little differently for the 2012-2013 season. Although early in the Influenza season we confirmed the presence of Influenza in rapid influenza diagnostic tests (RIDTs), this service is no longer available free of charge. Thirteen laboratory surveillance sites have been identified representing various regions across Montana. These laboratory sites include molecular testing laboratories and those performing RIDTs. These sites have been asked to submit one fee-waived specimen per week for subtyping, as needed, and for further characterization of circulating influenza viruses including anti-viral susceptibility trends.

In addition to the laboratory surveillance, 11 sentinel providers have been identified that can submit up to five fee-waived specimens for testing, and provide weekly Influenza-like Illness (ILI) updates to the DPHHS Communicable Disease Epidemiology (CDEpi) section.

Diagnostic testing is still available at the MTPHL at the reduced cost of \$50 for Influenza A and Influenza B PCR, with an additional charge of \$30 for subtyping any positive Influenza A viruses. Respiratory specimens still should be submitted in a cold condition.

Fee-waived testing in support of cluster investigations or other unusual circumstances involving influenza cases may be available. Please contact the DPHHS CDEpi section at 406-444-0273 for a consultation. Epidemiologists will gather the needed information and determine whether limited fee-waived testing is warranted.

This season's Influenza information, including surveillance and diagnostic testing guidelines, information about RIDTs and a weekly workload activity report is posted on our website:

<http://www.dphhs.mt.gov/publichealth/lab/news.shtml>



## Montana Communicable Disease Weekly Update

Release date: 12/14/2012

### DISEASE INFORMATION

**Summary – MMWR Week 49 - Ending 12/8/2012** Preliminary disease reports received at DPHHS during the reporting period December 2 – 8, 2012 included the following:

- **Vaccine Preventable Diseases:** Influenza\* (9) Pertussis (4), Varicella (4)
- **Invasive Diseases:** Meningitis, Viral (1)
- **Enteric Diseases:** Amebiasis (1), Campylobacteriosis (3), Cryptosporidiosis (2), Giardiasis (4), Salmonellosis (4), Shigellosis (2)
- **HIV Disease\*\*:** (0)
- **Other Diseases:** (0)
- **Animal Rabies:** (1, skunk)
- **Travel Related Conditions:** (0)

\*Cases confirmed by MTPHL. 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) communicable diseases YTD; (2) cases just this past reporting week; (3) clusters and outbreaks; and (4) a quarterly HIV/STD summary.

### HOT TOPICS

**Pertussis:** We have had fewer than 10 cases again this last week (two weeks in a row/knock on wood) and are still holding our collective breath. Our goal now is to stay below 2005 numbers. It is going to be close. We are once again sorry for those counties that had those cases we did have.

**CDC Pertussis Surveillance Worksheet:** We really want to **thank you all for the hard work** on the worksheets. One question we have had is around people (usually from many months ago) not responding for follow-up when requested. Please make three attempts, document them and if no response mark LTF (lost to follow-up) on the submitted form. The effort is making a difference. And we really appreciate those that are going back to before July.

***Please submit your completed case reports for pertussis!!!  
Within four weeks after the initial Report.***

**Seasonal Influenza:** I have once again put in this week's fluview map AND last weeks. Once again you can see the progression and increase including Montana. I said, "Stand-by" last week. Well no need, it is here. This is a good time to go take a look at the Google Flu Trends site. CDC links to it themselves noting the historical correlation to reality. It is a little scary this year. Go to <http://www.google.org/flutrends/us/#US>

See the attached Montana Flu Report. To see the full view of national activity, go to [CDC FluView](#). Montana information can be viewed at [Montana Influenza Information](#)

# FLUVIEW



A Weekly Influenza Surveillance Report Prepared by the Influenza Division  
Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists\*

Week Ending December 08, 2012- Week 49



\*This map indicates geographic spread and does not measure the severity of influenza activity.

# FLUVIEW



A Weekly Influenza Surveillance Report Prepared by the Influenza Division  
Weekly Influenza Activity Estimates Reported by State and Territorial Epidemiologists\*

Week Ending December 01, 2012- Week 48



\*This map indicates geographic spread and does not measure the severity of influenza activity.

## INFORMATION / ANNOUNCEMENTS

### **Rabies HRIG: CDC has noted: Human Rabies Immune Globulin**

- Human rabies immune globulin produced by Sanofi Pasteur (Imogam) is again available to order for postexposure prophylaxis (PEP).
- Human rabies immune globulin produced by Grifols/Talecris Biotherapeutics (HyperRAB) will continue to be available for order as well

### **Rabies Vaccine**

- No change in rabies vaccine availability has been reported

- Rabies vaccine produced by Novartis (RabAvert) is available for pre-exposure and PEP from wholesale distributors
- Rabies vaccine produced by Sanofi Pasteur (IMOVAX), is currently available for PEP only by direct supply to health care providers who are treating patients who have documented rabies exposures.

Attached is our most recent resource designed for your local 24/7 manual. It was designed based upon the most often questions asked using the best we could find from other state resources.

<http://www.cdc.gov/rabies/resources/news/2012-12-12.html>

**Vaccines.gov:** This is a great resource for influenza and other vaccine related questions. <http://www.vaccines.gov/> Get the word out.

**Pertussis Colds Influenza:** What is the difference? The attached lists distinguishing symptoms. Inquiring minds want to know.

**Norovirus:** Based upon request, attached is the recently developed Norovirus recommendations for general settings. This can also be found on the TCC.

### **24/7 AVAILABILITY**

The Communicable Disease Epidemiology program is available 24 hours a day/7days a week/365 days a year but is primarily directed toward you as local health jurisdictions with us as a last resort. If you need us to assist, please call 406.444.0273 if you need immediate communicable disease epidemiology assistance, the answering service will take a message and we will return the call as quickly as possible or be linked directly. Please ensure that your required 24/7 information is up to date and reported to us or the Public Health Emergency Preparedness program if changes occur. Please ensure that you communicate YOUR local 24/7/365 number to your local providers.

*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>*