

02/25/2013

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Updates from the MT  
Laboratory Services

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## MT PHL Support of Pertussis Outbreak Investigations

The Montana Public Health Laboratory performs *Bordetella pertussis* detection by PCR and culture. The 2012 case rate of pertussis in Montana was 52.8 cases per 100,000 Montana residents (as of November 30, 2012), and 2013 outbreaks have been occurring as well. Clinical Laboratory Specialists at MTPHL continue to provide testing support to state and county public health staff, even on weekends when necessary, to aid in disease interventions.

In an effort to stay on the cutting edge, the MT PHL is validating a new CDC-developed five-target assay, which will be able to differentiate between *Bordetella pertussis*, *B. parapertussis*, and *B. holmesii*. The widely used single target assay for *B. pertussis* can also misidentify *B. holmesii*, and there is concern that outbreaks of pertussis may be, in fact, cases of *B. holmesii*. Although there are [reports](#) of outbreaks of co-circulating *B. pertussis* and *B. holmesii*, a recent MMWR publication describing the Washington state pertussis outbreak found less than 1.5% of the positives were identified as *B. holmesii*. A Journal of Clinical Microbiology publication detailing the five-target assay can be found on the ASM [website](#).

## Upcoming APHL Webinars

[March 5, 2013: Test Method Verification in the Microbiology Laboratory](#)

[March 12, 2013: Molecular Epidemiology of Listeria monocytogenes](#) (MTPHL will air in the Cogswell Building, Conference Room C205, 1400 East Broadway in Helena.)

[March 14, 2013: Estimated Glomerular Filtration Rate - What's the Latest?](#)

[March 19, 2013: Data Integrity and Ethics for the Environmental Laboratory](#) (MTPHL will air in the Cogswell Building, Conference Room C205, 1400 East Broadway in Helena.)

[March 26, 2013: 2013 CLIA Update: Tips for a Successful Survey](#)

Access the entire 2013 directory of webinars, along with their descriptions [here](#).

## Pertussis Vaccinations and Waning Immunity

Why are we seeing more outbreaks of pertussis? Research is being done to determine possible causes. Study results, published in the August 1, 2012 issue of the Journal of the American Medical Association, address the effectiveness of whole-cell vs. acellular vaccines. While acellular vaccines have fewer side effects, the immune response does not appear to be as strong, resulting in a shorter protection period. Read about the study [here](#).

Another study, addressed in the New England Journal of Medicine, [February 7, 2013](#), addresses the appearance of pertactin-negative variants of *B. pertussis* in the United States. Pertactin is a component of acellular vaccinations, which these strains have adapted to be able to evade. Analysis of isolates obtained from pediatric patients in Philadelphia revealed that 11 of 12 were pertactin-negative. However, more wide-spread testing would need to be done before it can be determined if this is a regional event or a nationwide shift.

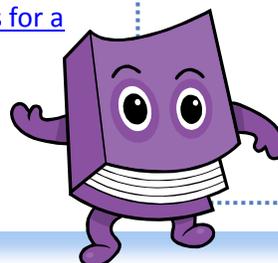
## Second Call for Antibiograms

Many thanks to the twenty laboratories who have submitted antimicrobial susceptibility data for 2012. Your participation helps to provide Montana clinicians and public health practitioners with data that can be used to identify opportunities to maximize appropriate antimicrobial usage and to safeguard the efficacy of antimicrobial agents.

If you have not yet submitted data for 2012, your submission would be appreciated by March 15, so the state antibiogram can be published in a timely manner.

Susceptibility data is accepted and appreciated in any format chosen by your laboratory. Previous years' antibiograms, Collection Guidelines, and Collection Tools may be accessed on the [Laboratory Services website](#).

For more information or assistance in submitting data from your facility, contact [Jan Stetzer](#), 444-0695. Thank you all for your collaboration in developing the Montana Antibiogram.



## Montana Communicable Disease Weekly Update

Release date: 2/22/2013



### DISEASE INFORMATION

**Summary – MMWR Week 7 - Ending 2/16/2013** Preliminary disease reports received at DPHHS during the reporting period February 10–16, 2013 included the following:

- **Vaccine Preventable Diseases:** Influenza\* (10) Pertussis (10), Varicella (3)
- **Invasive Diseases:** *Strep pneumoniae* (1)
- **Enteric Diseases:** Campylobacteriosis (3), Giardiasis (2), Salmonellosis (3)
- **HIV Disease\*\*:** (1)
- **Other Diseases:** (0)
- **Animal Rabies:** (0)
- **Travel Related Conditions:** (0)

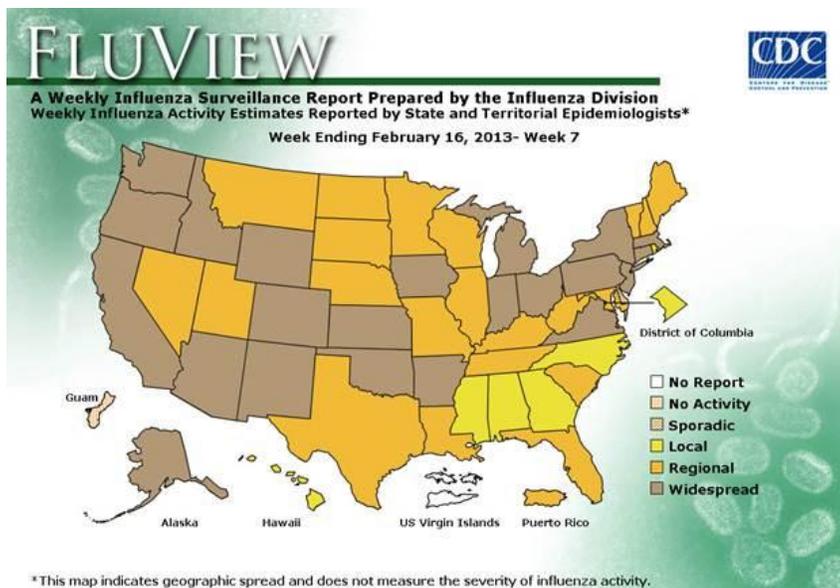
\*Cases confirmed by MTPHL only. Weekly updated Montana Flu information will now be included as an attachment to the weekly update.

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

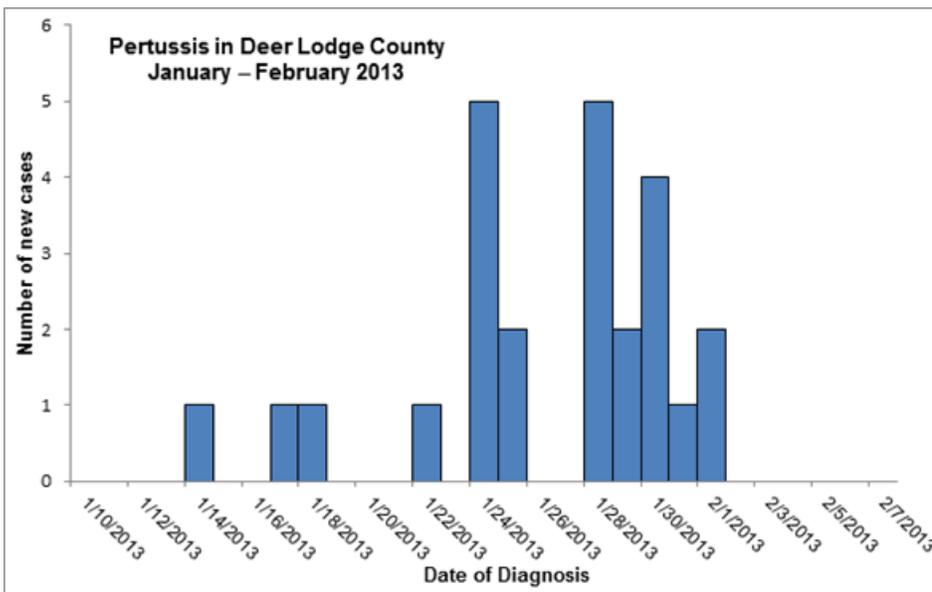
### HOT TOPICS

**Seasonal Influenza:** Influenza continues to decline nationally and in Montana as we move from the widespread designation to regional as of February 16. States report geographic spread of influenza activity as no activity, sporadic, local, regional, or widespread. More information can be found by looking the attached Montana Weekly Influenza Summary viewing at [DPHHS Influenza](#). A major change in reporting in Montana is anticipated for the 2013-2014 season contingent upon approved rule changes. More to come over the next few weeks. To see the full view of national activity, visit [CDC FluView](#). Dr. Tom Frieden CDC Director testified in front of Congress regarding this year's influenza season. That testimony can be viewed at <http://docs.house.gov/meetings/IF/IF02/20130213/100255/HHRG-113-IF02-Wstate-FriedenT-20130213.pdf>.



**Influenza Vaccine Effectiveness:** CDC has released information on the effectiveness of this year’s influenza vaccine. On January 11, 2013, [CDC published interim early estimates of the 2012-2013 influenza vaccine’s](#) effectiveness at preventing medical visits due to laboratory-confirmed influenza among people enrolled at 5 study sites across the United States. All in all, the vaccine appears to be a good match in 2012-2013 except for individuals 65 and older where it appears to be less protective against influenza A (H3N2) viruses.

**Pertussis:** We appear to be in a declining period for Pertussis at the moment and hopefully long term (knocking on wood) with only one case reported this week and 10 from the previous week as noted in the data above. Please see the attached MMWR week 7 CDEpi report for county specific data. Flathead County which has averaged 6 new cases a week since the beginning of the year until this week is undoubtedly holding its collective breath... while the Deer Lodge Outbreak with one apparently sporadic exception is now three weeks out from the end of its multi-case outbreak. Lewis and Clark County is watching and pursuing contacts relative to their situation closely. A summary report is being worked on for 2012 including immunization related data and other elements for the last 15 months of cases.



**GAS:** Because of a recently reported cluster of invasive group A streptococcal (GAS) cases in one health jurisdiction and concern of a similar cluster in another jurisdiction, we are concerned other clusters might have occurred recently in Montana. We will be working with infection preventionists around the state to see if other clusters are in evidence. If you have any questions, please contact Dr. Randy Nett at 406-444-5917 or email at [RNett@mt.gov](mailto:RNett@mt.gov).

**INFORMATION/ANNOUNCEMENTS**

**New Staff in CDEpi:** Joel Merriman has joined CDEpi as the new Healthcare Associated Infection/Syndromic Surveillance Program Manager. We welcome him. In Joel’s words: “Greetings – I am Joel. I am an adventure guru and outdoor enthusiast! I grew up in a small town in Western New York (not New York City), twenty minutes from Canada, a stone’s throw away from Lake Erie. My search for amazing life experiences has brought me to North Carolina, Indiana, Colorado, and now Montana. I love fishing, golfing, lacrosse, skiing, snowboarding, four wheeling, hiking, kayaking, and biking – not exactly in that order – all hobbies that transition nicely to Montana. A few of my short term goals include finding some worthwhile organizations in and around Helena to volunteer at, engaging myself in (or spearheading) local community gardening efforts, and of course, catching my first EVER cutthroat trout. I am excited about working at MT DPHHS, and I look forward to meeting everyone!”

**Quarter 4 2012 Reconciliation (REMINDER):** Reconciliation reports for the fourth quarter of 2012 have been sent out via ePass. The fourth quarter includes any cases from October 1 through December 31 of last year. You should have received files from both the CDEpi and STD programs. Included in these files are instructions for how to reconcile cases with each program. For any questions on ePass receipt of data or reconciliation processes themselves, please contact either Stacey or Cara at the numbers or email addresses below:

CDEpi report or ePass questions: Stacey Anderson 444-3012 or [sanderson2@mt.gov](mailto:sanderson2@mt.gov)

STD report questions: Cara Murolo 444-2678 or [cmurolo@mt.gov](mailto:cmurolo@mt.gov)

**Please try to have all 2012 Quarter 4 reconciliations completed by March 8, 2012.**

### **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>*