

Coming April 2013: MTPHL to Offer Lyme Serology to Improve TAT

Lyme disease is caused by the bacterium *Borrelia burgdorferi* and is transmitted to humans through the bite of infected blacklegged ticks. Deer ticks (*Ixodes scapularis*) or western blacklegged ticks (*Ixodes pacificus*) are not found in Montana. Their habitat is humid areas like the Northeast or Great Lakes region of the United States, or the west coast. In 2011, 96% of the Lyme disease cases were reported from 13 states, mainly in the northeast and upper Midwest. See map [here](#).

Typical Lyme disease symptoms are non-specific (fever, headache, fatigue) unless the characteristic skin rash resembling a circular, expanding rash (erythema migrans) is observed. If left untreated, infection can spread to joints, the heart, and the nervous system. Antibiotics commonly used for oral treatment include doxycycline, amoxicillin, or cefuroxime axetil. Patients with certain neurological or cardiac forms of illness may require intravenous treatment.

Diagnosis of the disease depends on three factors: the likelihood that the patient has been exposed in an endemic area, the symptoms of the patient, and the laboratory test results. The positive predictive value for the test is dependent on the likelihood of infection with the disease (prevalence in the population); this is true for most laboratory tests. Therefore testing should not be performed on patients who exhibit no symptoms, or do not have a history of a tick bite or out of state travel.

Due to the low prevalence of Lyme disease in Montana, MTPHL has been referring Lyme Serology to the Centers for Disease Control and Prevention (CDC) for analysis. This has led to very lengthy turnaround times. In the past year we have noticed increased interest in Lyme testing, and MTPHL is pleased to announce that to improve our service to our customers, we will add Lyme Serology (Total IgG and IgM) to our in-house test menu.

CDC recommends a two-tiered approach to antibody testing against the Lyme disease bacteria. The Lyme EIA screen is run, which tests for the presence of total (IgM and IgG) antibodies. If this screen is negative, no further testing is required unless the specimen was drawn too early in the onset of disease to detect antibodies. If the EIA screening result is positive or equivocal, the

sample will be referred to CDC for confirmatory testing using a Western Blot test, which is specific for IgG or IgM. Results are considered positive only if both of these tests, the EIA screen and the Western Blot are positive. The date of onset is extremely important in the interpretation of testing results, so be sure to include that information on the specimen request form.

Testing will be performed once a week, routinely on a Monday. This should provide a maximum turnaround time of 7 days. Specimen requirements are 1 mL of serum transported in a cold condition, and the CPT code remains unchanged (86618). The cost of the Lyme Serology at the Montana Public Health Laboratory will be \$35, with an additional \$25 charge if the specimen must be referred to CDC. We believe that this fee increase will be more than compensated by the added benefit of the improved turnaround time.

Please contact Vicky Tiberi, vtiberi@mt.gov, or (800) 821-7284 with questions.

CLSI 2013 AST Update

February 6th at 11:00 (application deadline February 4th) [CLICK HERE TO REGISTER](#)

February 7th at 1:00 PM (application deadline February 5th) [CLICK HERE TO REGISTER](#)

Both webinars are \$105.00, including six-month archive. MT PHL will be airing the February 6th webinar here in Helena at the Cogswell Building, 1400 E. Broadway, in Conference Room C207, if you would like to attend.

Public Hearing on Proposed Communicable Disease Rule Changes

There will be a public hearing February 6th at 10:00 AM regarding the proposed changes to the communicable disease rules. This will take place in the DPHHS auditorium, 111 N. Sanders, in Helena. Written and verbal comments are can be submitted at that time or to dphslegal@mt.gov by 5:00 PM on February 14th, 2013. Interested parties can view the proposed changes here: <http://www.dphhs.mt.gov/legalresources/rules/37-624pro-arm.pdf>

Thank you to our laboratory partners for sharing their molecular influenza flu data— see the testing graph on page 3 below!

Montana Communicable Disease Weekly Update

Release date: 1/25/2013

DISEASE INFORMATION

Summary – MMWR Week 3 - Ending 1/19/2013 Preliminary disease reports received at DPHHS during the reporting period January 13 – 19, 2013 included the following:

- **Vaccine Preventable Diseases:** Influenza* (23) Pertussis (11), Varicella (3)
- **Invasive Diseases:** *Streptococcus pneumoniae* (1)
- **Enteric Diseases:** Campylobacteriosis (3), Giardiasis (1), Salmonellosis (1)
- **HIV Disease** :** (0)
- **Other Diseases:** (0)
- **Animal Rabies:** (1,skunk)
- **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.

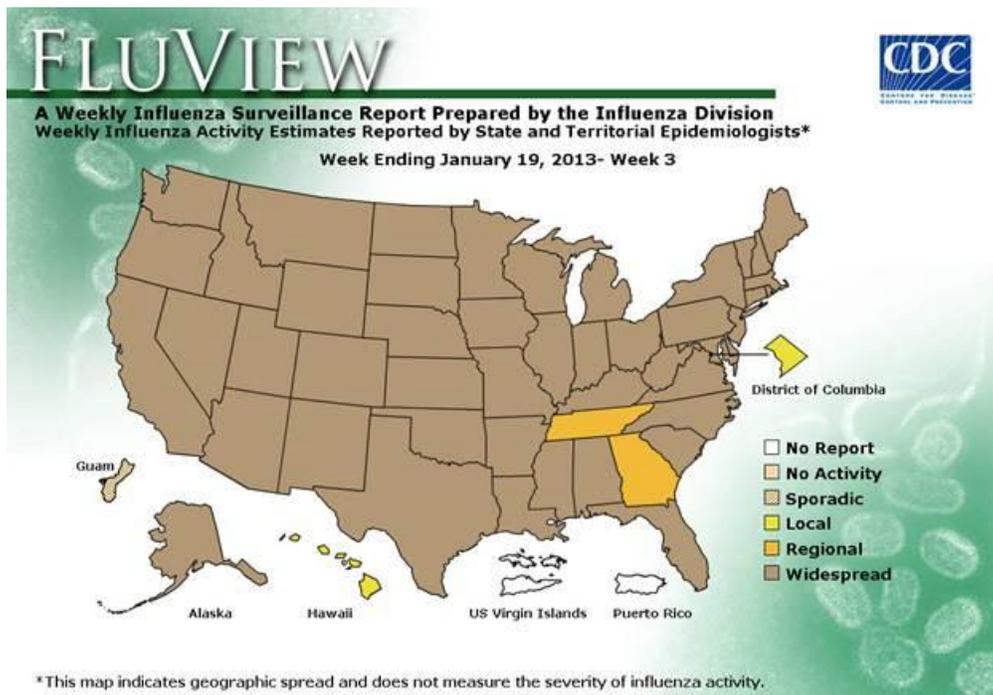
NOTE: The attached reports have multiple pages reflecting the following information: (1) communicable diseases YTD; (2) cases just this past reporting week; (3) clusters and outbreaks; and (4) a quarterly HIV/STD summary.

HOT TOPICS

Pertussis: Staff in Deer Lodge County are working on an expanding outbreak. Flathead County reports additional cases even in the midst of assertive disease control efforts. School related events involving multiple counties and school districts are a distinct threat. Keep your surveillance partners close.

Seasonal Influenza : The Weekly Influenza Summary is attached. DPHHS has received ongoing reports of hospitalizations and deaths but it is important to note that there is often a delay and or lag in reporting of these cases due to various reasons. The maps of influenza activity in the attached report provide more detailed data on the situation as of January 19, 2013.

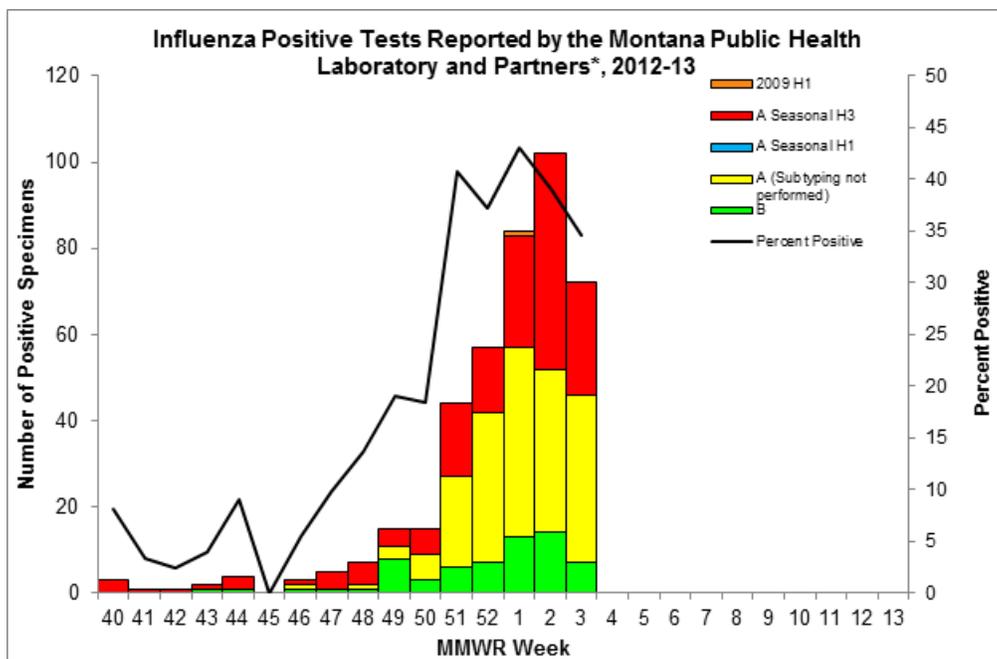
The Centers for Disease Control and Prevention national map (as of January 19, 2013) is shown below. Tennessee and now Georgia have fallen back to “Regional.” Georgia was also one of the first states to go to widespread earlier in the season. CDC notes that there are still mixed signals indicating declines in some areas and data and increases in others.



CDC Key Points:

- Influenza activity remains elevated in most of the country. (See [FluView Activity Update](#) section for more information.)
- A web spotlight on influenza activity and its effect on seniors is available at <http://www.cdc.gov/flu/spotlights/flu-activity-update.htm>.
- Like last week, some national indicators are declining while others are increasing. There also are differences by locality including differences across regions, states and within states as well.
- Nationally, influenza-like-illness is still elevated but seems to be leveling off (from 4.5% to 4.3%) however some parts of the country are continuing to show increases. (In general, the South, Southeast, New England and the Midwest are declining. The Southwest, Mid-Atlantic and the Northwest are rising.)

Data from the Montana Public Health Laboratory and Partners (below) reflects a decline in the number of positive specimens; however we have many verbal reports of healthcare providers no longer testing and that may be reflected in these data.



*Partner laboratories include: Benefis, Bozeman Deaconess Hospital, Kalispell Regional Medical Center, Missoula Community Hospital and St. Patrick's Hospital

To see the full view of national activity, visit [CDC FluView](#). The CDC situational update can be viewed at [CDC Jan 19 2013 national influenza situational update](#) Montana influenza information and weekly data can be viewed at [DPHHS Influenza](#).

INFORMATION/ANNOUNCEMENTS

Outbreak Reports: Please review the outbreak reports chart in the attached CDEpi Report. If you still have “ongoing” outbreaks that have been resolved, please contact Elton Mosher at emosher@mt.gov to coordinate closing those out.

In addition, we do not require “formal” weekly updates of outbreaks. Please notify CDEpi at the beginning of an outbreak by submitting an ‘initial notification’ using the Cluster/Outbreak reporting form. There is no need to completely fill out the form at this time. However, during an outbreak investigation, this form can be used as a guide for data collection. Once the outbreak is deemed over (i.e., 2 incubation periods have passed without any new cases) please submit a final summary of the outbreak on the Cluster/Outbreak reporting form.

Surveillance Snapshots: We have two surveillance snapshots for January. Please click on the article names below to read. Please distribute as needed.

[Varicella In Montana 2007 - 2011](#) – “In Montana during 2007 to 2011, 1303 varicella cases were reported. Nearly 1180 (90%) reported cases occurred in persons aged less than 19 years. The median age was 8 years (range: 9 days–86 years). Almost 80% of cases were reported during October

through May.”

[Childhood Vaccination Coverage by Clinic Specialty, 2010 - 2011](#) – “Montana continues to rank among the lowest 10 states for childhood vaccination coverage. In 2011, only 66.8% (95% confidence interval = 58.2%–75.4%) of Montana children aged 19 to 35 months were estimated to have received the modified vaccine series (4:3:1:3:1:4) with *Haemophilus influenzae* type b vaccine (Hib) excluded. In Montana, it is unknown whether childhood vaccination coverage is influenced by clinician specialty.”

Number of undervaccinated children increasing:

[Reuters](#) (1/22, Pittman) reports that the number of children who are undervaccinated rose from 42 percent to over 54 percent between 2004 and 2008, according to a recent study. The babies born later in the study were also more likely to be late on their vaccines than those children born towards the beginning of the study. According to the results, a variety of factors were included as reasons that children were either late on their vaccine or not vaccinated at all; while physicians have no issues with the current childhood vaccination schedule, a growing number of parents are citing concerns over a potential link between vaccines and autism as a reason they skip immunizations, despite a lack of evidence to support this claim.

The [Denver Post](#) (1/22, Booth) reports that Jason Glanz, of the Kaiser Permanente Institute for Health Research, said that if the number of parents who refuse or delay their children's vaccines increases, outbreaks of flu and whooping cough can be expected; previous studies have shown that children who were denied the whooping cough vaccine are 23 times more likely to catch the disease than their immunized peers.

The [MedPage Today](#) (1/22, Bankhead) reports, "Overall, 49% of 323,247 children had at least one episode of undervaccination before 24 months over a 5-year period." Douglas Opel, MD, and Edgar Marcuse, MD, of the University of Washington in Seattle, added, "Parents and clinicians seek guidance, and there is no better guidance than high-quality scientific evidence. It behooves immunization scientists and policymakers to continue this pursuit, deliberately but decidedly. Defining the questions of greatest importance would be a good start."

[HealthDay](#) (1/22) reports, "The researchers also found that under-vaccinated children are less likely to visit their doctor's offices and more likely to be admitted to hospitals," compared to their peers who received all of their vaccinations on time. In addition, "Recent research found that children whose parents refuse to allow childhood vaccinations are nine times more likely to get chickenpox."

Severe Influenza and Deaths Reporting Form: A PDF version of a revised form for reporting cases of severe influenza (hospitalizations and deaths) is attached. This form should be used to report only severe cases of influenza that result in hospitalization and/or death. Pediatric deaths in persons 18 years of age or younger must be reported IMMEDIATELY to your local health jurisdiction. Healthcare providers and Infection Control Preventionists can use this form for reporting cases to their LOCAL health jurisdictions who will then forward the report to the state.

E3 Deliverable Update: We have had some questions concerning when this PHEP deliverable is met. Deliverable E3 states that “at least one person from each jurisdiction is trained and using MIDIS by March 31, 2013.” In order to complete this deliverable you must:

1. Complete paperwork to enroll staff members who will use MIDIS. Enrollment forms are available by contacting Stacey Anderson (sanderson2@mt.gov)
2. Attend a training session, either via WebEx or one of the upcoming iLinc sessions scheduled for February 5th and 7th.

3. Begin using MIDIS on a daily basis. This includes logging into the system to check lab results, and entering case information to report cases to DPHHS.

If you have not completed all three, you cannot mark this deliverable as complete in your PHEP documentation.

Please contact Stacey Anderson (sanderson2@mt.gov) with any questions on this deliverable.

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>