

# MONTANA LABORATORY SENTINEL

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

## DON'T DRINK THAT WATER!!

One of my most favorite summer activities is camping, and nothing is better than relaxing within earshot of the sound of a rushing creek. However, being a laboratorian, I know that within that pristine water that is so clear one can hardly determine its depth, there are millions of little critters just waiting to invade my gastrointestinal tract!

Among the many potential hazards of swimming are recreational water illnesses (RWIs). They can include skin, ear, respiratory, eye, neurologic and wound infections. The most commonly reported RWI is diarrhea, caused by *Cryptosporidium*, *Giardia*, *Shigella*, *norovirus* and *E. coli* O157:H7. Some of these germs live freely in lakes, streams, and creeks, but can easily enter water that is designed to be safe, such as swimming pools, hot tubs, water parks, and splash parks—basically, anywhere fecal matter can enter water, and subsequently enter an unsuspecting swimmer's digestive system.

*Cryptosporidium* is one of the most frequent causes of waterborne disease among humans in the United States, According to CDC's MMWR [Cryptosporidiosis surveillance — United States, 2009–2010](#), from 2004 to 2008, reported Crypto cases increased over 200% (from 3,411 cases in 2004 to 10,500 cases in 2008).

RWI's can cause severe infection in children, pregnant women, and people with weakened immune systems. *Cryptosporidium* is of special concern to people with weakened immune systems as they can cause life-threatening infections.

According to the [May 22 DPHHS newsletter](#), "On average, Montana has about 60 cases of cryptosporidiosis a year with a seasonal peak during summer months. The most extreme outbreak in recent years occurred in 2006 when two cryptosporidiosis outbreaks were associated with recreational water, in particular splash parks, sickening over 180 people." Although pools are chlorinated, it can take several minutes to days to kill some organisms, making it important for fecal contamination to be recognized and cleaned quickly.

### Germ Inactivation Time for Chlorinated Water

Germ	Time
<i>E. coli</i> O157:H7 Bacterium	Less than 1 minute
Hepatitis A Virus	About 16 minutes
<i>Giardia</i> Parasite	About 45 minutes
Crypto Parasite	About 15,300 minutes or 10.6 days

\* 1 parts per million (ppm) or mg/L free chlorine at pH 7.5 or less and a temperature of 77°F (25°C) or higher

[Fecal Incident Response Recommendations for Pool Staff](#)

The following steps can help to avoid spreading infections in public recreational sites:

- Shower thoroughly with soap before entering pool. According to the CDC's Healthy Swimming site, people have, on average, about 0.14 grams of feces on their bottoms that can contaminate recreational water.
- Don't swim when you have diarrhea. Feces in the water can spread illness. Formed stools "contain" most organisms, but diarrheal stools are easily spread in the water, along with the germs they carry. Just one person with diarrhea can contaminate the water in a large pool or water park.
- Don't swallow pool water. Swallowing even a small amount of recreational water that has been contaminated with feces containing germs can cause infection.
- Take children on bathroom breaks every 60 minutes or check diapers every 30-60 minutes. Change diapers in the appropriate areas where germs will not be introduced into the water. Make sure to wash your hands after bathroom activities.
- If disinfectant levels in pools or hot tubs are not maintained at the appropriate levels, these germs can multiply and cause illness when swimmers breathe in mists or aerosols of or have contact with the contaminated water.
  - Pools: Proper free chlorine level (1–3 mg/L or parts per million [ppm]) and pH (7.2–7.8) maximize germ-killing power.
  - Hot tubs/spas: Proper disinfectant level (chlorine [2–4 parts per million or ppm] or bromine [4–6 ppm] and pH [7.2–7.8]) maximize germ-killing power.

For more information about healthy swimming, visit [www.cdc.gov/healthyswimming/](http://www.cdc.gov/healthyswimming/)



## Save the Date!!

This year's workshop, "Bioterrorism Preparedness for the Sentinel Laboratory", will be held at Carroll College in Helena on **Friday, July 26<sup>th</sup>**. Please make plans to attend! Workshop announcement and application is posted on the [LSB website](#).

### Montana Communicable Disease Weekly Update

Release date: 6/7/2013



#### DISEASE INFORMATION

**Summary – MMWR Week 22 - Ending 6/1/2013** Preliminary disease reports received at DPHHS during the reporting period May 26 – June 1, 2013 included the following:

- **Vaccine Preventable Diseases:** Influenza\* (0) Hepatitis A, acute (1) Pertussis (8)
- **Invasive Diseases:** *Streptococcus pneumoniae*, invasive (1)
- **Enteric Diseases:** Campylobacteriosis (8), Giardiasis (3), Salmonellosis (1), Shigellosis (1)
- **HIV Disease\*\*:** (1)
- **Other Diseases:** Hepatitis C, acute (1), Tularemia (1)
- **Animal Rabies:** (0)
- **Travel Related Conditions:** (0)

\*Cases confirmed by MTPHL only.

\*\* 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

**Multistate outbreak of Hepatitis A infections potentially associated with "Townsend Farms Organic Antioxidant Blend" frozen berry and pomegranate mix:** Montana is collaborating with CDC and the U.S. Food and Drug Administration (FDA) to investigate a multistate outbreak of Hepatitis A illnesses. No cases have been confirmed from Montana as of 3 pm June 7, 2013. The CDC general website on this can be found at <http://www.cdc.gov/hepatitis/Outbreaks/2013/A1b-03-31/index.html>. Guidance for health care providers can be found at <http://www.cdc.gov/hepatitis/HAV/HAVfaq.htm#D1>

**Hepatitis A Immune Globulin Availability:** The DPHHS Immunization Program working with local health jurisdictions has ordered a limited amount of IG that will be shipped on Monday (to be received on Tuesday) to the following local jurisdictions. These resources are for use when all other options have been explored but are available.

Flathead

Lewis & Clark

Butte

Cascade

Billings

Dawson

Richland

These resources are to ONLY be used as an appropriate response (appropriate - per CDC recommendations for use and determined need in relation to other availability) associated with the recent situation or otherwise for contacts to other cases that might arise.

**2012-13 Influenza Season (Final Report Attached):** In addition to the *Prevention Opportunities Under the Big Sky* article “2012-2013 Influenza Season Coming to an End,” that can be found [HERE](#), we have also attached our final report for the 2012-2013 season. In general, as if you all didn’t know, it was an early but intense season with many hospitalizations. Many of the laboratories in the state began using PCR testing and worked closely with the state to provide a more complete picture of confirmed cases.

You all did a great job of reporting on a weekly basis and we learned and changed our state influenza reporting rule by listening to your feedback. *Next year you will **NOT** have to report “suspected” cases any longer and just confirmed. All hospitalizations and deaths will need to be reported formally.* We are working on a web-based reporting system for weekly counts that we hope will make your lives easier and calculating weekly numbers better. Thanks again.

**Rabies Immune Globulin Availability:** *It’s that time of year...* Human rabies immune globulin supplies are adequate. See attached for more information. The DPHHS HRIG 24/7 on call manual resource is also attached. It is designed to answer the most common questions received at 1 am in the morning in relation to someone exposed during the day who can’t sleep worrying about it and has gone to their emergency provider who is calling you or us.

**MERS –CoV/H7N9: These are still international public health threats and are being monitored. More information as it become available. CDC websites [CDC MERS-CoV](#) [CDC H7N9](#)**

## **INFORMATION/ANNOUNCEMENTS**

**Montana Communicable Disease Rule Changes:** The final notice of adoption regarding the Department of Public Health and Human Services Communicable Disease Control Rules 37.114 can be found at the link below. All changes will be in effect as of Friday June 7, 2013. A completed set of rules including all changes and amendments adopted will be available upon quarterly publication by the Montana Secretary of State’s office expected as of October 1st. The final rule notices show any changes made since the proposal stage. Previous changes are in the original proposed notices. ***All rule actions are effective the day after print publication of the adoption notice*** unless otherwise specified in the final notice. The formal adoption notice can be found in the latest issue of the Montana Administrative Register at the Secretary of State’s website; Current Issue: [Issue 11](#), June 6, 2013, Pages 967-970

*Under a separate cover, on Monday June 10, we will re-send the two main initial communication pieces (disease list and FAQ) for local provider reporting and communication. For local providers reporting to local jurisdictions, not much has changed. The listed diseases have changed, but most of those changes are with diseases seldom encountered. Providers still are supposed to report all reportable diseases to YOUR jurisdiction “immediately.” Changes applying for jurisdictions reporting to DPHHS will be coming out. We are not too worried about that as you all have improved your timeliness measurably and notably over the last couple of years. We are expecting a “clean” draft of the new rules for local use within a week or two and will send upon receipt.*

**MIDIS and HIV laboratory reports:** You now are able to view HIV-related electronic laboratory reports (ELR) in MIDIS (e.g. HIV Ab/Ag, HIV RNA, CD4+); however, you will not be able to modify them. In most instances, the tests will be for persons previously diagnosed with HIV whose treatment is being monitored. No follow-up, case investigation or case report is needed for these individuals unless DPHHS is unaware of them. Any questions regarding HIV-related lab reports may be directed to Peter Choi 406-444-4735.

**MIDIS and STD Reports:** A question came up during the PHEP Deliverables road show regarding STD reporting in MIDIS. As you know, MIDIS sends an electronic notification of new cases to CDC. However, the system cannot do this for STDs at this time. As a result, you have a choice for how to handle STD lab reports in MIDIS:

1. Mark the lab as Reviewed to take the lab out of your queue. You will need to fill out the STD case reporting form and fax it to the STD Program.

2. Create an investigation from the lab report. However, because MIDIS does not collect all of the information that the STD Program requires, you will still have to fill out and fax the STD case report form to the STD Program. It is a bit duplicative, but if you prefer to track all of your communicable diseases in one system you are more than welcome to enter the cases into MIDIS.

The STD module is still on schedule and we are hoping to have it in place to begin using it for STD cases on January 1, 2014. We will keep you updated on the progress of this highly anticipated change in MIDIS. If you have any questions, please contact Stacey Anderson (444-3012 [sanderson2@mt.gov](mailto:sanderson2@mt.gov)).

**Summer Institute “When Good Food Goes Bad” Registration Open June 1:** *Registration is going fast* and we already have 12 registrants. The 2013 [Summer Institute](#) will be on July 15-19 at the University of Montana in Missoula. The CDEpi/FCSS sponsored course is called, “When Good Food Goes Bad: A team approach to Foodborne Outbreak response.” This course is limited to 20 two person teams and will be taught by five nationally based instructors including a course designer and Montana local county health official, Joe Russell (Flathead Co.).

**FDA Online Food Defense Course:** The U.S. Food and Drug Administration (FDA) has revamped its online food defense courses to help bolster the food industry’s defense measures against an act of intentional food contamination.

The revamped courses, entitled “Food Defense 101,” have been updated to address the types of intentional contamination that have occurred in the United States in recent years and the FDA’s most current thinking on how to forestall or minimize the impact of such incidents. The courses also have been integrated into one module, so users can now more easily find the information.

The four courses are: 1) Food Defense Awareness for Professionals; 2) Food Defense Awareness for Frontline Employees; 3) FDA Regulations, which speaks to three federal regulations established to help protect the nation’s food supply; and 4) Alert, which is for owners and operators of food facilities to help them protect their facilities from the threat of intentional contamination.

Food Defense 101 is available to industry and the public at no charge. For additional information on FDA’s food defense resources and to access Food Defense 101, please visit:

<http://www.fda.gov/Food/FoodDefense/ToolsEducationalMaterials/ucm353774.htm>

### **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>***