

# The Pump Handle



"I had an interview with the Board of Guardians of St. James's parish, on the evening of Thursday, 7th September, and represented the above circumstances to them. In consequence of what I said, the handle of the pump was removed on the following day."

John Snow, 1855

## June 2008 Topics

- West Nile Virus (WNV) Update
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## **West Nile Virus (WNV) Update**

As of July 16, 2008, five human WNV infections have been reported to the state health department. In addition, one horse from Grand Forks County tested positive for WNV. For more information about WNV, visit the North Dakota Department of Health website at [www.ndhealth.gov/wnv](http://www.ndhealth.gov/wnv).

In the United States, as of July 15, 2008, 28 human West Nile virus cases have been reported to the CDC from 10 states. For nationwide WNV data, visit [www.cdc.gov/ncidod/dvbid/westnile/index.htm](http://www.cdc.gov/ncidod/dvbid/westnile/index.htm).

New West Nile virus educational materials are available for 2008! In addition to the colorful brochures and posters, a 16-page activity book for kids was developed that includes a word-search, cross-word puzzle, mosquito check-list and many coloring pages. Ordering is free and easy; go to [www.ndhealth.gov/WNV/Materials/](http://www.ndhealth.gov/WNV/Materials/) to order WNV educational materials.

A kid-friendly tick brochure and bookmark also have been developed. Call Michelle at 701.328.2378 if you have questions or would like to place an order.



### **Two North Dakota Residents Exposed to Tuberculosis on International Flight**

On June 20, 2008, the North Dakota Department of Health was notified that two North Dakota residents may have been exposed to tuberculosis (TB) on the March 14th flight to Japan. The exposed individuals currently are being contacted and evaluated for TB infection.

On May 19, 2008, the Maine Department of Health reported a case of tuberculosis (TB) in an individual who had recently traveled to Japan. This individual was admitted to the hospital on April 26, 2008, with coughing, fatigue, weakness, weight loss, night sweats and shortness of breath. The patient immediately was started on the standard four-drug treatment for TB, while undergoing further tests. TB disease was confirmed by an abnormal chest x-ray and positive laboratory results.

The patient flew from Chicago, Ill., to Narita, Japan, on March 14, 2008, potentially exposing passengers on the airplane to TB. TB is contracted through inhalation of respiratory droplets containing the TB bacteria. Passengers sitting in the same row and two rows in front and behind the infected individual are at the highest risk of becoming infected. The risk of becoming infected with TB also is increased when the flight is more than eight hours long.

Symptoms of TB disease include coughing for more than three weeks, fatigue, fever, night sweats and weight loss. People experiencing these symptoms should contact their medical provider immediately. Confirmed and suspected cases of TB disease should be reported to the North Dakota Department of Health by calling 701.328.2378 or 800.472.2180. More information about TB can be found on the program website at [www.health.state.nd.us/disease/tb](http://www.health.state.nd.us/disease/tb).



### **First Case of German Measles Since 1991**

The North Dakota Department of Health (NDDoH) confirmed the first case of rubella, also known as German measles, in North Dakota since 1991. The NDDoH was notified of a rash-like illness in an adult male Cass County resident on the afternoon of June 6, 2008. Laboratory tests confirmed rubella. The individual recently had traveled to India, which is where he likely contracted the illness. This individual had an unknown history of vaccination.

The NDDoH has contacted North Dakota residents who were potentially exposed to this rubella case via air travel or identified by the case as a close contact while the case was contagious to ensure that they all have a history of rubella vaccination or immunity due to past infection and that no other contacts have developed a rash. Because of the limited data on transmission of cases due to airline exposure, the NDDoH will be collaborating with the CDC in collecting vaccination histories and signs or symptoms for all flight contacts, looking for underlying cases of rubella.

Rubella is usually a mild disease, but it can be severe in some cases. Rubella during pregnancy, congenital rubella syndrome (CRS), can cause severe complications to the fetus, such as miscarriage, fetal death or birth defects.

The immunization for rubella is contained in MMR vaccine, which is required for all children attending day cares, schools and colleges in North Dakota. Immunity, whether by natural infection or vaccination, is especially important in pregnant women or people in close contact with pregnant women because of the serious effect the rubella virus can have on an unborn

child. Vaccination of susceptible pregnant women should be done post-partum, as rubella-containing vaccines cannot be given during pregnancy.

The NDDoH strongly encourages all North Dakotans to ensure that they and their children are up to date with all vaccinations. For more information about rubella, visit [www.ndhealth.gov/Disease/Documents/faqs/Rubella.pdf](http://www.ndhealth.gov/Disease/Documents/faqs/Rubella.pdf)

Please contact the NDDoH Division of Disease Control at 701.328.2378 or toll-free at 800.472.2180 with any questions or concerns regarding this issue.



### **New Recommendations for Cryptosporidiosis Accidents in Pools**

Cryptosporidiosis is a diarrheal disease caused by a parasite and is commonly known as "crypto." Many species of crypto infect humans and a wide range of animals. The parasite is protected by an outer shell that allows it to survive outside the body for long periods of time and makes it very resistant to chlorine disinfection.

Although this parasite can be transmitted in several different ways, water is a common method of transmission, and crypto is one of the most frequent causes of waterborne disease (drinking water and recreational water) among humans in the United States. Those who swim when ill with diarrhea place other swimmers at significant risk for illness.

In December 2007, revised guidelines were issued regarding the contact time needed for disinfecting pools against crypto. They are as follows: raise the free chlorine concentration to 20 ppm (mg/L) and maintain the water's pH between 7.2 and 7.5 and temperature at about 77°F (25°C). The chlorine and pH should remain at these levels for at least 12.75 hours to achieve the inactivation value of 15,300. (See Table 1 below.)

Table 1- Crypto Inactivation Time for a Diarrheal Fecal Accident

Chlorine Level (ppm)	Disinfection Time
1.0	15,300 minutes (255 hours)
10	1,530 minutes (25.5 hours)
20	765 minutes (12.75 hours)

For more information, visit the North Dakota Department of Health website at [www.ndhealth.gov/disease/GI](http://www.ndhealth.gov/disease/GI) or the Centers for Disease Control and Prevention's Healthy Swimming website at [www.cdc.gov/healthyswimming/fecal\\_response.htm#feces](http://www.cdc.gov/healthyswimming/fecal_response.htm#feces).



### **Salmonella Saintpaul Associated With Tomatoes**

As of Monday, July 14, 2008, a reported 1167 confirmed cases are associated with the Salmonella Saintpaul investigation. These cases come from 42 states, the District of Columbia and Canada.

The number of ill people identified in each state is as follows: Alabama (2 people), Arkansas (14), Arizona (54), California (9), Colorado (15), Connecticut (4), Florida (2), Georgia (28), Idaho (6), Illinois (104), Indiana (16), Iowa (2), Kansas (18), Kentucky (1), Louisiana (1), Maine (1), Maryland (32), Massachusetts (26), Michigan (21), Minnesota (19), Mississippi (2), Missouri (17), New Hampshire (4), Nevada (11), New Jersey (12), New Mexico (102), New York (32), North Carolina (22), Ohio (10), Oklahoma (25), Oregon (10), Pennsylvania (12), Rhode Island (3), South Carolina (2), Tennessee (8), Texas (449), Utah (2), Virginia (31), Vermont (2), Washington (17), West Virginia (1), Wisconsin (13), and the District of Columbia (1). The four ill people reported from Canada appear to have been infected while traveling in the United States.

At this time, the FDA is advising U.S. consumers to limit their tomato consumption to those that are not the likely source of this outbreak. These include cherry tomatoes; grape tomatoes; tomatoes sold with the vine still attached; tomatoes grown at home; and red plum, red Roma, and round red tomatoes from specific sources listed at [www.fda.gov/oc/opacom/hottopics/tomatoes.html](http://www.fda.gov/oc/opacom/hottopics/tomatoes.html).

Consumers should be aware that raw tomatoes often are used in the preparation of fresh salsa, guacamole and pico de gallo, are part of fillings for tortillas, and are used in many other dishes.

For more information, visit the CDC website at [www.cdc.gov/salmonella/saintpaul/](http://www.cdc.gov/salmonella/saintpaul/). For additional FDA information about this investigation, visit [www.fda.gov/oc/opacom/hottopics/tomatoes.html](http://www.fda.gov/oc/opacom/hottopics/tomatoes.html).

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*The pump handle picture in the title was obtained from the website [www.ph.ucla.edu/epi/snow.html](http://www.ph.ucla.edu/epi/snow.html).*



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