

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

October 2004 Topics

- Influenza Antiviral Medications: Interim Guidelines
- Reporting Hospitalized Chickenpox Cases
- Rabid Puppies Sold in Minnesota and North Dakota
- Hand, Foot and Mouth Disease, Not Foot and Mouth Disease
- Salmonella in the Pet Store



Influenza Antiviral Medications: Interim Guidelines

The Centers for Disease Control and Prevention (CDC) has developed interim recommendations on the use of antiviral medications for the 2004-05 influenza season. Four antiviral medications are approved for treatment and chemoprophylaxis in the United States. These include amantadine, rimantadine, oseltamivir and zanamivir. **Local availability of these medications may vary.** Antiviral medications can reduce the spread and impact of influenza in people who are at high risk of influenza-related complications. Those at high risk are defined as the following:

- Adults age 65 years and older
- Children age 6 through 23 months
- People age 2 to 64 years with underlying chronic medical conditions
- Women who will be pregnant during the flu season
- Residents of nursing homes and long-term care facilities
- Children age 6 months to 18 years on chronic aspirin therapy
- Health-care workers involved in direct patient care
- Out-of-home caregivers and household contacts of children younger than 6 months

Details of the 2004-05 interim chemoprophylaxis and treatment guidelines can be found on the North Dakota Health Alert Network website at www.ndhan.gov/ or the CDC website at www.cdc.gov/.

News releases providing information about the influenza vaccine supply in North Dakota can be viewed at www.nddohpressroom.gov or visit the Division of Disease Control Immunization Program website at www.health.state.nd.us/disease/Immunization/ and click on “Forms and Memos.”



Reporting Hospitalized Chickenpox Cases

Chickenpox is a mandatory reportable condition in North Dakota. It is especially important to report hospitalized chickenpox cases so that the North Dakota Department of Health (NDDoH) can investigate and report possible vaccine failures. Cases of chickenpox may be reported online at www.health.state.nd.us/disease/Disease%20Reporting/ReportingMain.htm. Click “OnLine Disease Report Card.”

On Jan. 1, 2004, childhood immunization against chickenpox became a requirement for all children attending early childhood facilities in North Dakota. A letter sent from the NDDoH to providers describing this requirement can be viewed by [clicking here](#). Other information and frequently asked questions of chickenpox can be found on the NDDoH Immunization Program website at www.health.state.nd.us/disease/Immunization/SchoolRequirements/RequirementsMain.htm.



Rabid Puppies Sold in Minnesota and North Dakota

The NDDoH contacted more than 20 people regarding possible exposure to a puppy that came from a litter where rabies had been identified among litter mates. The puppy was one of a litter of 10 sold by a farmer near Viking, Minn. The puppies were born on July 18 and were sold between August 25 and September 10. On August 28, it is assumed a skunk entered the litter. The skunk was not seen, but there was the smell of skunk in the area and on the puppies. Seven of the puppies were sold after the skunk attack before any of the puppies developed any signs and symptoms possibly associated with rabies.

Rabies was confirmed in a puppy that became ill September 16 and died September 19. Another puppy died September 20 with neurological symptoms indicative of rabies infection. However, the puppy was not available for rabies testing. A third puppy developed neurological symptoms, became aggressive and died September 22. The puppy also was found to have rabies. After extensive follow-up, all 10 puppies were traced back to the people who purchased them; six of the puppies were located in Minnesota and four were found in northeastern North Dakota.

Follow-up with the owners of the puppies sold to North Dakota residents indicated that two of the puppies were sold prior to the August 28 skunk incident. The owners of the two puppies sold after August 28 indicated that the puppies had a skunk-like smell. One of the puppies was euthanized and tested negative for rabies. The other puppy sold to a North Dakota resident was involved in an accident September 6 and was euthanized by the owner. Unfortunately, the puppy was not available for rabies testing. The NDDoH initiated an investigation and contacted individuals who were identified to have had direct contact with the puppy. Twelve of the 20 individuals contacted by the NDDoH in

the Grand Forks area received post-exposure rabies prophylaxis. Approximately 250 people located in Minnesota and North Dakota required post-exposure rabies prophylaxis.

This incident reinforces the need for pet owners to protect their pets from exposure to wild animals. Animal litters should be located in areas where it is not possible for a wild animal to enter the area.



Hand, Foot and Mouth Disease, Not Foot and Mouth Disease

Hand, foot and mouth disease is caused by coxsackie viruses and is most prevalent in children under the age of 10 in the summer and early autumn. The first symptoms may appear three to six days after exposure and include a fever and sore throat that may persist for approximately one to three days. Small grayish vesicles follow, erupting most commonly on the inside of the mouth, cheek and gums, the sides of the tongue and later on the hands, feet and sometimes buttocks. The infection is usually self-limiting and rarely requires treatment. The virus is contagious and spreads by direct contact with nose and throat discharges, aerosol droplets or contact with feces of infected people. The virus may persist in stool for several weeks after the acute stage of illness.

Promoting hand washing is one of the best preventive measures for the spread of hand, foot and mouth disease. Food handlers having any open lesions caused from any disease or infection should not be working with food. Children are recommended to be excluded from day care and school if they have a fever or if they do not feel well. There is no evidence that excluding children from day care and school until the vesicles clear actually decreases spread of infection; therefore, exclusion is unnecessary.

There is no definitive risk to pregnant women contracting hand, foot and mouth disease, but occasionally severe complications occur if exposure occurs in the first trimester. Pregnant women in close contact with infected children or adults should avoid direct contact with individuals with active lesions and should wear rubber gloves if in direct contact with feces of infected children during diaper changes.

Hand, foot and mouth disease is not to be confused with foot-and-mouth disease (FMD). Although the names are similar, the diseases are not related. FMD is a severe, highly contagious viral disease in cattle, swine and horses. FMD also affects sheep, goats, deer and other cloven-hooved ruminants. People can often act as carriers of the disease and can spread it to animals. Occasionally dairy workers, animal husbandry workers and veterinarians can contract the disease from direct contact with animals, but in general, FMD is not recognized as a zoonotic disease (spread from animal to person). The United States has been free of FMD since 1929. For more information about FMD, visit www.aphis.usda.gov/lpa/pubs/fsheet_faq_notice/fs_ahfmd.html.

Information about hand, foot and mouth disease is available by [clicking here](#) or at www.cdc.gov/ncidod/dvrd/revb/enterovirus/hfhf.htm.



Salmonella in the Pet Store

A pet store in Fargo, N. D., received hamsters between the dates of Aug. 16 and Aug. 24, 2004, from the same pet distributor where other hamsters had been discovered to have been infected with *Salmonella* Typhimurium (*S. Typhimurium*). Hamsters are very

susceptible to *Salmonella*, which can be transmitted through contaminated feed, bedding and the environment and result in diarrhea, respiratory signs or acute death with hemorrhage. The pet store's regional sales manager confirmed that some of the hamsters from the infected group were sent to the Fargo store as well as numerous other states. Only two hamsters were sold at the Fargo pet store, both to Minnesota residents. All other hamsters were sent back to the distributor.

S. Typhimurium is shed in the feces of an infected animal and can infect humans through direct handling and contact of the infected animal or exposure to animal feces. Public health officials contacted individuals at potential risk for salmonellosis including the staff at the distributor, the staff at the pet store and the consumers who purchased the hamsters. Eight human cases of salmonellosis in multiple states were identified and epidemiologically linked to hamsters or other small rodents housed with the hamsters at the point of distribution. No cases of salmonellosis in humans or hamsters were identified in North Dakota.

Contributing authors of The Pump Handle include Julie Goplin, Tracy Miller, Kirby Kruger and Larry Shireley. For questions, suggestions or inquiries, or to be removed from the mailing list, please contact Julie Goplin of the Division of Disease Control at 701.238.2375 or by email at jgoplin@state.nd.us.

The pump handle picture in the title was obtained from the website www.ph.ucla.edu/epi/snow.html.



Terry Dwelle, MD, MPHTM, State Health Officer
Craig Lambrecht, MD, MPH, Chief, Medical Services Section
Larry A. Shireley, MS, MPH, Director, Division of Disease Control