

# 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

## March 2007 Topics

- Two North Dakota Salmonella Cases Linked to Peanut Butter
- Influenza Peak Season
- Hantavirus Awareness and Prevention
- April Is National STD Awareness Month
- Human Papillomavirus Vaccine



### **Two North Dakota Salmonella Cases Linked to Peanut Butter**

Two cases of *Salmonella* serotype Tennessee infections were reported to the North Dakota Department of Health (NDDoH) since the Peter Pan and Great Value lot 2111 peanut butter recall issued on Feb. 14, 2007. One case was a child younger than 10 with diarrhea, abdominal cramps, vomiting and fever and who reportedly had eaten Peter Pan peanut butter before becoming ill. The child was not hospitalized. The second case was older than 60 and was hospitalized for five days after presenting with bloody diarrhea, vomiting and abdominal cramps. This patient did not have a history of eating either Peter Pan or Great Value lot 2111 brands of peanut butter. However, laboratory testing indicated that the infection was the same strain of *Salmonella* Tennessee responsible for the multi-state outbreak.

Product testing performed by the U.S. Food and Drug Administration (FDA), the Centers for Disease Control and Prevention (CDC) and public health laboratories has confirmed the presence of the outbreak strain of *Salmonella* Tennessee in both opened and unopened jars of peanut butter and environmental samples taken at the plant where the peanut butter was produced. FDA officials and the peanut butter manufacturer are working to determine how the peanut butter may have become contaminated.

For more information about the multi-state salmonella outbreak and the number of cases reported nationwide, visit [www.ndhealth.gov/disease/Outbreak/Salmonella.htm](http://www.ndhealth.gov/disease/Outbreak/Salmonella.htm) and [www.cdc.gov/salmonella](http://www.cdc.gov/salmonella).



### **Influenza Peak Season**

Influenza activity in North Dakota reached its peak for the 2006-2007 season during the week ending Feb. 24, 2007. Since then, flu activity has been decreasing; however, infection is persisting in communities. As of March 22, 2007, a total of 1,965 influenza cases were reported to the NDDoH so far this season. Influenza type A is the predominant type reported, with the majority of the cases in those 19 and younger. The following table summarizes the 2006-2007 influenza cases by type and age group:

Age Group	Influenza Type		
	A	B	Unspecified A or B
<10	772	10	33
10-19	442	4	26
20-29	208	3	8
30-39	129	0	9
40-49	108	0	3
50-59	82	2	3
60 and older	109	2	12
TOTAL	1,850	21	94

Two influenza isolates have been characterized by the CDC. One virus was identified as A/New Caledonia/20/99-Like (H1N1), and the other isolate was identified as B/Ohio/01/2005-Like. Both isolates are well matched to the strains contained in the 2006-2007 influenza vaccine. In addition, 25 influenza A isolates have been sub-typed, 15 isolates were identified as type A (H1) and 10 as type A (H3).

For more information about influenza and the surveillance program, visit the NDDoH Influenza website at [www.ndflu.com](http://www.ndflu.com).



### **Hantavirus Awareness and Prevention**

Nine cases of hantavirus pulmonary syndrome (HPS) have been reported in North Dakota since 1993, of which five were fatal. Two cases (one fatality) were reported in 2006. One case, who survived, reported contact with mouse droppings while cleaning at work. The second case, a fatality, was reported to have swept out an outbuilding on private property prior to illness. No apparent rodent exposure was reported.

Symptoms of HPS usually occur two to three weeks after exposure. Early symptoms commonly include fever, muscle and body aches, fatigue, headache, dizziness, chills, nausea and vomiting. The illness worsens within a short period of time to include cough and severe shortness of breath when lungs fill with fluid.

Most cases reported in North Dakota have documented rodent exposure and live in rural areas. HPS is prevented by taking precautions against rodent infestation and ensuring proper disinfection:

- Fill any holes in your home or cabin into which you can place your finger.
- Clean droppings or urine with 1 ½ cups chlorine bleach to one gallon water.

- Wear rubber gloves while cleaning.
- Do not vacuum or sweep to avoid making virus-containing particles airborne.
- For heavy rodent infestation, contact your state or local public health department.

For more information about hantavirus and cleaning rodent-infested buildings, visit [www.ndhealth.gov/Disease/Documents/faqs/Hantavirus.pdf](http://www.ndhealth.gov/Disease/Documents/faqs/Hantavirus.pdf) or [www.cdc.gov/ncidod/diseases/hanta/hps/index.htm](http://www.cdc.gov/ncidod/diseases/hanta/hps/index.htm) or call the North Dakota Department of Health at 800.472.2180.



### **April Is National STD Awareness Month**

April is National Sexually Transmitted Diseases (STDs) Awareness Month, an observance created to increase awareness about STDs, including their transmission, prevention and treatment. STDs continue to be a major health threat in the United States, especially among adolescents and young adults. In North Dakota, preliminary data indicate 1,725 cases of chlamydia and 127 cases of gonorrhea were reported to the NDDoH in 2006. Of these totals, 75 percent of chlamydia cases and 61 percent of gonorrhea cases occurred among people ages 15 to 24.

If undetected and left untreated, STDs can lead to potentially severe health consequences, including ectopic pregnancy or infertility in females. The CDC recommends that all sexually active women age 25 or younger receive annual screening for chlamydia. Additional information about STDs is available at [www.ndhealth.gov/std/](http://www.ndhealth.gov/std/) or [www.cdc.gov/std](http://www.cdc.gov/std).



### **Human Papillomavirus Vaccine**

On June 8, 2006, the FDA approved Gardasil™, the first vaccine developed to prevent cervical cancer, precancerous genital lesions and genital warts due to human papillomavirus (HPV) types 6, 11, 16 and 18. Types 16 and 18 cause about 70 percent of cervical cancers and types 6 and 11 cause about 90 percent of genital warts. Merck is the manufacturer of Gardasil™. The vaccine was approved for use in females ages 9 through 26. The catalog price for Gardasil™ is \$120 per dose.

The vaccine should be administered intramuscularly as three separate 0.5 mL doses according to the following schedule:

- First dose: elected date
- Second dose: two months after first
- Third dose: six months after first

The minimum interval between doses of HPV vaccine is four weeks between doses one and two and 12 weeks between doses two and three.

Studies showed that Gardasil™ was nearly 100 percent effective in preventing precancerous cervical lesions, precancerous vaginal and vulvar lesions and genital warts caused by the types of HPV covered by the vaccine.

The Advisory Committee on Immunization Practices (ACIP) met June 29, 2006, to develop recommendations for the use of HPV vaccine. ACIP recommends that HPV vaccine be given routinely to females when they are ages 11 to 12. The recommendation also allows for administration of HPV vaccine as early as age 9 at the discretion of the physician or health-care provider. Females ages 13 to 26 are also recommended to receive the vaccine.

The vaccine works best if given prior to the onset of sexual activity, but girls who are sexually active also should be vaccinated. Pap testing, screening for HPV DNA or HPV antibody are not recommended prior to vaccination. The ACIP also recommends that women with genital warts and an abnormal Pap test or a positive HPV DNA test be vaccinated. HPV vaccine would provide protection against infection with HPV types not previously acquired.

**Gardasil™ is provided by the North Dakota Department of Health (NDDoH) Immunization Program for Vaccines For Children (VFC) eligible children.** VFC eligible children must be 18 and younger and must meet one of the following criteria:

- Medicaid eligible
- American Indian or Alaskan Native
- Uninsured (no insurance)
- Underinsured (insurance does not cover vaccination): underinsured children must be vaccinated at a rural health clinic or federally qualified health center.

Health-care providers should contact the NDDoH if they are interested in participating in the VFC program. Merck also has a patient assistance program for eligible people who are unable to afford the vaccine and who do not have health insurance that will pay for the vaccine. For more information about the Merck patient assistance program, visit [www.merck.com/merckhelps/](http://www.merck.com/merckhelps/).

To order vaccine or if you have questions about HPV or HPV vaccine, call the NDDoH Immunization Program at 800.472.2180 or visit [www.ndhealth.gov/Disease/Documents/faqs/HPV5.pdf](http://www.ndhealth.gov/Disease/Documents/faqs/HPV5.pdf).

*Contributing authors of The Pump Handle include Molly Sander, Kim Weis, Michelle Feist, Julie Goplin, Tracy Miller and Kirby Kruger. For questions, suggestions or inquiries, or to be removed from the mailing list, please contact Julie Goplin of the Division of Disease Control at 701.328.2375 or by email at [jgoplin@nd.gov](mailto:jgoplin@nd.gov).*

*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).*



**NORTH DAKOTA**  
DEPARTMENT of HEALTH

Terry Dwelle, MD, MPHTM, State Health Officer  
Craig Lambrecht, MD, MHSA, MBA, MPH, Chief, Medical Services Section  
Kirby Kruger, Director, Division of Disease Control