

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

November 2003 Topics

- An Early and Severe Influenza Season
- Planning for the Return of SARS
- Whooping Cough in Local Day-care Facilities
- Sexually Transmitted Diseases on the Increase



An Early and Severe Influenza Season

A drifted strain of influenza has surfaced in the United States this influenza season. This strain, called A/Fujian/411/2002(H3N2), predominated in Australia and New Zealand during the recent influenza season. The Fujian strain is described as being “moderately severe.” As of November 15, the CDC had identified the drifted strain in 78 percent of the influenza A (H3N2) strains tested in the United States.

Influenza experts were aware of the drifted strain, but not in time for it to be included in the current influenza vaccine produced for the United States. The current vaccine includes three strains of influenza virus, including A/Panama/2007/99, which is very similar to the drifted strain. It is believed that there is sufficient antigenic cross-reactivity between the drifted Fujian strain and the Panama strain for the current vaccine to be protective and/or to reduce the severity of the disease.

Due to early and widespread flu activity in the United States, demand for vaccine is high nationally and the supply is now running low. Therefore, the North Dakota Department of Health (NDDoH) is recommending that the remaining injectable form of the vaccine be reserved for those individuals at high risk for complications from the flu. Influenza vaccine recommendations can be viewed on the NDDoH influenza website at www.ndflu.com.



Planning for the Return of SARS

It is recommended that all hospitals and health-care facilities have a SARS protocol in place. This protocol would provide health-care workers a set of guidelines to follow if a SARS case would present at the facility. Reviewing and practicing this protocol may prevent an outbreak from occurring in your community. Guidelines for SARS planning are available at the CDC's SARS website at www.cdc.gov/ncidod/sars/sarsprepplan.htm.

Posters and flyers displayed in the health-care facility may alert patients to self-screening tips and provide them important information to stop the spread of disease. Examples can be seen at www.hopkins-heic.org/pdf/SARS_flyer.pdf or by [clicking here](#).



Whooping Cough in Local Day-care Facilities

Three related pertussis cases occurred in August and September. The first identified case occurred in a 3-month-old infant on August 26, 2003. The infant had a cough onset of July 16 and other symptoms including apnea, paroxysmal cough and pneumonia. The child had not been immunized.

The infant had attended two day-care facilities while ill. Day-care providers and parents of children in each day care were contacted, notified and provided information regarding preventive treatment and symptoms of pertussis. A review of the children's pertussis immunization records indicated that in one day care, all attendees had current immunizations, and all but one child in the other were current.

The second reported pertussis case was the father of the index case. He developed a cough on August 6 and tested positive for pertussis on September 2. The parents were the only household contacts of the index case and both received erythromycin and were monitored for symptoms.

The third pertussis case involved a day-care provider at one of the day-care facilities. The provider developed a cough on August 8 and tested positive for pertussis on September 5. As a result, it was recommended that all contacts at the day care receive preventive treatment for pertussis.

A total of eight symptomatic contacts to these pertussis cases were tested and all results were negative. A total of 50 people received prophylaxis. The NDDoH consulted with the local school regarding the possibility of the outbreak spreading to school children who attended the affected day cares. No additional cases of pertussis were reported.

These cases emphasize the importance of childhood immunizations. All children, except for one, were up-to-date on immunizations, which likely prevented pertussis transmission. This situation also highlights the fact that adults are at risk for pertussis and can be a source of pertussis infection for infants and children. Adults and older children often present with mild and atypical manifestations of the disease, with prolonged cough without whoop that often results in missed diagnosis and disease transmission.



Sexually Transmitted Diseases on the Increase

During the first three quarters (January through September) of 2003, reported cases of chlamydia, gonorrhea and syphilis increased in North Dakota, compared to the same time period in 2002. Chlamydia increased 37 percent, from 860 reported cases in 2002 to 1,178 in 2003. While reported cases have increased, so have the number of females being screened and the number of males being tested. During the first three quarters of 2003, 9,782 chlamydia tests were performed at the Division of Microbiology, a 37.2 percent increase from the 7,128 test performed during the same time period in 2002. The rate of positive tests also has increased, with 7.7 percent of all chlamydia tests performed at the Division of Microbiology testing positive, compared to 5.2 percent in 2002.

Gonorrhea cases also increased during the first three quarters of 2003. Sixty-eight cases were identified in 2003, compared to 58 cases during the same time period in 2002. A cluster of 15 gonorrhea cases occurred in Burleigh County in October.

Two cases of infectious syphilis were reported during the first three quarters of 2003. A case of primary and a case of secondary syphilis were reported. The follow-up investigation indicated that both infections were likely acquired out of state. One case involved a male who had sex with males. Syphilis rates are increasing nationally, primarily due to increases among males who have sex with males.

Health-care providers should continue to screen young sexually active females for chlamydia. Patients presenting with symptoms suggestive of chlamydia or gonorrhea and sexual partners of gonorrhea cases should be tested for gonorrhea. Patients presenting with genital lesions or body rash who have a risk factor for syphilis, as well as all men who have sex with men, should be tested for syphilis.

Contributing authors of The Pump Handle include Molly Sander, 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.



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