Early Reports of Influenza A Underscore Importance of Timely Influenza Vaccination

During the last week of October, laboratory confirmed and several additional probable cases of influenza have been reported in Washington State counties on both sides of the Cascades. Two cases have been confirmed in Yakima County as of this date. Through the third week of October, CDC reports that Texas, New York, and five other states have reported outbreaks of laboratory-confirmed influenza A infections. Virtually all isolates have been subtype A(H3N2). Preliminary analysis shows that some isolates (33%) exhibit antigenic drift from the A(H3N2) A/Panama/2007/99 vaccine strain, although the majority do match the vaccine strain. While influenza activity in the United States usually starts in November or December and reaches peak levels from late December through April, the timing of influenza activity is highly variable. In previous years, influenza outbreaks have been reported in October and outbreaks this year appear to be getting an early start.

Similar to United States isolates, approximately 33% of influenza A(H3N2) viruses isolated worldwide between February and September have drifted antigenically from the current A(H3N2) A/Panama/2007/99 vaccine strain in laboratory tests. By contrast, influenza A (H1N1) and influenza B viruses generally have remained similar to their vaccine strain counterparts. Influenza vaccine is expected to provide good protection against influenza A(H1N1), B viruses, and A(H3N2) viruses that are similar to the vaccine strains. While vaccine protection against the A(H3N2) drift variants may be lower, the vaccine is expected to provide some degree of effectiveness, although the level of protection cannot be predicted.

Supplies of influenza vaccine are adequate in the United States this year. This adequate supply, coupled with early appearances of community influenza activity in some parts of the country serves as a reminder for timely vaccination of persons who are at increased risk for complications of influenza. Such "high-risk" groups include:

- Persons 65 years of age and older
- Women who will be in the second or third trimester of pregnancy during influenza season
- Persons with one of several chronic, long-term health problems (e.g., heart or lung disease, kidney problems, asthma, and HIV/AIDS or any other illness or condition that suppresses the immune system).
- Persons 6 months to 18 years of age on long-term aspirin therapy.

Influenza vaccination is also recommended for other target groups, including:

- Persons aged 50 to 64 years because of the increased prevalence of high-risk conditions in this age group.
- Health-care workers and others in close contact with high-risk individuals because of the possibility that this group might transmit influenza to persons in high-risk groups.

For the 2003-04 influenza season, vaccination is also encouraged, when feasible, for children 6 to 23 months of age and their household contacts and out-of-home caregivers; this age group has an increased risk of influenza-related hospitalization. For 2004-05, influenza vaccination will be recommended for these groups for the first time.

Finally, effective implementation of influenza immunization may reduce the number of hospitalizations for lower respiratory infections that could include SARS in the differential diagnosis. For additional information on influenza and weekly updates on surveillance, please see the CDC Website at http://www.cdc.gov/ncidod/diseases/flu/fluveus.htm.
Rabbit Fever Near-Miss

On Friday, October 17, a physician reported to the Health District the story of a family who, two days prior, had encountered a burrow of wild rabbits. In a compassionate effort to save what appeared to be two sick and dying baby rabbits, they were removed from the burrow and brought home. One day later, the animals were noted to have mucocutaneous lesions. One of the animals was taken to a pet store for possible assistance; the other remained in the home. By the next day, both had died. Several family members had experienced close direct contact with the rabbits, including exposure to lesions, secretions and/or blood. The family then sought consultation for an asymptomatic, exposed child. Suspecting exposure to tularemia, the physician contacted YHD. After consultation, the physician offered both child and other family members chemoprophylaxis against tularemia with a three-week course of doxycycline.

One dead rabbit was recovered and preliminary results of testing from the Washington State Public Health Laboratory indicated the presence of Francisella tularensis, the causative agent of tularemia. Other potential exposed persons were investigated, but none appeared to have a sufficient degree of contact to warrant chemoprophylaxis.

Tularemia (rabbit fever) is a zoonotic gram-negative bacterial disease with a variety of clinical manifestations, depending on the route of exposure and virulence of the organism. Most often it presents as an ulcer at the site of inoculation along with regional lymphadenopathy. Other presentations include glandular, oropharyngeal, septicemic, or pneumatic. Transmission is via bites of infected ticks, mucous membrane or non-intact skin exposure to blood or tissue of an infected animal, drinking contaminated water, or inhaling aerosolized organisms. Tularemia is a potential agent of bioterrorism, particularly if applied in an aerosol. It is not transmitted from person-to-person. The animal reservoir includes rabbits, hares, voles, muskrats, and beavers. Hard ticks are the primary arthropod vectors. The incubation period ranges from 1-14 days, but is typically 3-5 days. The quantitative risk of infection following exposure is not well described.

The treatment of choice for tularemia is streptomycin or gentamicin for 7-14 days. Tetracyclines, chloramphenicol, and ciprofloxacin are alternative agents. For public health purposes, chemoprophylaxis is not routinely recommended outside of bioterrorist attacks. However, the nature and intensity of contact with the infected rabbits in this scenario was accompanied by a consensus between the health care provider and YHD that chemoprophylaxis was clinically indicated. Options for chemoprophylaxis include doxycycline or ciprofloxacin administered for at least two weeks.

This report highlights the clinical and public health value of reporting possible exposures to or episodes of zoonotic illness. Although individual prophylaxis may not always be indicated or available, collaboration between exposed persons, their health care provider, and YHD can lead to interventions that identify possible infectious agents. In addition, this collaboration can help educate other exposed persons and prevent further exposures from occurring. Even though the final test results on the rabbit were negative for tularemia, this family’s story highlights the role health care providers can play in educating and discouraging patients from handling or domesticating wild or exotic animals, no matter how compelling and compassionate their motivation may be. For more information on tularemia or prevention of zoonotic diseases, contact Barbara Andrews at 509.249.6533 or visit the following websites:

- http://www.doh.wa.gov/ehp/ts/ZOO.HTM

References:


Acknowledgement:

Craig Whittlesey, MD, of Wapato, for reporting and following-up on this exposure.
Informed Consent for HIV Testing During Pregnancy

By: Kirsten Pederson, J.D. and M.S. in Health Policy and Management

Recently, a women contacted the Yakima Health District questioning what doctors are required to do when giving HIV tests. This woman found out, after the fact, that while she was pregnant her physician had given her an HIV test as part of the routine prenatal blood work. She was concerned because she did not think that she had ever consented to having the test performed. When the woman contacted the physician’s office, she said that the office told her that HIV testing was part of prenatal blood work and the doctor did not need to get a patient’s separate consent. In order to reduce any confusion around this issue, here is a clarification of what the law requires physicians to do before giving an HIV test to their pregnant patients.

Informed consent for HIV testing for pregnant women is one component of a larger requirement for performing AIDS counseling. In Washington State, all physicians and other principal health care providers are required to provide AIDS counseling for their pregnant patients. AIDS counseling includes:

- Performing a risk screening analysis during intake,
- Giving specific written or verbal information about HIV infection,
- Obtaining the pregnant woman’s informed consent to HIV testing,
- Providing HIV testing unless the pregnant woman refuses to give her consent; and
- If the pregnant woman refuses a confidential HIV test, then discussing and addressing her reasons for refusing a confidential test and documenting that in her medical record.

Many physicians have a routine battery of tests that are automatically ordered for all new patients who are or may be pregnant. This gives physicians a baseline for the pregnant woman’s health and screens the woman for common problem areas during pregnancy. The law encourages physicians to make HIV testing a routine part of their testing, as long as it is done correctly. The bottom line is that a physician cannot give a pregnant woman a HIV test unless the woman specifically has given her consent to the HIV test being done.

Before giving a HIV test, physicians must:

1. Specifically inform the patient verbally or in writing that an HIV test is being done, and
2. Obtain the patient’s consent to the HIV test.

This means that physicians can include HIV testing in routine prenatal testing if they 1) tell the patient verbally or have it written in a consent form, and 2) obtain the patient’s consent to the HIV test. If physicians want to tell the patients in writing that HIV testing is done by including it in a written consent form for all other routine tests, the section about HIV testing should be easy for the patient to see. The goal is to encourage pregnant women to have the HIV test done, but they must know that the test has been done.

Informed consent for HIV testing is similar to informed consent for other procedures, except people are concerned about how the test results are kept confidential, and what happens if the test results are positive. The Washington State Department of Health has brochures that physicians can give their patients to explain the risks of HIV to their unborn child, how the test results are kept confidential, and what happens to the mother and child if the test results are positive. If you treat pregnant women and have further questions about this, please contact Wendy Doescher, HIV Program Manager, at 509.249.6503.

For more information and to download a copy of the Prenatal HIV Testing Brochure, please visit:

## Notifiable Conditions Summary

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<th>Year-to-date Jan to Sept</th>
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Reminder to Keep an Eye Open for SARS

Severe Acute Respiratory Syndrome (SARS) emerged in China in November 2002, but was not recognized as a new disease until it appeared in several other Asian countries and Canada in March 2003. This disease, caused by a newly described coronavirus (SARS-CoV), appears to be transmitted primarily through large droplets, although airborne and other routes of transmission have not been ruled out. A key feature of the 2002-2003 SARS outbreaks was the great number of health care workers infected following nosocomial spread of the virus, and the subsequent impact on the affected health care systems. Currently, there is no known SARS activity in the world, but it is possible the disease will re-emerge.

To quickly detect SARS re-emergence so that public health action can be taken to control the spread of disease, the following guidelines are recommended when evaluating patients with respiratory illness in your clinic, emergency department (ED), or hospital:

- Place a surgical mask on all patients with cough of infectious or unknown etiology seen in the ED or outpatient setting. This will help decrease transmission of SARS and other respiratory illnesses like pertussis, influenza, and tuberculosis.

- Ask the following of all patients hospitalized with chest radiograph (CXR)-confirmed pneumonia or ARDS:
  - Do you work in a healthcare facility?
  - In the 10 days prior to onset, have you traveled to an area previously affected by SARS? (China; Hong Kong; Hanoi; Vietnam; Singapore; Toronto, Canada; Taiwan)
  - In the 10 days prior to onset, have you had close contact with someone with a respiratory illness who recently traveled to one of these countries?
  - Are you a close contact of someone with pneumonia of unknown etiology?

If such a patient answers “yes” to one or more of these questions:

- Call the Yakima Health District (509.249.6541) immediately AND alert the person responsible for the infection control program in your facility.
- Implement droplet precautions
- Treat for common causes of community-acquired pneumonia
- Perform diagnostic workup (alert clinical lab of possible SARS case) including:
  - CBC with differential
  - Pulse oximetry
  - Blood cultures
  - Sputum Gram stain and culture
  - Testing for viral respiratory pathogens (e.g., influenza A/B, RSV, parainfluenza)
  - Urinary antigen testing: legionella and pneumococcal

If no alternative diagnosis is established within 72 hours, consider the value of SARS testing in consultation with YHD. For hospitalized patients suspected to have SARS, enzyme-linked immunosorbent assay [ELISA] of acute and convalescent serum specimens for SARS antibody, as well as reverse-transcriptase polymerase chain reaction (RT-PCR) assay of tissue, respiratory, blood or stool specimens, will be available through the Washington State Department of Health’s Laboratory. Consultation with YHD is required prior to submission of specimens. Both ELISA and RT-PCR require patient consent, as neither test has yet been licensed by the FDA for diagnostic purposes. Consent forms and additional information are available at: http://www.cdc.gov/ncidod/sars/labdiagnosis.htm. While such testing will be of value for public health and infection control purposes, results may not be available quickly enough to guide clinical management.

CDC is continually updating SARS information. For more information, visit their website at: http://www.cdc.gov/ncidod/sars/index.htm.
Yakima County Health Profile 2003

The 2003 Edition of the Washington Health Foundation's Yakima County Health Profile is now available on the internet at http://www.whf.org/professionals/downloads/CountyProfiles/yakima.pdf. The report indicates that, when compared to the state as a whole, Yakima County continues to have:

- a younger population distribution
- poorer economic indices (e.g., income, unemployment, entitlement eligibility)
- lower educational attainment
- a shortage of providers accepting Medicaid patients
- considerably higher birth rates (for all ages and teen mothers)
- similar pregnancy outcomes, except for slightly higher infant mortality
- higher total and cause-specific death rates

These figures suggest a close, but complex and incompletely characterized association between economic development, education, access to health care, and health outcomes. Unfortunately, Yakima County residents are experiencing consistently poorer outcomes than our neighbors, and in some cases the gap is widening. For more information or to get involved, contact Dennis Klukan at 509.249.6666 or Jessica Moseley of the Washington Health Foundation at 206.285.6355.