Yakima Health District BULLETIN

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Websites of Interest

Office of Civil Right's HIPAA
www.cdc.gov/privacyrule
www.hhs.gov/ocr/hipaa

DOH's Notifiable Conditions
http://www.doh.wa.gov/notify/

Mosquito Tips and Hints
http://www.doh.wa.gov/ehp/ts/Zoo/WNV/MosquitoProblems.html
http://www.doh.wa.gov/ehp/ts/Zoo/WNV/MosquitoTips.html

Arbovirus Information
http://www.co.yakima.wa.us/health/default.html
http://www.cdc.gov/ncidod/dvbid/arbor

CDC's TB Website
http://www.cdc.gov/nchstp/tb

SARS Information
http://www.cdc.gov/ncidod/sars/
http://www.who.int/csr/sars/en/index.html

HIPAA and Notifiable Conditions

As you are aware, new national health information privacy standards have been issued by the U.S. Department of Health and Human Services (DHHS), pursuant to the Health Insurance Portability and Accountability Act of 1996 (HIPAA). The new regulations provide protection for the privacy of certain individually identifiable health data, referred to as protected health information (PHI). *The Privacy Rule still permits covered entities to disclose protected health information, without authorization, to public health authorities (e.g., YHD) who are legally authorized to receive such reports for the purpose of preventing or controlling disease, injury, or disability. This would include, for example, the reporting of a disease or injury; reporting vital events, such as births or deaths; and conducting public health surveillance, investigations, or interventions.* For more information see the websites of interest on the front page.

The Revised Code of Washington 70.28 assigns broad powers and duties to local health officers and Boards of Health to enforce public health laws, to investigate and prevent the spread of dangerous or communicable conditions, and to promote the health of the community.

Washington Administrative Code 246-101 requires health care providers, laboratories, and facilities to notify the local health jurisdiction (i.e., YHD) of suspected and confirmed cases of notifiable conditions, to report suspected outbreaks, and to cooperate with public health officials during the investigation of conditions of public health importance. This obligation is not affected by HIPAA rules and does not require patient authorization. Public health officials, in turn, are required to protect the confidentiality of the individuals who are reported. The following reports demonstrate the importance of disease reporting to public health surveillance and community protection. If you have any doubts about reporting a particular case or situation, we would rather that you call and ask before making a decision not to report. To report notifiable conditions call 249.6541. For questions about HIPAA and notifiable condition reporting, contact Dennis Klukan (Administrator) at 249.6666 or Dr. Chris Spitters (Health Officer) at 206.930.1336.

Be on Alert for Summer Gastroenteritis

Summer months typically bring a 50-100% increase in reports of bacterial gastroenteritis and foodborne intoxication. The most common bacterial agents are *Campylobacter spp.*, *Salmonella spp.*, and *E. coli* O157:H7; however, *Shigella*, *Yersinia*, *S. aureus*, *C. perfringens* and *B. cereus* also contribute. Increased camping, picnicking, cookouts, and other gatherings bring increased risk of food handling errors that amplify and transmit these agents or their toxins—most often from animal and certain other food products (e.g., poultry, eggs, ground beef, sprouts, and cantaloupe).

Later summer months typically also bring outbreaks of enteroviral disease, with cases of aseptic meningitis coming to light as the tips of the iceberg. Please be vigilant for these and strongly consider obtaining stool specimens for bacterial pathogen testing when patients present with febrile diarrhea syndromes. Pursuit of laboratory testing should be emphasized when illnesses present with bloody stools; appear to be associated with a gathering or other congregate setting; cluster in time or location; or occur in persons in sensitive occupations (i.e., foodhandlers, childcare staff, health care workers). Please report all cases of bacterial gastroenteritis and any suspected clusters or outbreaks of gastroenteritis to the Yakima Health District at 509.249.6514 or 800.535.5016 x 514.

Suspected Arbovirus Disease

During the month of June, two suspected cases of arthropod-borne viral infection were reported to the Health District. The first occurred in a 59 year-old woman who resides in northwestern Yakima County. Her illness began on May 15 and included fever (103F), chills, headache, photophobia, eye pain, myalgia, and arthralgia. At the peak of her illness, she was bedbound at home for three days. She received a clinical diagnosis of viral meningitis. Cerebrospinal fluid was not obtained. Her illness began to resolve after approximately two weeks. She still reported fatigue, staggering gate, and reduced appetite three weeks into the illness. Serologic testing for West Nile Virus (WNV) antibodies was negative. During the investigation, she reported heavy mosquito burden and observation of dead birds on her residential property. A visit to her home revealed no birds for testing—they had been picked up and discarded by another family member.

The second case occurred in a 42 year-old Yakima resident who presented with fever and progressive encephalopathy of onset 06/08/03. She was hospitalized on the fourth day of her illness. Other components of her illness included headache, nausea, vomiting, myalgias, change in mental status , and photophobia. CSF evaluation revealed pleocytosis (257 WBC/mcl; 27% lymph), elevated protein and glucose. CSF Gram's stain showed no organisms, and viral and bacterial cultures were negative. After nine days, her clinical course improved and encephalopathy resolved. She was discharged home on the sixth day of hospitalization. Serologic testing for WNV was negative. Investigation of her residential area revealed no dead birds or heavy mosquito populations.

Both suspected cases demonstrate the importance of reporting suspected cases of arthropod-borne infection to YHD (e.g., viral encephalitis, viral meningitis in persons >17 y/o, Guillan-Barre syndrome, etc.). YHD can then conduct a prompt case investigation and environmental assessment to determine the probability of arboviral disease, while facilitating access to appropriate laboratory services for diagnosis. The goal is early detection of the presence of an organism in the local environment with timely notification to other health care providers and the community. This, in turn, further aids ongoing diagnostic, surveillance, and prevention efforts.

Although these cases apparently do not represent WNV infection, arboviral disease remains in the differential diagnosis and their serum has been sent to CDC for additional testing for St. Louis encephalitis (SLE) and western equine encephalitis (WEE). These infections are rarely reported in Washington state, but a case of SLE was recently confirmed near the Tri-Cities area in a man who was suspected of having WNV infection. SLE also is transmitted by mosquitoes and has a bird reservoir but, unlike WNV, does not make birds ill—thus limiting the utility of dead bird surveillance for SLE. Other infectious diseases that can cause aseptic meningitis or encephalitis include enteroviral disease (typically during summer months), Lyme borreliosis (tick-borne), and herpes simplex.

No bird, horse, or human cases of WNV have been confirmed in Washington state thus far this season. Because control of mosquito vectors and prevention of bites is the core of prevention for WNV, we encourage you to share information with your patients about reducing mosquito breeding areas and safe use of effective mosquito repellants. Check the front page for website addresses related to this topic.

Tuberculosis Contact Investigation Finds Undiagnosed Child

To date in 2003, six suspected and five confirmed cases of active TB have been reported in Yakima County. Approximately 10-12 confirmed active cases are reported annually, with usually one or two occurring among children. Recently, a young adult Hispanic woman who had entered the United States one year ago presented with right cervical adenopathy. She reported no history of TB exposure, diagnosis or treatment. She reported no cough, sputum, or fever. Radiographic study of the chest several weeks later demonstrated left lingular and superior segment (lower lobe) infiltrates. Two weeks subsequent to that, an excisional biopsy of a cervical lymph node showed necrotizing granulomata with negative acid-fast (AFB) and fungal smears. The entire specimen was submitted in formalin and thus could not be inoculated for culture. Approximately one month later, the adenopathy persisted. A PPD was placed and read 48 hours later as 20 mm (induration). At this point, the suspicion of TB was reported to YHD. Three sputum specimens were collected and were AFB smear-positive.

The woman was started on treatment for pulmonary and cervical lymph node TB under YHD supervision and a contact investigation was immediately initiated. The woman was found to have a toddler with cough and reduced feeding of several weeks' duration. His chest radiograph showed right hilar adenopathy and clear lung fields. His PPD was zero mm. He was started on treatment for intrathoracic lymph node TB and his condition promptly improved. Additional household and social contacts with latent TB infection were found and started on isoniazid. Three weeks later, *M. tuberculosis* sensitive to all first-line agents was isolated from the woman's original sputum specimen.

This case demonstrates several salient features of TB lymphadenitis, which is the most common form of extrapulmonary TB (EPTB). Options for diagnosis include fine needle aspirate or excisional biopsy (e.g., when the FNA is non-diagnostic). While necrotizing granulomata or caseous necrosis are usually seen on routine histologic evaluation, the sensitivity of AFB smears is limited (often <50%). While AFB smear and culture always should be conducted when TB is suspected, the absence of AFB on stain does not rule out TB. Although this woman's PPD was indeed positive, about 25% of active TB cases have a negative PPD. Thus, a negative PPD in a patient with a compatible clinical syndrome also should not interrupt a complete

evaluation for TB. Last, because half of EPTB cases also have pulmonary involvement, radiographic evaluation of the chest should be pursued in the initial diagnostic work-up, and three sputum specimens for AFB smear and culture should be collected if abnormalities suggestive of TB are found.

This case report also highlights the importance of reporting suspected cases of TB while the clinical and laboratory evaluation is still underway. Small children can develop serious or fatal TB disease within weeks of exposure, often before disease is confirmed in the adult source case and before the child's skin test becomes positive. YHD identifies these at-risk children and ensures clinical evaluation and appropriate management, such as in this case. Furthermore, results from contact evaluations can inform clinical decision-making in cases where the suspicion of active TB is borderline. YHD consultation also facilitates prompt and complete evaluation (e.g., submission of appropriate specimens, early identification of infectious cases). Among cases for whom treatment is initiated, YHD case management ensures appropriate monitoring for tolerance and adherence, as well as addresses other medical and social needs which may serve as a barrier to adherence. To report suspected TB cases or obtain consultation in screening or diagnosis for TB, contact Lela Hansen at 509.249.6532 or Amelia Ayala at 509.830.1597.

SARS Update

In early May, a local physician alerted YHD of a suspected case of SARS in an ambulatory child with fever and cough. The child was visiting from an area where endemic transmission was occurring at the time. Her febrile respiratory illness resolved after several days on broad-spectrum antibiotics, and she returned to her home after a 10-day isolation period. No significant exposures occurred between the child and local residents. Follow-up serologic testing for coronavirus will be performed. No other suspected cases have been reported locally. In Washington state, 32 suspected cases have been reported, two are considered probable, and none are confirmed. Nationwide, 36 probable cases have been reported, only 8 of which have laboratory confirmation.

June 19 marked the 100th day since WHO first alerted the world, on 12 March, to the SARS threat. From the 55 cases recognized on that day, concentrated in hospitals in Hong Kong, Hanoi, and Singapore, the outbreak exploded within a month to cause some 3000 cases and more than 100 deaths in 20 countries on all continents. During June, the number of new cases has gradually dwindled to the present daily handful. Through July 11, nearly 8500 cases have been reported worldwide. The World Health Organization contends that the reduced number of cases is not a "natural phenomenon" that can be attributed to a change in the virulence or infectivity of the SARS virus, as often happens with new diseases that quickly "burn out". Instead, the dramatic reduction in the number of SARS cases is the result of monumental efforts on the part of governments and health care staff, supported by a well-informed and cooperative public. In early July, WHO removed Hong Kong and Beijing – the world's two most severely affected cities – from its list of areas with recent local transmission of SARS. Taiwan was the last country removed from this list on July 15, 2003.

Monkey Pox in Humans

Through July 16, the Centers for Disease Control and Prevention reports investigation of 72 cases of monkeypox in humans in several midwestern states (mostly Illinois, Indiana, and Wisconsin). Thirty-seven cases are laboratory confirmed. No human or animal cases have been reported in Washington state. Monkeypox is a rare viral disease that is found mostly in the rainforest countries of central and west Africa. It belongs to the orthopoxvirus group of viruses. Other orthopoxviruses that can cause infection in humans include variola (smallpox), vaccinia (used in smallpox vaccine), and cowpox viruses.

In humans, the signs and symptoms of monkeypox are similar to those of smallpox, but usually milder. Unlike smallpox, monkeypox causes swollen lymph nodes. The incubation period for monkeypox is about 12 days. Previous vaccination against smallpox might attenuate clinical illness, and smallpox vaccination is being offered as immunoprophylaxis to close contacts of cases. The report of one case of encephalitis in a child indicates the potentially serious consequences of infection.

The majority of patients had direct or close contact with wild or exotic mammals such as prairie dogs. The prairie dogs were apparently infected in captivity by imported exotic rodents from Africa. The distribution of other exposed prairie dogs is being traced by the Food and Drug Administration. Meanwhile, the importation, distribution, transport, and sale of prairie dogs and African rodents has been prohibited by a joint order of CDC and FDA. The Yakima Health District has made pet stores and veterinarians aware of the situation and the ban. No licensed vendors of prairie dogs exist in Yakima County.

YAKIMA HEALTH DISTRICT

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Prevention is Our Business

Notifiable Conditions Summary, Yakima County, 2001-2003

Condition	Cases Jan to June			Total Cases by Year	
	2003	2002	2001	2002	2001
Campylobacteriosis	52	45	46	106	134
Cryptosporidiosis	0	0	1	1	10
E. coli O157:H7	1	2	3	10	7
Giardiasis	12	14	21	36	48
Salmonellosis	28	31	10	56	31
Shigellosis	5	7	13	29	26
Hepatitis A acute	0	1	10	3	17
Hepatitis B acute	0	0	0	1	3
Hepatitis B chronic	14	10	25	15	41
Hepatitis C acute	1	1	2	3	3
Hepatitis C chronic	127	120	131	255	236
Meningococcal	3	1	2	6	2
Pertussis	8	40	0	89	2
Tuberculosis	6	4	6	8	15
HIV New	8	5	5	10	17
HIV Deaths	0	1	1	1	2
HIV Cumulative Living	120	107	92	112	103
Chlamydia	449	402	423	886	875
Genital Herpes—Initial	38	37	50	76	121
Gonorrhea	38	21	39	61	74
Primary and Secondary Syphilis	2	0	0	1	4