



Yakima Health District BULLETIN

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Preliminary Report: Botulism Among Black Tar Heroin Injectors

During August 22 through August 26, four residents of Yakima County, Washington (ages 31-50), presented to Hospital "A" with complaints of three to seven days of fatigue, weakness, drooping eyelids, blurry vision, double vision, and difficulty speaking and swallowing. Two also reported dyspnea. All denied nausea, vomiting, fever, headache, and stiff neck. All four had recent histories that included intramuscular or subcutaneous injection of black tar heroin. One also snorted black tar heroin. At least three of the cases were socially connected and may have had the same source of heroin. No meals or gatherings were attended by all of the cases and no single common food item had been recently consumed (e.g., home canned foods, vacuum packed foods). On examination all had clear sensoria and varying degrees of cranial nerve palsies (e.g., ptosis, ophthalmoplegia, dysarthria, diminished or absent gag reflex) and upper extremity and truncal weakness. No sensory deficits were noted. Three of four had discernable wound infections associated with drug injection sites. Botulism was immediately suspected by the admitting physician of the first two cases, who presented simultaneously. He alerted local and state public officials and promptly obtained consultation from the Center for Disease Control (CDC) for bivalent antitoxin release. Antitoxin was administered within 14-24 hours of admission for all cases. Wound debridement and treatment with intravenous ampicillin/sulbactam was initiated within 12 hours for the three patients with discernable wounds. The fourth case had no discernable wounds, reported allergy to penicillin, and was started on intravenous clindamycin on the third day of hospitalization.

Two cases progressed to respiratory failure, the first on day two of hospitalization and the second on day five (approximately

90 hours after antitoxin administration). Both continue to require mechanical ventilation, have been transferred to Hospital "B" and are showing mild improvement. The other two cases' cranial nerve palsies and strength are improving. As of September 3, one is eating by mouth, but the other patient still has weak gag reflex and requires nasogastric tube feeding.

Serum specimens from the first two cases are positive for botulinum toxin A by bioassay. Stool toxin bioassays and anaerobic cultures on these two patients were negative. Analogous specimens are pending on the other two cases. Wound specimens for anaerobic culture and toxin bioassay were collected on three cases have not yielded clostridial growth to date. Local public health officials interviewed family members and housemates of the cases. No additional suspected cases were discovered and no home canned food products were identified. Injection paraphernalia and residual traces of black tar from one residence were collected and submitted for microbiologic testing. Local public health officials notified health care providers and acute care facilities to increase suspicion of wound botulism in injection drug users. Outreach staff are working through a needle exchange program and other outreach venues to inform drug injectors in the community about the outbreak, about the need to seek immediate care if affected, and about the ongoing risks of using black tar heroin.

The Health District expresses special thanks to the health care providers and facilities who made the diagnoses, treated the patients, and/or assisted the Health District's investigation and reporting of the outbreak. The Yakima Health District also acknowledges the assistance to these health care providers and to the investigation by the CDC and the Washington State Department of Health.

Alternate Diagnosis Found in Previously Suspected West Nile Virus Case

Based upon further results obtained through the Centers for Disease Control (CDC) and the Washington State Department of Health's Public Health Laboratory (PHL), the "probable" West Nile Virus (WNV) case reported on August 13 by the Yakima Health District is no longer suspected of truly having had WNV. Tests conducted at CDC to confirm the State PHL's previous results have not supported the diagnosis of WNV. Meanwhile, supplementary tests at the State PHL on the case's original specimen have isolated another virus which *does* explain his illness: echovirus 30. This enteroviral culture result is final and is not subject to further confirmation.

Echovirus 30 is one of many members of the family of enteroviruses that commonly cause viral meningitis in summer months. It has been seen here in Yakima, elsewhere in Washington State, and throughout the nation this year. In many cases, such as this one, there is substantial overlap between the clinical appearance of WNV and enteroviral infection. However, transmission of enteroviruses is person-to-person (e.g., saliva, feces), emphasizing the importance of consistent and thorough handwashing with warm water and soap after toileting and before preparing food.

The most efficient diagnostic method is detection of IgM antibody to WNV in serum (collected within 8-14 days of illness onset) or cerebral spinal fluid (collected within 8 days of illness onset). WNV testing is available through the PHL for hospitalized patients. Testing for milder presentations should be conducted through commercial laboratories. *Because WNV cannot be distinguished from other causes of meningoencephalitis on clinical grounds, testing for other common causes of aseptic meningitis/encephalitis syndrome, including culture and/or PCR for enteroviruses and herpes viruses through commercial laboratories, is encouraged prior to (or at least simultaneous to) WNV testing.*

Notwithstanding the results in this case, the Health District's recommendations to eliminate mosquito breeding areas and avoid mosquito bites are important because WNV and other mosquito-borne viruses remain a potential threat in Yakima County. The Health District will continue surveil-

lance for their occurrence. To date, no additional suspected cases of locally acquired WNV in Yakima County or Washington State have had positive testing. No birds or horses have tested positive for WNV, either. The Health District thanks physicians who have reported suspected cases and have supported case investigations to date.

For further information, to report a suspected case, or to gain consultation or assistance in WNV testing, please contact the Yakima Health District at 509.249.6541 during business hours or at 509.575.4040 (prompt #1- "For Public Health Emergencies") after hours.

For Further Information on enteroviruses:

- MMWR on nationwide enteroviral meningitis outbreaks: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5232a1.htm>
- Enteroviruses as an important cause of aseptic meningitis even in WNV endemic areas: <http://www.cdc.gov/ncidod/EID/vol9no9/03-0068.htm>
- General Information on Enteroviruses: http://www.cdc.gov/ncidod/dvrd/revb/enterovirus/non-polio_entero.htm
- Viral Meningitis. In *Communicable Diseases Manual*, 17th edition. Chin JL, ed. Washington, DC: American Public Health Association, 2000, pp. 338-340.
- Enterovirus Infections. In *2003 Red Book: Report of the Committee on Infectious Diseases*. 26th edition. Pickering LK, ed. Elk Grove Village, IL: American Academy of Pediatrics; 2003: 269-270.

Further Information on WNV:

- DOH WNV web page: <http://www.doh.wa.gov/ehp/ts/Zoo/WNV/WNV.html>
- MMWR on WNV surveillance: <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5234a5.htm>
- General Information on WNV prevention: <http://www.doh.wa.gov/ehp/ts/Zoo/WNV/GeneralPublic.html>

YHD Information Dissemination for Health Care Providers

As you are aware, the Yakima Health District periodically releases information of public health importance to health care providers via broadcast facsimile. The intent of these efforts is to raise awareness, enhance surveillance, and promote diagnostic and treatment recommendations for the specific situation under consideration. To date, virtually all of these have been entitled "Alerts." In order to employ language parallel to that used by state and federal public health partners, our future communications will include one of the following three key phrases to indicate its priority and to guide your participation or response:

Alert: conveys the highest level of importance; warrants immediate action or attention.

Advisory: provides important information for a specific incident or situation; may not require immediate action.

Update: provides updated information regarding an incident or situation; unlikely to require immediate action.

If you are not receiving these notifications and would like to, or if you would like to provide feedback or receive more information, please call the Communicable Disease line at 509.249.6541.

Gonorrhea Case Reports Increase

From January through July, 2003, 58 cases of gonorrhea have been reported in Yakima County. During the analogous period in 2002, 24 cases were reported. This represents a 140% increase locally, whereas case reports are unchanged on a statewide basis. The distribution of Yakima County cases is equal across genders. Mean age of men has been 30.5 years (range: 19-45) and of women, 22.5 years (range: 16-35). About two-thirds of the reports are in Yakima city residents and the other third are from the Lower Valley. Leading reporters include hospital emergency rooms, community clinics, and family planning providers.

Chlamydia reports statewide and locally indicate a more modest increase of 10% compared to last year. Syphilis reports are about 50% higher than last year statewide, but are stable and minimal locally. The Health District makes the following recommendations to enhance detection, treatment, and prevention of these sexually transmitted diseases:

- Test for both gonorrhea (culture or PCR/LCR) and chlamydia (PCR/LCR) among patients with clinically apparent cervicitis, urethritis, or proctitis .
- Provide empiric treatment for chlamydia while awaiting results when cervicitis, urethritis or proctitis are present, especially for patients under 25 years of age. Empiric treatment for gonorrhea should be offered if proctitis is present, if results of staining show gram negative diplococci or if the likelihood of patient follow-up is low.
- Ask patients regularly about their sexual activity as part of routine primary care, particularly among young men 20-35 years and women 15-24 years of age.
- Screen for chlamydia among all sexually active women under 20 years of age at least annually. Screen any woman under 25 years of age if she has had multiple partners or if she acquired a new partner in the preceding 3 months.
- Retest for chlamydia and gonorrhea three months after treatment among women diagnosed with either infection.
- Offer urine-based chlamydia and gonorrhea screening to at-risk men presenting in high prevalence settings.
- Conduct serological testing for syphilis among patients with clinical indicators of infection, patients diagnosed with another STD, men who have sex with other men, and pregnant women. Also recommend and offer HIV testing in these situations.
- Provide single dose directly observed therapy whenever feasible (i.e., azithromycin for chlamydia and ceftriaxone, ciprofloxacin, ofloxacin, or levofloxacin for gonorrhea). Avoid using fluoroquinolones in groups where gonococcal resistance to these agents has been demonstrated (i.e., recent sex in California, Hawaii, Asia, or the Pacific Islands or recent sex with a person from those locations).
- Include partner management as a critical component of clinical care for STDs. Ask about partners, never assume that there is only one, and encourage patient involvement in bringing partners in for testing and chemoprophylaxis.

Thank you for reporting your STD cases! For more information on STD data, screening, or partner management, please contact Alex Popov at 509.249.6531. For medical consultation in STD diagnosis or treatment, call Chris Spitters, MD, at 206.930.1336.

Revised ATS/CDC Recommendations Discouraging Rifampin/Pyrazinamide Regimen for Treatment of Latent Tuberculosis Infection

Based upon case reports of serious liver injury among patients treated with rifampin and pyrazinamide (RZ) for latent tuberculosis (TB), the Centers for Disease Control (CDC) conducted a retrospective survey of TB clinics providing this regimen during the period January 2000–June 2002. Of 7,737 patients who were reported to have started RZ for treatment of latent TB infection (LTBI) during the survey period, 204 patients discontinued using RZ because of aspartate aminotransferase concentrations greater than five times the upper limit of normal (rate: 26.4 per 1,000 treatment initiations). An additional 146 patients discontinued using RZ because of symptoms of hepatitis (rate: 18.9 per 1,000). Estimated rates of hospitalization and death during the survey period were 3.0 and 0.9 per 1,000 treatment initiations, respectively. Analogous rates for isoniazid are 0.1-0.2 hospitalizations and 0.0-0.3 deaths per 1,000 treatment initiations.

The American Thoracic Society (ATS) and CDC now recommend that RZ should generally not be offered to persons with LTBI. If the potential benefits of this regimen outweigh

the risk of severe liver injury and death associated with it, use of RZ can be considered in carefully selected patients. ATS and CDC recommend that a TB/LTBI expert should be consulted before RZ is offered in such situations.

These findings and recommendations parallel those demonstrated by the Yakima Health District (YHD) and Yakima Valley Farmworkers Clinic in a retrospective analysis of RZ recipients in 2001. Those results showed seven (11%) of 66 treated adults developing drug-induced hepatitis. YHD then recommended that routine use of RZ for LTBI be discontinued in Yakima County. ATS, CDC, and YHD continue to recommend use of RZ together with isoniazid and ethambutol as part of a four-drug regimen for initial treatment of active TB.

For consultation or more information on these recommendations, call Chris Spitters, MD/MPH, at 206.930.1336 or Lela Hansen, RN, at 509.249.6532. For a copy of the CDC's report and updated guidelines for screening and treatment of LTBI, visit <http://www.cdc.gov/nchstp/tb/>.

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Prevention is Our Business

State Public Health Conference Comes to Yakima, October 13-15, 2003

The 10th Annual Washington State Joint Conference on Health, sponsored by the Washington State Public Health Association, the Washington State Department of Health and the Yakima Health District, will be held at the Yakima Convention Center, October 13-15, 2003. This meeting provides a forum for the state's public health workforce to collaborate with health care providers and other partners, updating knowledge on issues of public health importance, describing experiences with new programs, and discussing public health policy. The theme of this year's meeting is, "*Reaching Across Boundaries: Expanding Partnerships for a Safer and Healthier Washington.*" A wide array of topics will be covered, including health care financing, community health assessment, environmental health, tobacco, adolescent health, parent-child health, oral health, emergency preparedness, and infectious diseases.

The keynote speaker, William Foege, MD/MPH, currently serves as Senior Medical Advisor to the Bill & Melinda Gates Foundation Global Program on Health after a remarkable career serving in the World Health Organization, the Centers for Disease Control and Prevention, and The Carter Center. Local speakers will include:

- Vickie Ybarra, Mark Koday, and Carlos Olivares (Yakima Valley Farmworkers Clinic)
- Russel Maier, MD, (UW School of Medicine & Central Washington Family Practice)
- Joyce Hagen (Yakima Health District)
- Darlene Agnew (Yakima Health District)

For a conference brochure, to register, or to obtain more information, visit <http://www.wspha.org/JCH1.html> or contact Kathy Kimsey at 425.377.1477.