



## **Communicable Disease and Epidemiology News**

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### **Influenza Activity and Vaccine Supply Update**

#### Influenza Activity

Influenza activity in King County remains at a low level. From September through November 20th, 2004, sentinel influenza surveillance providers have submitted 75 specimens from persons with influenza-like illness to the Public Health-Seattle & King County laboratory. Influenza A has been detected in ten specimens. Of these, four are type H3N2, and six are yet to be typed. Other respiratory pathogens detected this year, include respiratory syncytial virus (4 cases), parainfluenza virus (2 cases), and adenovirus (2 cases). There have been 2 confirmed nursing home outbreaks reported to-date. School-absenteeism remains low. Pneumonia and influenza (P&I) mortality surveillance indicates that, for the week of November 13<sup>th</sup>, the percent of all King County deaths that were due to pneumonia and influenza was 7.5 percent. For weekly updates on influenza activity in King County, please visit:  
[www.metrokc.gov/health/immunization/fluactivity.htm](http://www.metrokc.gov/health/immunization/fluactivity.htm)

#### Vaccine Supply

Public Health expects to receive federal allocations of influenza vaccine in December and January. However, the allocation will represent only a portion of the estimated need in the county. In distributing available vaccine, Public Health will target healthcare providers most likely to be able to administer allotted vaccine to the greatest numbers of persons in priority groups, (based on our needs assessment), and we will establish equitable access to vaccine for residents throughout the County. Public Health's flu season web pages will have updated information on vaccine supply and any public flu clinics as information becomes available:  
[www.metrokc.gov/health/immunization/fluseason.htm](http://www.metrokc.gov/health/immunization/fluseason.htm)

### **Syphilis Increase in King County**

Since 1997, King County, like much of the rest of the United States, has experienced an epidemic of syphilis among men who have sex with men (MSM). Over the last year, the magnitude of this epidemic has substantially increased, and a new epidemic among heterosexuals has emerged.

#### Heterosexual Syphilis in King County

Between 2001 and 2003, only 10 cases of early syphilis were reported among heterosexuals in King County. Since May of 2004, early syphilis has been diagnosed in 22 King County heterosexuals.

Common characteristics among these heterosexual cases include trading sex for money or drugs, and crack cocaine use. Of seven women diagnosed with syphilis, four are commercial sex workers (CSWs). Similarly, among men, 12 of 15 reported a sexual encounter with a CSW. Fifty percent of cases reported crack cocaine use. Additionally, anecdotal evidence suggests that several cases have been transiently housed or homeless. The number of sex partners reported for the 90 day period preceding the onset of symptoms ranges from 5 to 50. While African

Americans account for 46% (10/22) of heterosexual cases, the epidemic has affected whites, Asians, Pacific Islanders, Native Americans, and Latinos as well.

This outbreak presents particularly challenging control issues, primarily because cases belong to marginalized populations and many have been unwilling to share information about their sex partners. Additionally, cases with anonymous sex partners may be unable to provide good descriptive or locating information for these partners. The Public Health-Seattle & King County Sexually Transmitted Diseases Program has taken several steps to try to control this outbreak, including notifying providers and community based organizations to heighten awareness of the outbreak. Public Health has also implemented a peer referral program, field outreach testing, and increased screening in the King County Jail to enhance syphilis case finding.

#### Syphilis among Men Who Have Sex With Men (MSM)

After a period of increasing disease between 1997 and 1999, syphilis morbidity among MSM in King County remained relatively stable between 2000 and 2003, with 58 to 82 cases occurring annually. Between January and October of 2004, 124 cases of early syphilis have been reported among MSM in King County. Public Health continues its public education campaign urging MSM to use condoms, limit their number of sex partners, and to be tested for sexually transmitted diseases, including syphilis, at least annually.

#### Conclusions

The expanding syphilis epidemic among MSM, as well as the new epidemic among heterosexuals CSWs, their clients, and users of crack cocaine highlight the continued vulnerability of these populations to syphilis. Clinicians are urged to elicit a substance abuse history and sexual history as part of routine care, and particularly when evaluating persons with genital or anal lesions, or a rash affecting the trunk, arms, palms or soles. The threshold for testing for syphilis should be low. Annual syphilis testing is recommended for all MSM. Commercial Sex Workers, their clients, and people who acknowledge using crack cocaine should be tested for syphilis when they seek medical care. When clinical suspicion of syphilis is high and patient follow-up cannot be assured, clinicians should treat patients empirically without waiting for laboratory confirmation of the syphilis diagnosis.

### **A Case of Wound Botulism Likely Due to Injection of Black Tar Heroin**

On Sunday, November 7<sup>th</sup>, Public Health was notified of a possible case of botulism in an injecting user of black tar heroin. Public Health was able to assist the health care provider in obtaining botulinum antitoxin from the Centers for Disease Control and Prevention (CDC) for this patient. On Friday, November 12<sup>th</sup> a laboratory analysis of serum from this patient was positive for type A *Clostridium botulinum* toxin. Wound botulism is transmitted via inoculation of *C. botulinum* spores

during trauma, or via intramuscular injection or snorting of drugs, usually black tar heroin.

**Suspected cases of botulism should be reported to Public Health immediately at 206-296-4774.** Public Health will: 1) facilitate laboratory confirmation of the diagnosis, 2) assist in obtaining antitoxin from the CDC, 3) investigate and, when possible, remove, likely sources of transmission, and 4) identify other persons at risk for illness.

**Botulism should be suspected in patients with cranial nerve dysfunction manifested as difficulty seeing, speaking and/or swallowing, followed by symmetric, descending weakness and paralysis.** Clinical hallmarks include ptosis, blurred vision and the “4 Ds”: diplopia, dysarthria, dysphonia, and dysphagia. A history of injecting or inhaling black tar heroin should be sought, a thorough physical exam for evidence of cellulitis and abscesses, and examination of the paranasal sinuses should be performed. CSF protein is normal in botulism; EMG may help differentiate causes of paralysis.

**Initiation of treatment with antitoxin should be based on the clinical diagnosis and should not await laboratory confirmation.** Because antitoxin can prevent, but not reverse, neuromuscular blockade due to botulinum toxin, early treatment with botulinum antitoxin is important to prevent progression to respiratory failure, the most frequent cause of death. Wounds suspected of being contaminated with *C. botulinum* should be widely debrided and irrigated, ideally after the administration of botulinum antitoxin. Anaerobic cultures should be obtained. Mechanical ventilation is the main supportive therapy for severe cases of botulism.

**Zoonotic Disease Alert: Leptospirosis in Dogs**

Ten cases of laboratory confirmed leptospirosis in dogs have been reported from veterinarians in Western Washington since August. Three of these dogs lived in suburban King County, six in Pierce County, and one in Mason County. Interviews of the dog owners in King County did not reveal a common exposure.

Leptospira bacteria are long, thin, motile spirochetes affecting at least 160 mammalian species, including humans. There are 100-200 human cases of leptospirosis reported in the United States each year, 50% of them occurring in Hawai'i. Transmission to humans or animals occurs through direct or indirect transmission via contact with a mammalian host, although contact with leptospira contaminated water or soil is responsible for most cases.

The dogs in these recent Washington reports presented with signs that included fever, myalgia, vomiting, diarrhea, conjunctivitis, lethargy and anorexia, and laboratory tests indicated renal failure or insufficiency. Dog owners were interviewed about possible exposure routes and reported a

variety of potential sources including contact with dead animals (opossum, rodents) and swimming or playing in lakes, streams or swampy areas. Although no human cases of leptospirosis have been reported in association with these canine cases, humans can, rarely, acquire leptospirosis from infected mammals, or can be infected via the same exposure sources as the mammals. Presentation of acute infections in humans can include sudden onset of fever, headache, chills, severe myalgia, and conjunctival suffusion. In endemic areas, the majority of human infections are sub-clinical. The incubation period for leptospirosis in humans is usually 7 days, with a range of 2-29 days.

Infected dogs generally shed leptospira in their urine starting about a week after onset of clinical signs, and may continue to shed for a month or longer. Proper antibiotic treatment should reduce the period of infectivity. Owners of infected dogs should be counseled on infection control measures, and occasionally, when there is substantial exposure of humans or other pets in the household to urine of an infected dog, prophylactic antibiotics may be recommended.

Veterinarians are urged to consider leptospirosis in the differential diagnosis for dogs with acute onset of fever, depression, myalgia, conjunctivitis, and renal insufficiency. Veterinarians in the community may call Drs. Sharon Hopkins or Jane Koehler at (206) 296-4880 to consult on suspect canine leptospirosis or report confirmed cases. Health care providers should call (206) 296-4774 to report a human case of leptospirosis, or to ask questions about prophylaxis.

<b>Disease Reporting</b>	
AIDS/HIV .....	(206) 296-4645
STDs.....	(206) 731-3954
TB .....	(206) 731-4579
All Other Notifiable Communicable Diseases (24 hours a day) .....	(206) 296-4774
Automated reporting line for conditions not immediately notifiable .....	(206) 296-4782
<b>Hotlines</b>	
Communicable Disease .....	(206) 296-4949
HIV/STD .....	(206) 205-STDS
<b>Online Resources</b>	
<b>Public Health Home Page:</b> <a href="http://www.metrokc.gov/health/">www.metrokc.gov/health/</a>	
<b>The EPI-LOG:</b> <a href="http://www.metrokc.gov/health/providers">www.metrokc.gov/health/providers</a>	
<b>Subscribe to the Public Health Communicable Disease listserv (PHSKC INFO-X) at:</b>	
<a href="http://mailman.u.washington.edu/mailman/listinfo/phskc-info-x">http://mailman.u.washington.edu/mailman/listinfo/phskc-info-x</a>	

<b>Reported Cases of Selected Diseases, Seattle &amp; King County 2004</b>				
	Cases Reported in October		Cases Reported Through October	
	2004	2003	2004	2003
<b>Campylobacteriosis</b>	26	28	226	224
<b>Cryptosporidiosis</b>	2	3	28	35
<b>Chlamydial infections</b>	388	538	4,426	4,296
<b>Enterohemorrhagic E. coli (non-O157)</b>	0	0	0	0
<b>E. coli O157: H7</b>	6	6	40	39
<b>Giardiasis</b>	13	14	104	104
<b>Gonorrhea</b>	86	136	981	1162
<b>Haemophilus influenzae (cases &lt;6 years of age)</b>	0	0	2	2
<b>Hepatitis A</b>	2	5	11	26
<b>Hepatitis B (acute)</b>	0	2	16	29
<b>Hepatitis B (chronic)</b>	53	42	516	458
<b>Hepatitis C (acute)</b>	1	0	9	8
<b>Hepatitis C (chronic, confirmed/probable)</b>	121	53	1019	744
<b>Hepatitis C (chronic, possible)</b>	40	26	299	196
<b>Herpes, genital (primary)</b>	49	76	603	546
<b>HIV and AIDS (includes only AIDS cases not previously reported as HIV)</b>	23	55	344	403
<b>Measles</b>	0	0	6	0
<b>Meningococcal Disease</b>	0	1	15	4
<b>Mumps</b>	0	0	1	1
<b>Pertussis</b>	15	50	190	256
<b>Rubella</b>	0	0	0	0
<b>Rubella, congenital</b>	0	0	0	0
<b>Salmonellosis</b>	19	24	206	204
<b>Shigellosis</b>	4	5	55	84
<b>Syphilis</b>	7	6	123	72
<b>Syphilis, congenital</b>	0	0	0	0
<b>Syphilis, late</b>	11	4	59	38
<b>Tuberculosis</b>	9	10	108	131

The *Epi-Log* is available in alternate formats upon request.