



**Communicable Disease and Epidemiology News**

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- **Update on Hepatitis A Infections—Going, Going, But Not Gone**
- **Flu Update**

**Update on Hepatitis A Infections—Going, going, but not gone**

Public Health is investigating an outbreak of foodborne hepatitis A. At press time, 6 cases with onsets in early March have been identified in residents of King (4), Pierce (1), and Snohomish (1) Counties. The estimated exposure period is late January and early February. Please consider the diagnosis of hepatitis A in patients with compatible symptoms.

Hepatitis A rates in the United States have declined by 89 percent since hepatitis A vaccine first became available in 1995. In the US in 2006, 3,579 acute cases of hepatitis A were reported, corresponding to an annual incidence of 1.2/100,000, the lowest rate ever recorded. After adjusting for asymptomatic infection and underreporting, the estimated number of new infections was 32,000. In Washington State, hepatitis A cases have decreased from 3,273 in 1989 to fewer than 100 cases a year recently. King County received an average of 16 reports each year from 2003 through 2008 (range 14-17). In 2008, 16 cases were reported, the majority occurred among 18 to 44 year olds, with men and women equally affected; two cases required hospitalization. Twelve of the 16 cases were related to international travel (10) or recent arrival to the U.S. (2). The most frequently reported travel destinations were India (6) and Mexico (3). No source was identified for four cases. The last reported death from hepatitis A in King County was in 2000.

Hepatitis A virus (HAV) is transmitted person-to-person through the fecal-oral route (i.e., ingestion of something contaminated with the feces of an infected person). Most infections result after international travel or close personal contact with an infected household member or sex partner. Common-source outbreaks and sporadic cases also can occur from exposure to fecally-contaminated food or water. Waterborne outbreaks are infrequent in developed countries with well-maintained sanitation and water supplies.

In addition to routine vaccination of children, persons at increased risk for acquiring HAV infection should be vaccinated. These include 1) travelers to countries with high or intermediate endemicity of HAV infection; 2) men who have sex with men; 3) users of injection and non-injection illegal drugs; 4) persons with clotting factor disorders, and 5) persons working with nonhuman primates susceptible to HAV infection.

Symptoms of acute hepatitis A usually occur abruptly and can include fever, fatigue, loss of appetite, nausea, vomiting, abdominal pain, dark urine, clay-colored

bowel movements, joint pain, and jaundice. In children aged <6 years, 70 percent of infections are asymptomatic; if illness does occur, it is typically not accompanied by jaundice. Older children and adults typically have symptoms, with jaundice occurring in >70 percent of patients. Symptoms usually last less than 2 months, although 10 percent–15 percent of symptomatic persons have prolonged or relapsing disease for up to 6 months. The average incubation period for hepatitis A is 28 days (range: 15–50 days). After acute infection, IgG antibodies to HAV, which appear early in the course of infection, provide lifelong protection. In addition to vaccination, good hygiene — including handwashing or use of hand sanitizer after using the bathroom, changing diapers, and before preparing or eating food — is integral to hepatitis A prevention, given that the virus is transmitted through the fecal–oral route.

**Pre-exposure Prophylaxis Prior to International Travel**

International travel is the most common risk factor for preventable hepatitis A infections. All susceptible persons traveling to or working in countries that have a high (particularly developing countries) or intermediate incidence of hepatitis A should be vaccinated, or receive immune globulin (IG) before traveling. The risk for hepatitis A exists even for travelers to urban areas, those who stay in luxury hotels, and those who report that they have good hygiene and that they are careful about what they drink and eat. The first dose of hepatitis A vaccine should be administered as soon as travel is considered.

On the basis of data indicating that immune globulin and vaccine have equivalent postexposure efficacy among healthy persons aged 1–40 years, the Advisory Committee on Immunization Practices (ACIP) has amended its guidelines for hepatitis A vaccination for travelers. ACIP now recommends that one dose of hepatitis A vaccine administered at any time before departure may provide adequate protection for most healthy persons. For optimal protection, older adults, immunocompromised persons, and persons with chronic liver disease or other chronic medical conditions who are planning to depart in <2 weeks should receive the initial dose of vaccine simultaneously with IG (0.02 mL/kg) at a separate anatomic injection site.

**New Recommendations for Hepatitis A Vaccine**

1. Postexposure protection against hepatitis A: Until recently, an injection of immune globulin (IG) was the only recommended way to protect people after they have been exposed to hepatitis A virus. In June 2007, U.S. guidelines were revised to allow for hepatitis A vaccine

to be used after exposure to prevent infection in healthy persons aged 1–40 years.

For persons aged >40 years, IG is preferred because of the absence of information regarding vaccine performance in this age group and because of the more severe manifestations of hepatitis A in older adults. Vaccine can be used if IG cannot be obtained. The magnitude of the risk of HAV transmission from the exposure should be considered in decisions to use vaccine or IG in this age group. For children aged <12 months, immunocompromised persons, persons with chronic liver disease, and persons who are allergic to the vaccine or a vaccine component, IG should be used.

2. Pre-exposure prophylaxis for families of international adoptees: After reviewing data on transmission of hepatitis A from international adoptees after arrival in the U.S., in Feb. 2009 ACIP voted to recommend hepatitis A vaccination for previously unvaccinated persons who anticipate repeated close personal contact with an international adoptee within 60 days of arrival if the adoptee is from a country with high or intermediate endemicity for HAV. The first dose should be administered as soon as possible after adoption is planned and ideally at least 2 weeks before adoption.

## Influenza Update

Influenza reports have increased in King County over the last several weeks. While influenza A activity remains low, influenza B is circulating locally at higher levels than observed over the past five flu seasons. Circulating influenza A strains are well-matched to the 2008-09 vaccine. The influenza B virus that is circulating is predominantly the B/Victoria lineage, which differs from the strain contained in the 2008-09 vaccine. The World Health Organization has announced the recommended composition for the 2009-10 influenza vaccine, in which the influenza A components will remain unchanged and the influenza B component will change to a B/Victoria strain.

The number of hospitalizations associated with pneumonia and influenza is lower than peak levels observed during the previous four seasons. Deaths due to pneumonia and influenza have exceeded the national epidemic threshold two times this season, but returned to rates that were within normal limits the following week. No long-term care facilities have reported outbreaks of

influenza-like illness, compared to six outbreaks reported at this time last season.

Nationally, high levels of resistance to oseltamivir have been demonstrated for circulating influenza A (H1N1), while influenza A (H3N2) and influenza B remain sensitive to oseltamivir. No isolates tested have demonstrated resistance to zanamivir. Less than 1 percent of the influenza A (H1) isolates tested have exhibited resistance to the adamantanes, while 100 percent of the influenza A (H3) isolates tested have been resistant. The adamantanes are not effective in treating influenza B. Based on available data, CDC issued interim recommendations for the use of antiviral medications, which can be found at the following link: [www2a.cdc.gov/HAN/ArchiveSys/ViewMsgV.asp?AlertNum=00279](http://www2a.cdc.gov/HAN/ArchiveSys/ViewMsgV.asp?AlertNum=00279)

**Healthcare providers: To get e-mail Public Health Alerts and Advisories, contact Maybelle Tamura at 206-296-4774 or [maybelle.tamura@kingcounty.gov](mailto:maybelle.tamura@kingcounty.gov)**

**Disease Reporting**

AIDS/HIV .....(206) 296-4645  
 STDs .....(206) 744-3954  
 TB .....(206) 744-4579  
 All Other Notifiable Communicable Diseases (24 hours a day)..... (206) 296-4774  
 Automated reporting line for conditions not immediately notifiable .....(206) 296-4782

**Hotlines**

Communicable Disease.....(206) 296-4949  
 HIV/STD.....(206) 205-STDS

**Please Note Our New Website Addresses:**

Public Health main page: [www.kingcounty.gov/health](http://www.kingcounty.gov/health)  
 Communicable Disease Epidemiology & Immunization Section main page: [www.kingcounty.gov/health/cd](http://www.kingcounty.gov/health/cd)

<b>Reported Cases of Selected Diseases, Seattle &amp; King County 2009</b>				
	Cases Reported In February		Cases Reported Through February	
	2009	2008	2009	2008
<b>Campylobacteriosis</b>	17	21	45	41
<b>Cryptosporidiosis</b>	0	2	1	6
<b>Chlamydial infections</b>	366	436	866	947
<b>Enterohemorrhagic E. coli (non-O157)</b>	0	0	1	0
<b>E. coli O157: H7</b>	1	1	1	1
<b>Giardiasis</b>	8	3	14	13
<b>Gonorrhea</b>	85	94	154	200
<b>Haemophilus influenzae (cases &lt;6 years of age)</b>	0	1	0	1
<b>Hepatitis A</b>	1	2	1	5
<b>Hepatitis B (acute)</b>	1	4	2	8
<b>Hepatitis B (chronic)</b>	57	111	112	166
<b>Hepatitis C (acute)</b>	0	1	1	3
<b>Hepatitis C (chronic)</b>	133	111	250	270
<b>Herpes, genital (primary)</b>	25	54	63	86
<b>HIV and AIDS (includes only AIDS cases not previously reported as HIV)</b>	25	33	56	62
<b>Measles</b>	0	0	0	0
<b>Meningococcal Disease</b>	1	1	2	1
<b>Mumps</b>	0	0	0	0
<b>Pertussis</b>	2	3	5	17
<b>Rubella</b>	0	0	0	0
<b>Rubella, congenital</b>	0	0	0	0
<b>Salmonellosis</b>	10	12	23	25
<b>Shigellosis</b>	11	6	16	10
<b>Syphilis</b>	6	18	14	32
<b>Syphilis, congenital</b>	0	0	0	0
<b>Syphilis, late</b>	6	6	11	17
<b>Tuberculosis</b>	7	2	7	6

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