



To: CAHAN San Diego Participants  
Date: May 4, 2017  
From: Public Health Services, Epidemiology & Immunizations Services Branch

## Update #2: Hepatitis A Virus Outbreak in San Diego County

This health advisory updates local healthcare providers about recent hepatitis A virus (HAV) infections disproportionately affecting homeless and illicit drug-using individuals in San Diego County. Updated recommendations and resources on HAV are provided.

### Situation

Eighty acute HAV infections have been reported in San Diego County residents with symptom onset between November 24, 2016 and April 26, 2017. Sixty-six (83%) of the cases have been hospitalized and three patients (4%) have died. The age range of confirmed HAV cases was from 26 to 72 years (median = 42 years) and 46 (58%) were male, with none self-identifying as men who have sex with men. Forty-nine (61%) of the cases were homeless and forty-six (58%) reported injection or non-injection illicit drug use; some cases have both risk factors. Only five (6%) patients reported travel outside of the county. None of the cases were known to have been immunized against HAV. Of the 51 cases with complete liver virus tests available, 12 (24%) had evidence of hepatitis C infection.

Genotype and viral sequence analysis by the Centers for Disease Control and Prevention of a selected cohort of cases indicate that two unique, closely related strains of HAV genotype 1b are involved in the San Diego County outbreak. Different strains of this genotype are associated with the ongoing HAV [outbreak in Southeastern Michigan](#) and the outbreaks associated with [frozen strawberries in 2016](#) and [pomegranate arils in 2013](#).

Several small clusters of epidemiologically linked cases have been identified. Fifteen cases (all clients) reported receiving services from a single homeless provider in downtown San Diego, although no common point source has been identified. Six cases (four clients, two volunteers) are associated with a homeless services provider in El Cajon, although no common point source has been identified. Five cases are individuals who became symptomatic while incarcerated in jail facilities, but most likely were exposed to the virus while homeless in the community. Two secondary cases in jails have occurred, though each had been offered post-exposure prophylaxis and declined. No specific common food, beverage, or drug sources have yet been identified. Investigations of these cases are ongoing.

### Background

In the U.S., person-to-person transmission through the fecal-oral route is the primary means of HAV transmission. Most infections result from close personal contact with an infected household member or sexual partner, or their fecally contaminated environment. Common-source outbreaks and sporadic cases can also occur from exposure to fecally contaminated food or water. Those at increased risk for HAV infection include: travelers to [countries with high or intermediate endemicity of HAV](#); men who have sex with men; users of injection and non-injection illegal drugs, persons with clotting factor disorders; and persons working with nonhuman primates. HAV outbreaks have been reported among the homeless, who have a [higher morbidity and mortality](#) when compared with the general population and an [increased risk of infection](#) due to living conditions.

## Recommendations for Providers

- 1. Consider HAV infection in individuals, especially the homeless and those who use illicit drugs, with discrete onset of symptoms, and jaundice or elevated liver function tests.** Symptoms of concern include nausea, vomiting, diarrhea, anorexia, fever, malaise, dark urine, light-colored stool, and abdominal pain. A complete viral hepatitis serology panel is recommended in symptomatic patients. Serologic testing for HAV infection is not recommended in asymptomatic individuals or as screening before vaccination.
- 2. Promptly report all confirmed and suspect HAV cases to the Epidemiology Program.** Please fax a [Confidential Morbidity Report \(CMRa\)](#), or call 619-692-8499 (Monday-Friday 8 AM-5 PM), or 858-565-5255 (after hours, during weekends, and on County-observed holidays). Since this outbreak involves homeless individuals, **providers are urged to contact the Epidemiology Program, while suspected cases are still at the healthcare facility.** This action will ensure that a public health investigator can interview the patient by phone for a risk history and will facilitate serum or stool specimen submission to the San Diego County Public Health Laboratory for possible genotyping.
- 3. Provide post-exposure prophylaxis (PEP) for close contacts of confirmed HAV cases.** Susceptible people exposed to HAV should receive a dose of single-antigen HAV vaccine or intramuscular (IM) immune globulin (IG) (0.02 mL/kg), or both, as soon as possible within 2 weeks of last exposure. The efficacy of combined HAV/Hepatitis B virus (HBV) vaccine for PEP has not been evaluated, so it is not recommended for PEP. Detailed information on PEP may be found on the [CDPH Hepatitis A Postexposure Prophylaxis Guidance Quicksheet](#) (updated August 2016).
- 4. Provide HAV vaccine to homeless individuals and illicit drug users who are not already immunized.** The combined HAV/HBV (Twinrix®) vaccine may be used in this group if the individual is not already immune to HBV. Providers who do not have available vaccine may direct patients to an immunization clinic at the nearest [County Public Health Center](#). Providers who care for homeless individuals may contact the [Immunization Program](#) at 619-692-5607 (Monday-Friday, 8 AM-5 PM) to arrange obtaining 317-funded HAV vaccine for use during this outbreak. Homeless individuals and illicit drug users are also at higher risk for other vaccine preventable diseases and should be brought up-to-date with recommended vaccines per the relevant [CDC immunization schedule](#). Providers should check the [San Diego Immunization Registry](#) to see if patients are already vaccinated and note any vaccinations given.
- 5. Offer HAV vaccination to individuals who have frequent, ongoing contact with homeless individuals and illicit drug users in non-healthcare environments.** Under usual (non-outbreak) circumstances, occupational exposure does not warrant a [routine recommendation](#) to provide HAV vaccination. However, given the current outbreak, the County Public Health Officer recommends HAV vaccination for individuals with ongoing, close contact with homeless and illicit drug using individuals in San Diego County. This includes persons working in public safety, homeless shelters, and homeless and behavioral service provider agencies. Providers in healthcare environments would be expected to be protected by utilizing standard precautions; however they may also consider HAV vaccination for long-term protection.
- 6. Encourage those who are planning an international trip to check the [CDC Travelers' Health website](#) and obtain recommended vaccinations before travel.** High risk areas for HAV include parts of Africa and Asia, and moderate risk areas include Central and South America, Eastern Europe, and parts of Asia.

## Resources

Centers for Disease Control and Prevention

[Hepatitis A for Health Professionals](#)

[Hepatitis A General Fact Sheet](#)

[Hepatitis A Q&A for the Public](#)

[Hepatitis A Vaccine Information Statement](#)

[Viral Hepatitis Fact Sheet for Gay and Bisexual Men](#)

California Department of Public Health

[Hepatitis A Website](#)

[Quicksheet: Hepatitis A](#)

[Viral Hepatitis Resources](#)

**CAHAN San Diego**, County of San Diego Health & Human Services Agency, Epidemiology and Immunization Services Branch  
Phone: (619) 692-8499 Fax: (858) 715-6458 Urgent Phone for pm/weekends/holidays: (858) 565-5255  
E-mail: [cahan@sdcounty.ca.gov](mailto:cahan@sdcounty.ca.gov) Secure Website: <http://cahan.ca.gov> Public-Access Website: <http://www.cahansandiego.com>