

CDPH 2016-2017 Hepatitis A Outbreak Fact Sheet

Updated: September 27, 2017

Situation

California is currently experiencing the largest person-to-person (not related to a common source or contaminated food product) hepatitis A outbreak in the United States since the hepatitis A vaccine became available in 1996.

The current outbreak involves cases in multiple California counties and several other states, resulting in hepatitis A-associated deaths.

Cases have been linked using laboratory evidence as well as epidemiologic evidence. The outbreak is caused by related strains of the same hepatitis A virus genotype (1B), which is not commonly seen in the United States, but is common in the Mediterranean region, South Africa, and Turkey. The investigation is ongoing.

The majority of people infected in this outbreak are homeless, use illicit drugs (injected or noninjected), or both.

Overview

“Hepatitis” means inflammation of the liver.

Hepatitis A, B, and C infections can cause similar symptoms and all affect the liver, but they are caused by different viruses, which infect people in different ways, and can affect the liver differently.

Hepatitis A virus is spread when virus is ingested by mouth from contact with hands, objects, food, or drinks that are contaminated by the feces of an infected person.

Hepatitis A infection typically causes fever, a general ill feeling, yellowness of the skin, lack of appetite, and nausea. Severe hepatitis A infection is rare but is more common in people with underlying liver disease, and can cause the liver to fail, which can lead to death.

Infected people are most contagious during the two weeks before developing yellowness of the skin. The usual time period from exposure to showing symptoms is 15-50 days.

Hepatitis A virus is very hardy in the environment and can live for months outside the human body. It is very hard to kill, and most common cleaning fluids are not effective. Handwashing with water and soap is needed, since waterless hand sanitizers are also not effective.

Common risk factors for hepatitis A include: traveling to a country where hepatitis A is common, being in the same household as or having sexual contact with a person with hepatitis A, being a man who has sex with men, and using illicit drugs (whether injected or not).

Hepatitis A outbreaks can be the result of people passing the virus from person-to-person when an infected person starts a chain of transmission in a population or from a group of people being exposed to a common source such as contaminated food.

Outbreak challenges

As hepatitis A is transmitted by contamination by feces and homeless people do not typically have easy access to clean toilets and handwashing facilities, there is a lot of opportunity for person-to-person transmission in this outbreak.

Hepatitis A vaccination is the main outbreak control and prevention measure. However, people who are homeless are often more difficult to physically reach to offer vaccination. In addition, there is often distrust of public health authorities, lack of concern about the disease, mental illness, and other factors that prevent people from accepting vaccination.

It is also more difficult to identify and locate contacts of infected homeless and/or drug-using people to offer them vaccine, which can prevent disease if given soon after exposure.

The hepatitis A strain in this outbreak is not thought to be a more virulent strain. Rather it is most likely that the affected population has more underlying conditions causing chronic liver disease, which can result in more severe disease when hepatitis A infection occurs. Homeless people and illicit drug users often have underlying liver damage due to alcoholic cirrhosis, or hepatitis B or C infection.

Hepatitis A vaccine is extremely effective: more than 95% of adults are protected after one of the two recommended doses (nearly 100% of adults are protected after two doses). Hepatitis A vaccination has been recommended for all children in California since 1999, therefore, most adults in California have not been routinely vaccinated against hepatitis A.

What public health is doing to reduce the impact of the outbreak

When hepatitis A cases are reported, local health departments try to identify all contacts the cases may have had during their infectious period and provide them with postexposure prophylaxis (PEP), to prevent them from becoming infected.

PEP is typically hepatitis A vaccine, although some high-risk contacts are also given injections of immune globulin, which helps block the hepatitis A virus.

Provision of handwashing stations and access to toilets are two additional prevention and control measures, in addition to other methods being employed by local health departments, that are being used to help reduce the risk of transmission from infected people to susceptible people in the population.

CDPH is actively supporting local health jurisdictions with and without outbreak-associated cases to control the outbreak in several ways, including: communicating with local, state, and federal (CDC) partners; conducting enhanced surveillance for additional cases; providing federally funded hepatitis A vaccine for outbreak control; facilitating (and soon to be providing) laboratory testing for cases;

compiling and disseminating hepatitis A toolkit materials; providing technical consultation, and sending staff on-site to assist.

Current outbreak-related hepatitis A vaccination recommendations in California

CDPH recommends the following people receive the hepatitis A vaccine:

Statewide

- People who are homeless, use illicit drugs (injected and noninjected), have chronic liver diseases (including alcoholic cirrhosis or hepatitis B or C infection), or are men who have sex with men.

Outbreak jurisdictions

- Anyone who has close contact with people who are homeless and/or use illicit drugs; anyone who has close contact with environments near or are serving people who are homeless and/or use illicit drugs. Contact may include through their job, volunteer activities, etc.

Certain local health jurisdictions have recommended that additional groups of people receive vaccination, such as food handlers.

Expected course for the outbreak

It is difficult to estimate the total number of cases that will occur as a result of this outbreak. The number of cases that continue to occur will be related to the number of susceptible people that remain in the main at-risk population (homeless people/illicit drug users) and potentially other population or transmission factors.

Eventually, sufficient herd immunity will be developed through infection and immunization or other factors interrupting transmission will occur to stop the outbreak, but this is not likely to occur for some time.

Additional resources

[CDPH's website on hepatitis A](#)

[CDC's website on hepatitis A](#)