

# STATE OF CONNECTICUT

## DEPARTMENT OF PUBLIC HEALTH

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TO: Healthcare Providers, Healthcare Facilities, Clinical Laboratories, and Local Health Departments (LHDs)

FROM: Infectious Diseases Section, Connecticut Department of Public Health (DPH)

**HEALTH ADVISORY: PREVENTING AN OUTBREAK OF HEPATITIS A VIRUS (HAV) INFECTIONS AMONG PERSONS WHO USE DRUGS AND PERSONS EXPERIENCING HOMELESSNESS**

*For All Clinical Staff in Internal Medicine, Pulmonary and Intensive Care Medicine, Geriatrics, Primary Care, Infectious Diseases, Emergency Medicine, Family Medicine,*

*Laboratory Medicine, and Infection Control/Epidemiology*

### SUMMARY

- The enclosed [Centers for Disease Control and Prevention \(CDC\) Health Advisory](#) describes efforts undertaken by CDC, state and local health departments in response to HAV outbreaks among persons reporting drug use and/or homelessness and their contacts.
- CDC encourages all states – those with active HAV outbreaks and those currently unaffected – to engage across programs to implement a plan for vaccination and monitoring of the groups at risk. CDC recommends that all jurisdictions heighten surveillance for hepatitis A and begin to identify contacts at homeless shelters and other resources necessary for vaccination or other field intervention.
- In Connecticut, 6 cases have been reported to date in 2018 (see figure below). For the first 6 months of 2015-2017, the average number of cases was 5. This means that Connecticut is not currently experiencing an active HAV outbreak, similar to what is being seen in other parts of the country. On July 5, the New York Department of Health [announced](#) that in New York State outside of New York City, 36 HAV cases have been reported to date in 2018, a 58% increase compared to the average number of cases reported from January through June in each of the last 3 years.



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- Given the pattern of significant HAV outbreaks seen in other states, there is concern that a similar outbreak could happen here in Connecticut. Effective prevention and response measures include early identification of cases, vaccination, enhanced sanitation processes and education of vulnerable populations.

### **Vaccination and Monitoring**

- In Connecticut, health care providers are required to report suspect and confirmed cases of HAV infection to the local health department where the patient resides and to the Connecticut DPH.
  - Any suspected cases occurring in a food handler or individual associated with other sensitive settings (e.g. child care, certain health care settings) should be reported immediately by telephone.
- Health care providers are encouraged to vaccinate all persons at high risk including persons experiencing homelessness, persons who use injection or non-injection drugs or have chronic liver disease (including chronic hepatitis C infection or chronic hepatitis B infection), and men who have sex with men. Vaccine options include single antigen hepatitis A vaccine (HAVRIX® or VAQTA®) and the combination hepatitis A and B vaccine (Twinrix®). Please keep in mind that Twinrix requires 3 doses for maximum efficacy and that it should not be used for postexposure prophylaxis.
- Health care providers are encouraged to offer vaccines at point of care including Emergency Department or Urgent Care encounters, inpatient admissions, observation stays, and outpatient clinic visits. If possible, vaccination information should be captured within the facility's electronic medical record to assist with monitoring of vaccine coverage.
- Targeted street-based workers and mobile van units serving these high-risk populations are encouraged to provide HAV and other vaccines to unsheltered individuals, persons living in encampments or otherwise not utilizing services within the shelters.
- Facilities that serve these high-risk populations should consider recommending HAV vaccination to all potentially exposed staff who are under- or un-immunized.
- All close contacts of persons diagnosed with acute HAV should be immunized with single antigen hepatitis A vaccine (and/or immune globulin, if indicated and available). For more information see: <https://www.cdc.gov/hepatitis/hav/havfaq.htm>. Please note, Twinrix is not recommended for postexposure prophylaxis.
  - Immunoglobulin (IG) dosing recommendations changed as of July 2017. Additional information on the prophylactic use of IG for HAV prevention can be found at <https://www.cdc.gov/mmwr/volumes/66/wr/pdfs/mm6636a5.pdf>
- Local health departments that want to plan or schedule a hepatitis A vaccine clinic should contact Mick Bolduc at the DPH Immunization Program at (860) 509-7929.

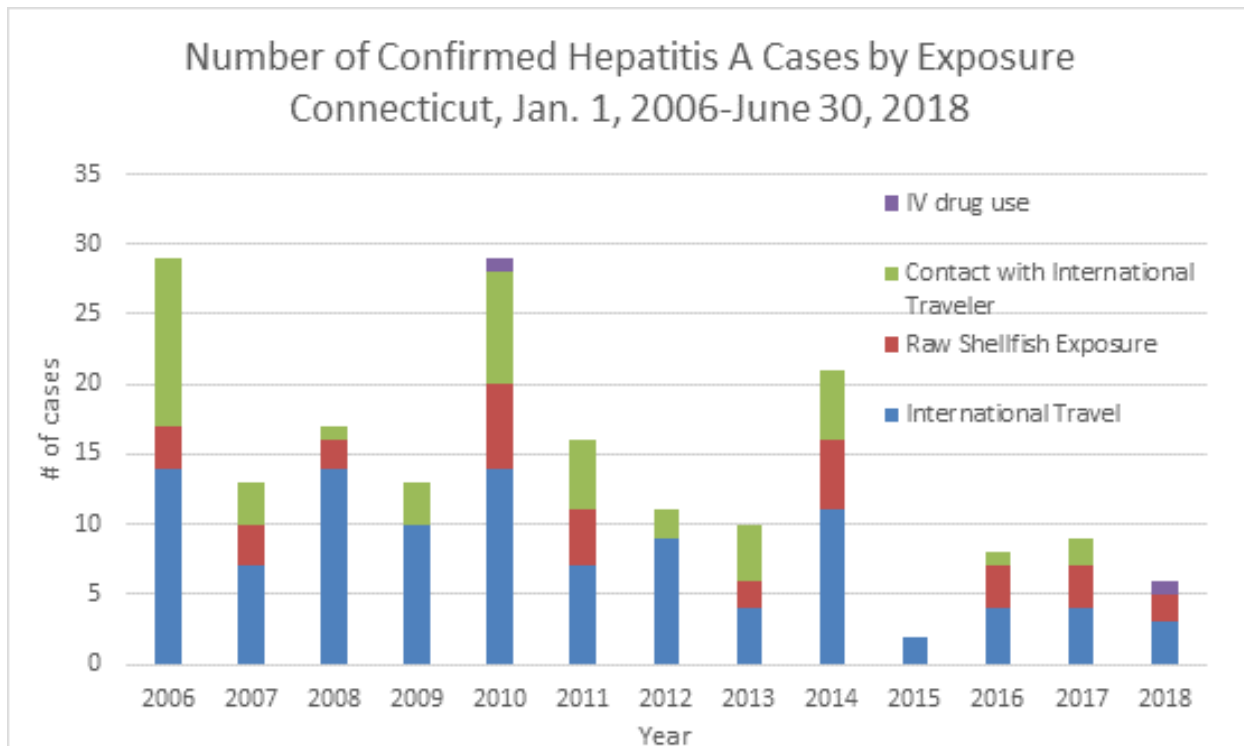
### **Hygiene and Sanitation**

- Facilities serving high-risk populations should increase opportunities for hand hygiene at entrances/exits. Encourage frequent hand washing with antimicrobial soap and hot water. Portable hand hygiene stations using hot water may be used.
- Because they may not be effective against HAV, alcohol-based hand sanitizers (ABHS) are NOT recommended

- Implement enhanced environmental control measures. These include cleaning and disinfecting frequently touched surfaces and bathroom facilities at least twice daily with an EPA-registered disinfectant effective against Norovirus or Hepatitis A virus, as indicated on the label. The EPA registration number on the product label may also be checked on this list: [List G: EPA's Registered Antimicrobial Products Effective Against Norovirus](#)
- Feces, vomit and other body substances require special attention. This includes first removing the material, then using a cleaning agent on the grime, and finally applying a disinfectant that is registered by EPA as effective against Hepatitis A or Norovirus. The disinfectant must sit wet on the surface for the amount of time specified on the product label for blood and body substances.
- Educational materials about HAV and hygiene are available online from the [Boston Public Health Commission](#), the [Healthcare for the Homeless Network](#) (HCHN), and the [CDC](#).

**Education** – Education should be provided to all high-risk populations and agencies serving these populations about signs/symptoms of HAV, need for vaccination, and hygiene measures to reduce transmission.

- Hospitals, clinics, and other agencies serving these populations should educate residents, nurses, community health workers, intake staff, etc.
- Strengthen education and outreach efforts to sheltered and unsheltered homeless, with a focus on necessary enhanced hygiene practices, referral for vaccination, and connecting potentially exposed and ill persons to care.
- For questions, please contact your local health department or the DPH Infectious Diseases Section at (860) 509-7995.



**This is an official**  
**CDC HEALTH ADVISORY**

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## **Outbreak of Hepatitis A Virus (HAV) Infections among Persons Who Use Drugs and Persons Experiencing Homelessness**

### **Summary**

The Centers for Disease Control and Prevention (CDC) and state health departments are investigating hepatitis A outbreaks in multiple states among persons reporting drug use and/or homelessness and their contacts. This Health Alert Network (HAN) Advisory alerts public health departments, healthcare facilities, and programs providing services to affected populations about these outbreaks of hepatitis A infections and provides guidance to assist in identifying and preventing new infections.

### **Background**

Hepatitis A infection is a vaccine-preventable illness. The primary means of hepatitis A virus (HAV) transmission in the United States is typically person-to-person through the fecal-oral route (i.e., ingestion of something that has been contaminated with the feces of an infected person).<sup>1</sup> Symptoms include fever, fatigue, loss of appetite, nausea, vomiting, abdominal pain, dark urine, clay-colored bowel movements, joint pain, and jaundice. Although rare, atypical extra hepatic manifestations include rash, pancreatitis, renal disease, arthritis, and anemia.<sup>2</sup> Severe infections can result in cholestatic hepatitis, relapsing hepatitis, and fulminant hepatitis leading to death.<sup>3</sup> Average incubation of HAV is 28 days, but illness can occur up to 50 days after exposure.<sup>4</sup> An HAV-infected person can be viremic up to six weeks through their clinical course and excrete virus in stool for up to two weeks prior to becoming symptomatic, making identifying exposures particularly difficult.<sup>5-7</sup> Illness from hepatitis A is typically acute and self-limited; however, when this disease affects populations with already poor health (e.g., hepatitis B and C infections, chronic liver disease), infection can lead to serious outcomes, including death.

The best way to prevent hepatitis A infection is through vaccination with the hepatitis A vaccine. The number and timing of the doses depends on the type of vaccine administered. Vaccines containing HAV antigen that are currently licensed in the United States are the single-antigen vaccines HAVRIX<sup>®</sup> (manufactured by GlaxoSmithKline, Rixensart, Belgium) and VAQTA<sup>®</sup> (manufactured by Merck & Co., Inc., Whitehouse Station, New Jersey) and the combination vaccine TWINRIX<sup>®</sup> (containing both HAV and hepatitis B virus antigens; manufactured by GlaxoSmithKline). All are inactivated vaccines. GamaSTAN S/D (Grifols Therapeutics, Inc., Research Triangle Park, North Carolina) immune globulin (IG) for intramuscular administration is the only IG product approved for HAV prophylaxis. The efficacy of IG or vaccine when administered >2 weeks after exposure has not been established. Additionally, practicing good hand hygiene—including thoroughly washing hands after using the bathroom, changing diapers, and before preparing or eating food—plays an important role in preventing the spread of hepatitis A.

From January 2017 to April 2018, CDC has received more than 2,500 reports of hepatitis A infections associated with person-to-person transmission from multiple states. Of the more than 1,900 reports for which risk factors are known, more than 1,300 (68%) of the infected persons report drug use (injection and non-injection), homelessness, or both.<sup>8-11</sup> During this time, responses conducted in various states resulted in increased vaccine demand and usage, resulting in constrained supplies of vaccine. As available vaccine supply has increased and progress has been made towards controlling ongoing outbreaks in some jurisdictions, vaccine is more readily available. However, both CDC and vaccine manufacturers continue to closely monitor ongoing demand for adult hepatitis A vaccine in the United States.

During the mid-1980s, drug use was a risk factor for >20% of all hepatitis A cases reported to CDC, but no large outbreaks have occurred among persons who use drugs since adoption of the recommendation for hepatitis A vaccination of persons who use injection and non-injection drugs was made in 1996.<sup>12,13</sup> Outbreaks of hepatitis A infections among homeless persons have occurred in other countries, but large outbreaks among the homeless have not been described previously in the United States.<sup>14-17</sup>

Person-to-person transmission of HAV between persons who report drug use and/or homelessness could result from contaminated needles and other injection paraphernalia, specific sexual contact and practices, or from generally poor sanitary conditions.<sup>13</sup> Transience, economic instability, limited access to healthcare, distrust of public officials and public messages, and frequent lack of follow-up contact information makes this population difficult to reach for preventive services such as vaccination, use of sterile injection equipment, and case management and contact tracing. These challenges make outbreaks among these groups difficult to control.

Rapid identification, a comprehensive response, and novel public health approaches may be required to address needs unique to these populations. Urgent action is needed to prevent further HAV transmission among these risk groups.

### **Recommendations for Health Departments**

1. Review the most recent sources of data on hepatitis A diagnoses. Attributes of communities at risk for unrecognized clusters of hepatitis A infection may include the following:
  - Recent increases in the:
    - Number of hepatitis A infections in persons who report drug use;
    - Number of hepatitis A infections in persons who report homelessness;
    - Number of hepatitis A infections in men who have sex with men; and
    - Number of hepatitis A infections in persons who report recent incarceration.
  - High rates of drug use, drug-related overdose, drug treatment admission, or drug arrests.
  - High rates of homelessness.
  
2. Ensure standard operating procedures to identify and interview cases, perform contact tracing for all new hepatitis A diagnoses, and provide post-exposure vaccination of contacts as soon as the diagnosis is made.
  
3. Ensure persons who report drug use (injection and non-injection) or are at high-risk for drug use (e.g., participating in drug substitution programs, receiving substance abuse counseling or treatment, recently or currently incarcerated) are vaccinated against hepatitis A virus, and specifically:
  - Consider programs to provide hepatitis A vaccinations in jails, syringe service programs, substance abuse treatment programs, and to at-risk persons in emergency departments, homeless shelters, warming centers, food distribution centers, and any venues where the at-risk populations may congregate or seek medical care.
    - Engage in “Participatory Planning.” Ask the facility what they feel is the best way to provide outreach to their population and what is the best way to provide vaccinations or improve vaccination uptake.
    - Have a consistent presence at the service provider if vaccinations are planned on-site. If repeat visits must occur, they should occur on scheduled days and times.
    - Adequately advertise vaccination events beforehand.
  - Engage stakeholders who care for persons who use drugs or may interact more frequently with facilities serving this population (e.g., behavioral specialists, disease intervention specialists).
  - Provide education to persons who report drug use and/or homelessness through targeted media campaigns encouraging vaccination and proper hand hygiene.

4. Remind venues that may encounter undiagnosed infections, such as emergency departments and community-based clinical practices (e.g., family medicine, general medicine) of the importance of reporting hepatitis A infections to the health department.<sup>18</sup>
5. Local health departments should notify their state health department and CDC (viralhepatitisoutbreak@cdc.gov) of any suspected clusters of acute hepatitis A.

### **Recommendations for Health Care Providers**

1. Consider hepatitis A as a diagnosis in anyone with jaundice and clinically compatible symptoms.
2. Encourage persons who have been exposed recently to HAV and who have not been vaccinated to be administered one dose of single-antigen hepatitis A vaccine or immune globulin (IG) as soon as possible, **within 2 weeks after exposure**. Guidelines vary by age and health status (please see <https://www.cdc.gov/hepatitis/outbreaks/InterimOutbreakGuidance-HAV-VaccineAdmin.htm> for additional information).
3. Consider saving serum samples for additional testing to assist public health officials in the investigation of transmission (i.e., confirmation of antibody test, HAV RNA test, genotyping, and sequencing). Contact the public health department for assistance with submitting specimens for molecular characterization.
4. Ensure all persons diagnosed with hepatitis A are reported to the health department in a timely manner.
5. Encourage hepatitis A vaccination for homeless individuals in areas where hepatitis A outbreaks are occurring.
6. Encourage hepatitis A vaccination for persons who report drug use or other risk factors for hepatitis A.
7. CDC recommends the following groups be vaccinated against hepatitis A:
  - All children at age 1 year
  - Persons who are at increased risk for infection:
    - Persons traveling to or working in countries that have high or intermediate endemicity of hepatitis A;
    - Men who have sex with men;
    - Persons who use injection and non-injection drugs;
    - Persons who have occupational risk for infection;
    - Persons who have chronic liver disease;
    - Persons who have clotting-factor disorders;
    - Household members and other close personal contacts or adopted children newly arriving from countries with high or intermediate hepatitis A endemicity; and
    - Persons with direct contact with persons who have hepatitis A.
  - Persons who are at increased risk for complications from hepatitis A, including people with chronic liver diseases, such as hepatitis B or hepatitis C.
  - Any person wishing to obtain immunity.

### **For More Information**

1. Centers for Disease Control and Prevention. Division of Viral Hepatitis A Outbreak Website. <https://www.cdc.gov/hepatitis/outbreaks/2017March-HepatitisA.htm>
2. Centers for Disease Control and Prevention's Hepatitis A Virus Website.

<https://www.cdc.gov/hepatitis/hav/index.htm>

3. Centers for Disease Control and Prevention. Viral Hepatitis Surveillance – United States, 2016. <https://www.cdc.gov/hepatitis/statistics/2016surveillance/pdfs/2016HepSurveillanceRpt.pdf>
4. Centers for Disease Control and Prevention. Hepatitis A General Information Fact Sheet. <https://www.cdc.gov/hepatitis/hav/pdfs/hepageneralfactsheet.pdf>
5. Centers for Disease Control and Prevention. The Pink Book. Chapter 9: Hepatitis A. <https://www.cdc.gov/vaccines/pubs/pinkbook/downloads/hepa.pdf>

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10. Michigan Department of Health and Human Services. Michigan Hepatitis A 2016-2018 Outbreak Summary. [https://www.michigan.gov/documents/mdhhs/HepA\\_Summ\\_County\\_SEMI2016\\_updated91517\\_60155\\_2\\_7.pdf](https://www.michigan.gov/documents/mdhhs/HepA_Summ_County_SEMI2016_updated91517_60155_2_7.pdf)
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**Categories of Health Alert Network messages:**

**Health Alert** Requires immediate action or attention; highest level of importance  
**Health Advisory** May not require immediate action; provides important information for a specific incident or situation  
**Health Update** Unlikely to require immediate action; provides updated information regarding an incident or situation  
**HAN Info Service** Does not require immediate action; provides general public health information

##This message was distributed to state and local health officers, state and local epidemiologists, state and local laboratory directors, public information officers, HAN coordinators, and clinician organizations##