To: Local Health Department Health Directors  
From: Zack Moore, MD, MPH, State Epidemiologist  
Wendy Holmes, Branch Head, Immunization Branch  
Subject: Hepatitis A Outbreak Case Increase Alert (4 pages)  
Date: October 15, 2020

Background

Hepatitis A outbreaks are expanding nationwide; the Centers for Disease Control and Prevention (CDC) has received reports from multiple states of more than 34,347 cases of hepatitis A infections associated with person-to-person transmission beginning in late 2016. These outbreaks have been prolonged and costly. Cases have occurred primarily among three risk groups: (1) persons who use injection or non-injection drugs; (2) persons experiencing homelessness; and (3) men who have sex with men.

North Carolina has also been experiencing an outbreak of hepatitis A, with a marked increase in cases reported in 2020. The hepatitis A outbreak in North Carolina is primarily among the at-risk populations above. To date, North Carolina has observed 346 outbreak related cases (beginning April 2, 2018) characterized with high hospitalization rates (64.5%) and high comorbidity prevalence (10.1% hepatitis B, 41.3% hepatitis C, 3.8% HIV). Two deaths (0.6%) have been reported. Unlike typical foodborne associated hepatitis outbreaks, the age range is clustered around a median age of 34.

Demographics

<table>
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<tr>
<th>Demographics</th>
<th>17-65 years</th>
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<tbody>
<tr>
<td>Age Range</td>
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<tr>
<td>Median Age</td>
<td>34 years</td>
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<tr>
<td>Male (n, %)</td>
<td>229 (66.2%)</td>
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An increase in the number of cases in the Western North Carolina and Triad regions has been observed since May 2020. Local health departments within these regions are working closely with NC DPH and community partners to provide education and increase vaccination amongst at-risk populations. A majority of cases reported in this outbreak are among people who use drugs (PWUD) and persons experiencing homelessness.
Figure 1: North Carolina outbreak-associated hepatitis A cases: April 01, 2018–October 7, 2020 (n=346)

Figure 2: Confirmed outbreak-associated cases of hepatitis A in North Carolina, county map: April 01, 2018 – October 7, 2020 (n=346)
Hepatitis A virus can be spread through contaminated food and drink or through person-to-person contact. This includes sexual contact, especially oral-anal sex (rimming). Fingers, hands or genitals that come into contact with the anus and then the mouth could provide a route of transmission. Bloodborne transmission through sharing of injection supplies is also possible, though believed to be uncommon.

A large majority of persons recently infected with hepatitis A in North Carolina have required hospital care. People in the identified risk groups are also at increased risk for hepatitis B or C and other chronic liver conditions and may face barriers to healthcare, all of which increases their risk of severe illness or even death. Increasing hepatitis vaccination rates among high-risk populations is critical to preventing a large-scale outbreak. A single dose of hepatitis A vaccine is highly effective, and completion of the vaccine series provides lifelong immunity.

**Actions for local public health departments**

To mitigate the current outbreak and prevent a larger outbreak from occurring, we urge health departments to work with detention centers in their jurisdictions, local community based organizations (CBOs), syringe service programs (SSPs), and homeless shelters to implement hepatitis A vaccination efforts and increase hepatitis A prevention messaging. A proactive vaccination program can also reduce the chance of community transmission, which can be resource-intensive and costly due to large number of potential contacts and the high rates of hospitalization (>60%).

1) When possible, plan flu vaccination efforts to include hepatitis A vaccination. If flu vaccine is being offered regularly, plan accordingly to include hepatitis A or Twinrix (if inmate stays at least six months) during these clinics.

2) Contact and coordinate with local jail health programs to establish hepatitis A vaccination efforts among detainees.
   a. Promote expansion of jail hepatitis A vaccination program to include all new detainees with negative or unknown serology or with risk factors for hepatitis A infections: persons who use drugs, men who have sex with men, persons with chronic liver disease, and persons experiencing homelessness. Opt-out approaches are encouraged, as they have been shown to be twice as likely to result in vaccination acceptance.

3) Contact and work with CBOs and SSPs to establish a streamlined and culturally competent method of vaccination for participants who are:
   a. Persons who use injection and non-injection drugs;
   b. Persons experiencing homeless;
   c. Men who have sex with men; and
   d. Persons with chronic liver disease, including chronic hepatitis B or C.

4) Work with CBOs, SSPs, Homeless Shelters, and Jail Health Programs to educate participant about their risk for hepatitis A and prevention methods:
   o Encourage handwashing before and after drug use (use of alcohol-based hand sanitizers is less effective than handwashing, but still recommended if handwashing facilities are unavailable)
   o Encourage handwashing before and after sex
Discuss transmission routes and highlight the differences between transmission of hepatitis A, B and C. Using new/sterile works during drug use, and using a condom/lube during sex, while efficient in preventing hepatitis B and C, are less effective for preventing hepatitis A.

5) When possible, provide safer sex and drug use supplies as well as hygiene supplies to help lower risk of transmission of hepatitis A, B and C.

Health departments who want to add a jail health vaccination program in their county should contact their state regional immunization nurse consultant who can assist them in developing a plan. Contact the Immunization Branch at (919) 707-5575 to begin this process.

We recognize that during COVID-19, health resources are strained. If help is needed to navigate the logistics of creating access to hepatitis A vaccine within jail settings, please reach out to the viral hepatitis program (christina.caputo@dhhs.nc.gov) or the vaccine preventable disease program (susan.sullivan@dhhs.nc.gov).

Thank you for your efforts to protect your patients and your community. For more information on the current outbreak, please visit the North Carolina hepatitis A tracking website at: https://epi.publichealth.nc.gov/cd/hepatitis/hepa_outbreak.html

Additional information on hepatitis A can be found on the CDC website at https://www.cdc.gov/hepatitis/hav/index.htm.

cc: Dr. Jean Marie Maillard, Communicable Disease Branch Medical Director
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