



NC DEPARTMENT OF
**HEALTH AND
HUMAN SERVICES**

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Division of Public Health

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 Update (**5 pages**)
Date: April 16, 2021

Background

North Carolina is entering into its third year responding to an outbreak of hepatitis A. While cases had plateaued prior to the COVID-19 state of emergency, NC has observed a marked increase in cases reported during 2020 and 2021. To date, North Carolina has observed 667 outbreak-related cases (beginning April 1, 2018) characterized with high hospitalization rates (63.1%), high comorbidity prevalence (48.0% hepatitis C, 13.0% hepatitis B, 2.2% HIV), and elevated mortality rates (1.5%)*.

An increase in the number of cases in the Western North Carolina and Triad regions has been observed since June 2020. This document is an update to the [alert](#) sent October 15, 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. The majority of cases reported in this outbreak are among people who use drugs (PWUD) and persons experiencing homelessness.

Hepatitis A outbreaks have continued to expand nationwide; the Centers for Disease Control and Prevention (CDC) has received reports from multiple states of more than 38,568 cases of hepatitis A infections associated with person-to-person transmission beginning in late 2016. Cases nationwide have occurred primarily among the same two risk groups as the NC outbreak.

Table 1: North Carolina Hepatitis A Outbreak Cases, Demographics

North Carolina Hepatitis A Outbreak Cases, April 1, 2018 – April 14, 2021	
Number of cases	667
Hospitalizations (n, %)	421 (63.1 %)
Deaths (n, %)	10 (1.5%)
Symptom Onset Date Range	04/16/18-04/09/2021
Demographics	
Age Range	17-71 years
Median Age	36 years
Male (n, %)	442 (66.3%)

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* Hepatitis A mortality is typically between 0.1 and 0.3%, but can reach 1.8% for adults aged 50 and older. (Source: APHA Manual)

Figure 1: North Carolina outbreak-associated hepatitis A cases: April 01, 2018-April 14, 2021 (n=667)

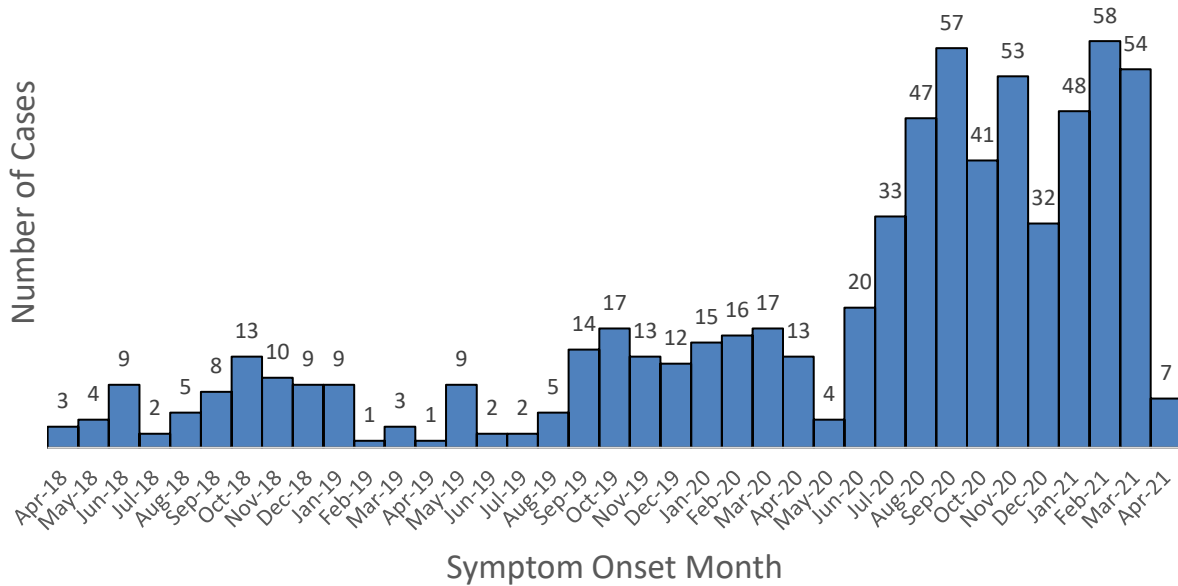
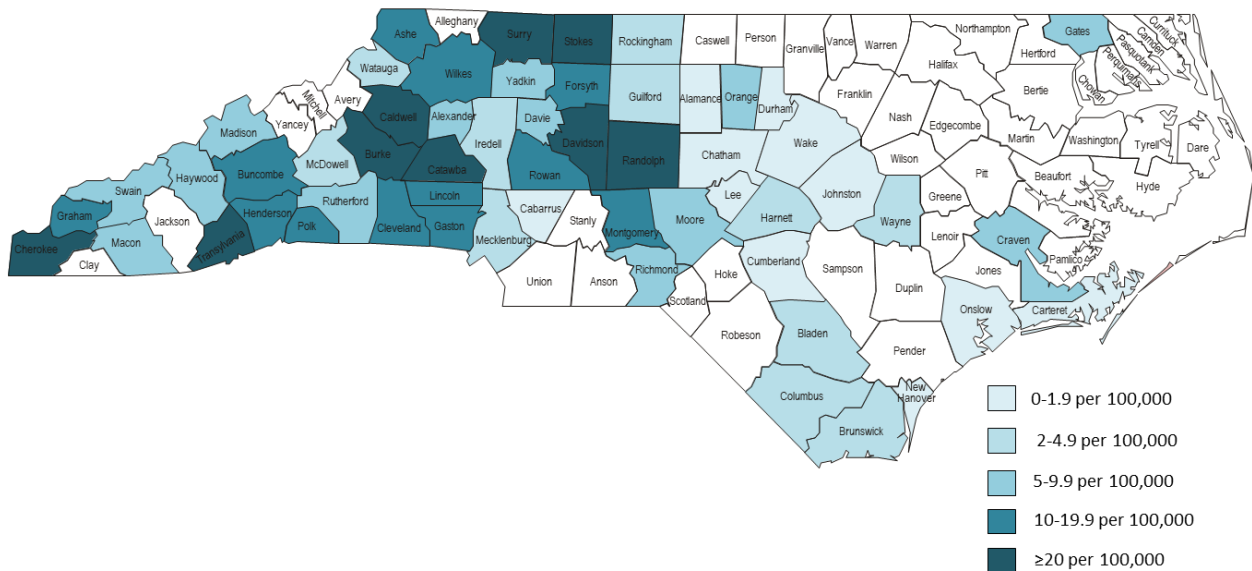


Figure 2: Confirmed outbreak-associated case rates of hepatitis A in North Carolina, April 1, 2018 – April 14, 2021 (n=667)

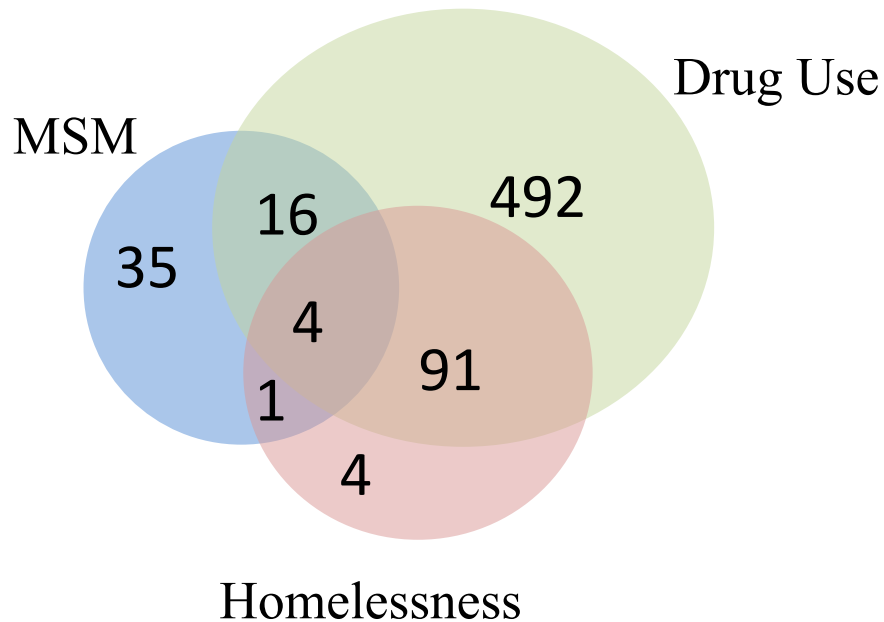


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Figure 3: Confirmed outbreak-associated cases of hepatitis A in North Carolina by risk factor: April 01, 2018 – April 14, 2021 (n=667)



Hepatitis A virus is 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.

The 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 increase their risk of severe illness or even death. Increasing 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 (two doses) provides lifelong immunity.

Actions for local public health departments

To mitigate the current outbreak and prevent a larger outbreak from occurring, health departments should work with settings at higher risk for hepatitis A transmission and outbreaks – detention centers in their jurisdictions, local community based organizations (CBOs), syringe service programs (SSPs), substance use disorder (SUD) treatment facilities, 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) Contact and coordinate with local jail health programs to establish hepatitis A vaccination efforts among detainees.

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- 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.
- 2) 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 homelessness;
 - c. Men who have sex with men; and
 - d. Persons with chronic liver disease, including chronic hepatitis B or C.
- 3) Work with CBOs, SSPs, Homeless Shelters, and Jail Health Programs to educate participants 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
 - o 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 are important measures to prevent hepatitis B and C and HIV but are less effective for preventing hepatitis A.
- 4) 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.

*While is it not recommended that COVID-19 and HAV vaccines are co-administered, HAV vaccine can be administered within 14 days of administration of COVID-19 vaccine. COVID-19 and other vaccines may be [administered](#) within a shorter period in situations where the benefits of vaccination are deemed to outweigh the potential unknown risks of vaccine coadministration (e.g., tetanus-toxoid-containing vaccination as part of wound management, rabies vaccination for post-exposure prophylaxis, measles or hepatitis A vaccination during an outbreak). This means that for both PrEP and PEP purposes, a patient should not turn down HAV vaccine for fear of not receiving COVID-19 vaccine.

Health departments that 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 non-traditional 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).

In addition, the viral hepatitis program and vaccine preventable disease program are available to provide epidemiological, investigation, contact tracing, testing and outreach support where needed. Viral Hepatitis Office Hours take place the second Wednesday of every month from 12-2pm. For more information on office hours, contact Morgan Culver (morgan.culver@dhhs.nc.gov)

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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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