



NC DEPARTMENT OF
**HEALTH AND
HUMAN SERVICES**

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Division of Public Health

To: North Carolina Health Care Providers
From: Erica Wilson, MD, MPH, Medical Epidemiologist
Re: Increase in Reports of Pediatric Hepatitis Internationally, 2022
Date: April 22, 2022

This memo provides information regarding identification and reporting of acute pediatric hepatitis cases of unknown etiology.

Background:

On April 21, 2022, CDC released a [Health Advisory](#) describing cases of children identified with hepatitis and adenovirus infection in Alabama and in the United Kingdom. In both Alabama and the European cases, laboratory investigation has excluded viral hepatitis A, B, and C and has shown no connection to COVID-19 infection or vaccination. A possible association between pediatric hepatitis and adenovirus 41 infection is currently under investigation.

Adenoviruses most frequently cause mild respiratory illness. Some adenoviruses, including adenovirus 41, are associated primarily with gastrointestinal disease. There is no specific treatment for adenovirus infections, but viral spread can be prevented with proper hand washing, covering your cough, and staying home if sick.

Request for Reporting:

North Carolina Division of Public Health (NC DPH) is requesting notification from clinicians of children <17 years of age with hepatitis of unknown etiology with elevated aspartate aminotransferase (AST) or alanine aminotransferase (ALT) (>500 U/L) since October 1, 2021. Cases should be reported independent of any adenovirus testing.

Clinicians should report suspected cases of acute pediatric hepatitis of unknown etiology to the NC DPH Communicable Disease Branch Epidemiologist on Call at 919-733-3419.

Laboratory Testing:

Clinicians should consider adenovirus testing listed below and consult with the clinical laboratory to identify the appropriate specimens. Specimens from patients meeting the criteria above should be collected as early as possible in the course of illness.

- NAAT (e.g., PCR) is preferable and may be done on respiratory specimens, stool or rectal swabs, or blood.

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LOCATION: 225 North McDowell St., Raleigh, NC 27603
MAILING ADDRESS: 1902 Mail Service Center, Raleigh, NC 27699-1902
www.ncdhhs.gov • TEL: 919.733.7301 • FAX: 919.733.1020

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- Anecdotal reports suggest that testing whole blood by PCR may be more sensitive than testing of plasma; therefore, testing of whole blood could be considered in those without an etiology who tested negative for adenovirus in plasma samples.

If additional testing is needed, please contact the North Carolina State Laboratory of Public Health at 919-733-7834. If available, please freeze additional specimens for potential future testing and contact NC DPH Communicable Disease Branch for further information.

In addition to adenovirus testing, appropriate testing should be done to rule out other possible causes of hepatitis including but not limited to testing for hepatitis A, B and C, and toxins such as acetaminophen. For questions regarding assessment of toxins as a cause of acute hepatitis, please contact the NC Poison Control Center at 1-800-222-1222.

For more information:

- [HAN Archive - 00462 | Health Alert Network \(HAN\) \(cdc.gov\)](#)
- [Acute hepatitis of unknown aetiology – the United Kingdom of Great Britain and Northern Ireland \(who.int\)](#)
- [Investigations of nine young children with adenovirus are underway \(alabamapublichealth.gov\)](#)
- [About Adenoviruses | CDC](#)