TEMPLATE – Educational letter for providers about appropriate use of hepatitis A IgM test (false positives)

Date: July 15, 2022 To: Ordering Providers

From:

Re: Hepatitis A false positive IgM antibody tests

Our records indicate that a hepatitis A virus (HAV) IgM antibody test you recently ordered on a patient was positive. Subsequent investigation by public health indicated that the patient did not have an illness compatible with HAV infection and the test likely represented a false positive.

The occurrence of false positive HAV IgM antibody test results in individuals who lack clinical or epidemiological evidence of hepatitis A infection has been well documented (reference 1 and 2). These individuals tend to be older and are asymptomatic or have a clinical presentation inconsistent with acute hepatitis A. Diagnostic tests for hepatitis A are highly sensitive and specific when used on persons with acute hepatitis, but are not specific enough to give accurate results when used as screening tests on persons without appropriate symptoms.

In 2021, only 17% of individuals reported with an anti-HAV IgM antibody in Massachusetts had appropriate clinical evidence of infection. Almost 1/3 of persons without appropriate symptoms were over 65 and most did not have elevated liver enzymes. True cases of hepatitis A are characterized by abrupt onset of symptoms, such as fever, fatigue, loss of appetite, nausea, vomiting, abdominal pain, dark urine, clay-colored bowel movements, joint pain, and jaundice. Seventy percent of adults and children over the age of 6 with hepatitis A have jaundice.

Tests for HAV are often included as part of a panel designed to screen for hepatitis B or C infection. Where possible, HAV testing should be removed from the routine screening panel. Reducing the number of false positive HAV IgM tests reduces the reporting burden on ordering providers and avoids unnecessary public health follow-up.

References:

- 1. Alatoom A, Ansari MQ, Cuthbert J. Multiple factors contribute to positive results for hepatitis A virus immunoglobulin M antibody. Arch Pathol Lab Med. 2013 Jan;137(1):90-5.
- 2. Dembek ZF, Hadler JL, Castrodale L, et al.. Positive Test Results for Acute Hepatitis A Virus Infection Among Persons With No Recent History of Acute Hepatitis --- United States, 2002—2004. MMWR May 13, 2005 / 54(18);453-456: https://www.cdc.gov/mmwr/preview/mmwrhtml/mm5418a1.htm