Ministry of Health and Long-Term Care

Infectious Diseases Protocol

Appendix B: Provincial Case Definitions for Diseases of Public Health Significance

Disease: Hepatitis A

Effective: February 2019

Ontario

Hepatitis A

1.0 Provincial Reporting

Confirmed and probable cases of disease

2.0 Type of Surveillance

Case-by-case

3.0 Case Classification

3.1 Confirmed Case

Laboratory confirmation of infection, in the absence of recent hepatitis A vaccination:

- Detection of immunoglobulin M antibody to hepatitis A virus (anti-HAV IgM)
  AND
- Acute illness with discrete onset of symptoms and jaundice or elevated serum aminotransferase levels (AST, ALT)
  OR
- An epidemiologic link to laboratory-confirmed case

3.2 Probable Case

Acute illness in a person with an epidemiologic link to a laboratory-confirmed case

4.0 Laboratory Evidence

4.1 Laboratory Confirmation

The following will constitute a confirmed case of acute/recent hepatitis A:

- Serum/plasma sample positive for HAV IgM antibody

4.2 Approved/Validated Tests

- Tests for immunoglobulin G antibody to hepatitis A virus (anti-HAV IgG), anti-HAV IgM and anti-HAV Total (IgG and IgM) antibody

4.3 Indications and Limitations

- Anti-HAV IgM results are repeated in duplicate to confirm a positive result.
- Detection of anti-HAV IgM antibodies confirms recent infection. Antibodies are generally detectable in serum/plasma 5-10 days before symptom onset and usually decrease to undetectable levels within 6 months after onset of infection. In rare cases, anti-HAV IgM may persist for longer. Acute/recent infection should be confirmed with clinical history, symptoms, and biochemical tests (e.g. elevated serum transaminases [AST, ALT], bilirubin, etc.)
- Reactive anti-HAV IgM serological tests may be reported in the absence of clinically compatible illness or epidemiologic links to hepatitis A cases / settings

with hepatitis A transmission. This may reflect a false-positive anti-HAV IgM test due to non-specific cross reactivity in the lab test, presence of rheumatoid factor in serum, following recent immunization with the hepatitis A vaccine, (both IgG and IgM antibodies will appear in serum within two weeks after immunization),.or other unexplained reasons. It may also be due to remote hepatitis A infection with persistent anti-HAV IgM, which has been reported. Finally, it may signal detection of unapparent / anicteric hepatitis A infection; as above, interpretation of a reactive anti-HAV IgM result should consider clinical history and presence of elevated AST, ALT.

- Detection of anti-HAV IgG antibodies signals recovery from acute hepatitis A infection or past vaccination. When anti-HAV IgG antibodies are detected alone, they indicate some level of immunity either from past infection or previous immunization. “Total hepatitis A virus antibody” (total IgM and IgG antibody) is not a confirmatory test for acute HAV infection but is used as an initial screening test in some laboratories.
- AST and ALT generally return to normal before the anti-HAV IgM disappears.

5.0 Clinical Evidence

Acute clinical illness is characterized by abrupt fever, malaise, anorexia, nausea and abdominal pain followed by jaundice or elevated aminotransferase levels within a few days.

6.0 ICD 10 Code(s)

B15.0 Hepatitis A with hepatic coma

B15.9 Hepatitis A without hepatic coma [Hepatitis A (acute) (viral) NOS]

7.0 Sources

Centers for Disease Control and Prevention. Positive Test Results for Acute Hepatitis A Virus Infection Among Persons With No Recent History of Acute Hepatitis --- United States, 2002--2004. Morbidity and Mortality Weekly Report. 2005;54(18):453-6.

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Heymann DL, editor. Control of Communicable Diseases Manual. 20 ed. Washington, D.C: American Public Health Association; 2015.

Kao HW, Ashcavai M, Redeker AG. The persistence of hepatitis A IgM antibody after acute clinical hepatitis A. Hepatology. 1984;4(5):933-6.

Public Health Agency of Canada. Hepatitis A. In: Case Definitions for Communicable Diseases under National Surveillance. Canada Communicable Disease Report. 2009;35S2.

8.0 Document History

Table 1: History of Revisions

Revision Date	Document Section	Description of Revisions
March 2017	General	New Template
March 2017	8.0 Sources	Updated
March 2017	9.0 Document History	Updated
February 2019	General	Minor revisions were made to support the regulation change to Diseases of Public Health Significance.


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