

Viral Hepatitis Surveillance Case Definitions 2013

Contents

Hepatitis A CASE DEFINITIONS	1
Hepatitis B CASE DEFINITIONS (Acute, Outbreak, Chronic, Perinatal)	2
Acute Hepatitis B (CSTE Position ID 11-ID-03)	2
Outbreak Definition (Colorado)	2
Chronic Hepatitis B (CSTE Position ID 11-ID-04)	2
Perinatal Hepatitis B	3
Hepatitis C CASE DEFINITIONS	3
Acute Hepatitis C, CSTE Position Statement 11-1D-05)	4
<i>Case Classification</i>	4
Confirmed	4
Hepatitis C, Past or Present (CSTE Position Statement 11-1D-06)	4
<i>Case Classification</i>	4
Confirmed	5

Hepatitis A CASE DEFINITIONS

Hepatitis case definitions are based upon The Council of State and Territorial Epidemiologist position statements, available [CSTE website](#). They are published by the U.S. Centers for Disease Control and Prevention as part of the National Notifiable Diseases Surveillance System ([NNDSS](#)).

Acute Hepatitis B (CSTE Position ID 11-ID-02)

Clinical Criteria

An acute illness with a discrete onset of any sign or symptom consistent with acute viral hepatitis (e.g., fever, headache, malaise, anorexia, nausea, vomiting, diarrhea, and abdominal pain), and either a) jaundice, or b) elevated serum alanine aminotransferase (ALT) or aspartate aminotransferase (AST) levels.

Laboratory Criteria

Immunoglobulin M (IgM) antibody to hepatitis A virus (anti-HAV) positive

Case classification

Confirmed:

- A case that meets the clinical case definition and is laboratory confirmed, OR
- A case that meets the clinical case definition and occurs in a person who has an epidemiologic link with a person who has laboratory-confirmed hepatitis A (i.e., household or sexual contact with an infected person during the 15-50 days before the onset of symptoms)

Hepatitis B CASE DEFINITIONS (Acute, Outbreak, Chronic, Perinatal)

Case definitions for acute, chronic, and perinatal hepatitis B are based upon The Council of State and Territorial Epidemiologist position statements, available [CSTE website](#). They are published by the U.S. Centers for Disease Control and Prevention as part of the National Notifiable Diseases Surveillance System ([NNDSS](#)) The outbreak definition is specific to Colorado.

Acute Hepatitis B (CSTE Position ID 11-ID-03)

Clinical Criteria

An acute illness with:

- discrete onset of any sign or symptom** consistent with acute viral hepatitis (e.g., fever, headache, malaise, anorexia, nausea, vomiting, diarrhea, and abdominal pain), **and**
- jaundice **or** elevated serum alanine aminotransferase (ALT) levels >100 IU/L

Laboratory Criteria

Hepatitis B surface antigen (HBsAg) positive **and** IgM antibody to hepatitis B core antigen (IgM anti-HBc) positive (if done) **or**

A documented negative HBsAg laboratory test result **within 6 months prior to a positive test (as described in the laboratory criteria for diagnosis) result does not require an acute clinical presentation to meet the surveillance case definition.

Case classification

Confirmed: a case that meets the clinical case definition is laboratory confirmed, and is not known to have chronic hepatitis B **or** a documented negative HBsAg laboratory test result within 6 months prior to a positive test **and** does not require an acute clinical presentation.

Outbreak Definition (Colorado)

Two or more confirmed acute cases involving individuals clustered in time (e.g., occurring within two weeks-6 months of each other), and linked by a risk factor or sharing a common space where transmission is suspected to have occurred.

Chronic Hepatitis B (CSTE Position ID 11-ID-04)

Clinical Criteria

No symptoms are required. Persons with chronic HBV infection may have no evidence of liver disease or may have a spectrum of disease ranging from chronic hepatitis to cirrhosis or liver cancer.

Laboratory Criteria

- IgM antibodies to hepatitis B core antigen (IgM anti-HBc) negative **AND** a positive result on one of the following tests: hepatitis B surface antigen (HBsAg), hepatitis B e antigen (HBeAg), or nucleic acid test for hepatitis B virus DNA (including qualitative, quantitative and genotype testing) **or**

- HBsAg positive **or** nucleic acid test for HBV DNA positive (including qualitative, quantitative and genotype testing) **or** HBeAg positive **two times** at least 6 months apart (Any combination of these tests performed **6 months apart** is acceptable)

Case Classification

- **Confirmed:** a person who meets either of the above laboratory criteria for diagnosis
- **Probable:** a person with a single HBsAg positive **or** HBV DNA positive (including qualitative, quantitative and genotype testing) **or** HBeAg positive lab result and does not meet the case definition for acute hepatitis B.

Perinatal Hepatitis B

Clinical Criteria

Perinatal hepatitis B in the newborn may range from asymptomatic to fulminant hepatitis.

Laboratory Criteria

Hepatitis B surface antigen (HBsAg) positive

Case Classification:

Confirmed: HBsAg positivity in any infant aged >1-24 months who was born in the United States or in U.S. territories to an HBsAg-positive mother

Comment

Infants born to HBsAg-positive mothers should receive hepatitis B immune globulin (HBIG) and the first dose of hepatitis B vaccine within 12 hours of birth, followed by the second and third doses of vaccine at 1 and 6 months of age, respectively. Post-vaccination testing for HBsAg and anti-HBs (antibody to HBsAg) is recommended from 3 to 6 months following completion of the vaccine series. If HBIG and the initial dose of vaccine are delayed for >1 month after birth, testing for HBsAg may determine if the infant is already infected.

The 1995 case definition appearing on this page was re-published incorrectly in the 1997 *MMWR* Recommendations and Reports titled *Case Definitions for Infectious Conditions Under Public Health Surveillance*.¹ Thus, the 1995 and the 1997 versions of this case definition are not identical, and the 1995 version is the correct one. Colorado defines a perinatal hepatitis B case as a case (acute or chronic) of hepatitis B that is less than or equal to 24 months of age and born in the U.S. to a mother that is positive for hepatitis B infection at the time of birth. Children vaccinated for hepatitis B should not be tested for HBsAg until a minimum of one month separates their last dose of vaccine from the collection of blood for testing.

Hepatitis C CASE DEFINITIONS

Case definitions for hepatitis C describe acute infections and those that are not acute but are past or present infections. The phrase, “past or present”, is used, because the case definition does not distinguish between cases in which the person resolved their infection and those cases in which the person still carries the hepatitis C virus. The Council of State and Territorial Epidemiologist position statements are available [CSTE website](#). They are published by the U.S. Centers for Disease Control and Prevention as part of the National Notifiable Diseases Surveillance System ([NNDSS](#)).

Acute Hepatitis C, CSTE Position Statement 11-1D-05)

Clinical Description

An acute illness with a discrete onset of any sign or symptom* consistent with acute viral hepatitis (e.g., fever, headache, malaise, anorexia, nausea, vomiting, diarrhea, and abdominal pain), and either a) jaundice, or b) elevated serum alanine aminotransferase (ALT) levels >400IU/L.

*A documented negative HCV antibody laboratory test result followed within 6 months by a positive test (as described in the laboratory criteria for diagnosis) result does not require an acute clinical presentation to meet the surveillance case definition.

Laboratory Criteria

One or more of the following three criteria:

- Antibodies to hepatitis C virus (anti-HCV) screening-test-positive with a signal to cut-off ratio predictive of a true positive as determined for the particular assay as defined by CDC. (URL for the signal to cut-off ratios: <http://www.cdc.gov/hepatitis/HCV/LabTesting.htm>), **OR**
- Hepatitis C Virus Recombinant Immunoblot Assay (HCV RIBA) positive, **OR**
- Nucleic Acid Test (NAT) for HCV RNA positive (including qualitative, quantitative or genotype testing)

AND, if done meets the following two criteria:

- Absence of IgM antibody to hepatitis A virus (if done) (IgM anti-HAV), **AND**
- Absence of IgM antibody to hepatitis B core antigen (if done) (IgM anti-HBc)

Case Classification

Confirmed

A case that meets the clinical case definition is laboratory confirmed, and is not known to have chronic hepatitis C.

Hepatitis C, Past or Present (CSTE Position Statement 11-1D-06)

Clinical Description

Most hepatitis C virus (HCV)-infected persons are asymptomatic; however, many have chronic liver disease, which can range from mild to severe.

Laboratory Criteria

One or more of the following three criteria (except in persons less than 18 months of age, for whom only criteria 3 would meet the case classification criteria):

- Antibodies to hepatitis C virus (anti-HCV) screening-test-positive with a signal to cut-off ratio predictive of a true positive as determined for the particular assay as defined by CDC. (URL for the signal to cut-off ratios: <http://www.cdc.gov/hepatitis/HCV/LabTesting.htm>), **OR**
- Hepatitis C virus recombinant immunoblot assay (HCV RIBA) positive, **OR**
- Nucleic acid test (NAT) for HCV RNA positive (including qualitative, quantitative or genotype testing).

Case Classification

Probable

A case that does not meet the case definition for acute hepatitis C, is anti-HCV positive (repeat reactive) by EIA, and has alanine aminotransferase (ALT or SGPT) values above the upper limit of normal, but the anti-HCV EIA result has not been verified by an additional more specific assay or the signal to cut-off ratio is unknown.

Confirmed

A case that is laboratory confirmed and does not meet the case definition for acute hepatitis C.