

Merlin disease code: 07051 Hepatitis C, Acute

[Paper case report form](#)
Merlin extended data required

Background

Acute hepatitis C is characterized by discrete onset of symptoms consistent with acute viral hepatitis (e.g., fever, headache, malaise, anorexia, nausea, vomiting, diarrhea, and abdominal pain) and either jaundice or elevated liver enzymes (serum alanine aminotransferase [ALT] level >200 IU/L) during the period of acute illness. Most people (approximately 80%) with acute hepatitis C infection are asymptomatic.

A documented negative hepatitis C virus (HCV) result followed within 365 days by a positive result (as described in the laboratory criteria for diagnosis) does not require an acute presentation to meet the surveillance case definition.

Nucleic acid tests for HCV RNA (HCV NAT) include quantitative, qualitative, or genotype testing. No HCV antigen tests are currently approved by FDA. These tests will be acceptable laboratory criteria if and when an FDA-approved test becomes available.

Clinical criteria for case classification

Confirmatory:

One or more of the following in the absence of a more likely diagnosis (which may include evidence of acute liver disease due to other causes or advanced liver disease due to pre-existing chronic HCV infection or other causes, such as alcohol exposure, other viral hepatitis, hemochromatosis, etc.):

- Jaundice,
- **Or** bilirubin ≥ 3.0 mg/dL,
- **Or** ALT level >200 IU/L.

Reclassifying acute hepatitis C as chronic:

In the absence of laboratory criteria (2), cases with either of the following will be reclassified as chronic hepatitis C:

- Case has a more likely diagnosis for clinical criteria
- **Or** case reviewer verified that clinical criteria are not met.

Reclassifying chronic hepatitis C as acute:

Chronic hepatitis C cases with one or more of the following will be reclassified as acute:

- Bilirubin ≥ 3.0 mg/dL,
- **Or** ALT level >200 IU/L,
- **Or** a person <18 years old (unless case reviewer verified that clinical criteria are not met).

Laboratory criteria for case classification

Confirmatory:

1. With clinical criteria, either of the following:
 - Positive HCV NAT
 - **Or** positive HCV antigen.

2. With no clinical criteria, one or more of the following:
 - An infant <1 year old with one or more of the following:
 - Positive HCV NAT,
 - **Or** HCV antigen,
 - **Or** HCV antibody (anti-HCV);
 - **Or** a person ≥ 1 year old with one or more of the following:
 - Negative HCV NAT in the absence of a positive HCV NAT or anti-HCV with the same or earlier specimen event date followed within 365 days by positive HCV NAT,
 - **Or** negative anti-HCV in the absence of a positive anti-HCV with the same or earlier specimen event date followed within 365 days by positive anti-HCV,
 - **Or** negative HCV antigen in the absence of a positive HCV antigen or anti-HCV with the same or earlier specimen event date followed within 365 days by positive HCV antigen;
 - **Or** a person >36 months old with the following:
 - Positive HCV NAT result followed by 2 negative HCV NAT results ≥ 30 days apart, ≥ 30 days after the last positive HCV NAT followed within 365 days by positive HCV NAT.

Presumptive:

Both of the following:

- Positive anti-HCV
- **And** absence of a negative HCV NAT.

Reclassifying acute hepatitis C as chronic:

Cases who do not meet clinical criteria and do not have laboratory criteria (2) who have more or more of the following will be reclassified as chronic hepatitis C:

- Positive HCV NAT,
- **Or** positive HCV antigen,
- **Or** positive anti-HCV.

Reclassifying chronic hepatitis C as acute:

Chronic hepatitis C cases with one or more of the following will be reclassified as acute:

- Negative anti-HCV and positive NAT with the same specimen event date (unless case reviewer verified that clinical criteria are not met),
- **Or** negative HCV NAT in the absence of a positive HCV NAT or anti-HCV with the same or earlier specimen event date followed within 365 days by positive HCV NAT,
- **Or** negative anti-HCV in the absence of a positive anti-HCV with the same or earlier specimen event date followed within 365 days by positive anti-HCV,
- **Or** negative HCV antigen in the absence of a positive HCV antigen or anti-HCV with the same or earlier specimen event date followed within 365 days by positive HCV antigen.
- **Or** a person >36 months old with a positive HCV NAT result followed by 2 negative HCV NAT results ≥ 30 days apart, ≥ 30 days after the last positive HCV NAT followed within 365 days by positive HCV NAT.

Not a case:

Both of the following, in the absence of a conversion from negative to positive HCV NAT or conversion from negative to positive anti-HCV:

- Positive anti-HCV
- **And** negative HCV NAT.

Epidemiological criteria for case classification

One of the following:

- A child ≤ 36 months old known to be exposed to HCV via a mechanism other than perinatal transmission (e.g., acquired via health care exposure or household contact),
- **Or** a person >36 months old with no previous diagnosis or Merlin case of acute hepatitis C in the past year and no previous diagnosis or Merlin case of chronic hepatitis C,
- **Or** a person >36 months old with a previous case of acute or chronic hepatitis C with a positive HCV NAT result followed by 2 negative HCV NAT results ≥ 30 days apart, ≥ 30 days after the last positive HCV NAT result.

Case classification

Confirmed:

One or more of the following:

- A child ≤ 36 months old with confirmatory clinical criteria, confirmatory laboratory criteria (1) and epidemiological criteria,
- **Or** a child ≤ 36 months years old with confirmatory laboratory criteria (2) and epidemiological criteria,
- **Or** a person >36 months old with confirmatory clinical criteria, confirmatory laboratory criteria (1) and epidemiological criteria,
- **Or** a person >36 months old with confirmatory laboratory criteria (2) and epidemiological criteria.

Probable:

Either of the following:

- A child ≤ 36 months old with confirmatory clinical criteria, presumptive laboratory criteria, and epidemiological criteria
- **Or** a person >36 months old with confirmatory clinical criteria, presumptive laboratory criteria and epidemiological criteria.

Criteria to distinguish a new case from previous reports

See epidemiological criteria for classification. A new probable acute case may be re-classified as a confirmed acute case if a positive NAT for HCV RNA or a positive HCV antigen is reported within the same year. A confirmed acute case may be classified as a confirmed chronic case if a positive NAT for HCV RNA or a positive HCV antigen is reported one year or longer after acute case onset. A confirmed acute case may not be reported as a probable chronic case (i.e., HCV antibody positive, but with an unknown HCV RNA NAT or antigen status).

Reinfection

For individuals with a previous acute or chronic hepatitis C with a positive HCV NAT result, a new confirmed acute case may be created for persons >36 months old when there are two negative HCV NAT results followed by a new positive HCV NAT result, each of which are ≥ 30 days apart. Reinfection cases should be investigated and interviewed.

Comments

Infants and children ≤ 36 months old should only be reported as perinatal hepatitis C (Merlin disease code: 07058), not acute hepatitis C (Merlin disease code: 07051) or chronic hepatitis C (Merlin disease code: 07054) **unless** there is evidence that the case was exposed to HCV via a mechanism other than perinatal transmission (e.g., was acquired via health care exposure) or progressed to chronic infection. Test results prior to 2 months of age should not be used for classification.

Up to 20% of acute hepatitis C cases will be anti-HCV negative when reported because some (5%–10%) have not yet seroconverted and others (5%–10%) remain negative even with prolonged follow-up. Available serologic tests for anti-HCV do not distinguish between acute and chronic or past infection. Thus, other causes

of acute hepatitis should be excluded for anti-HCV positive patients who have an acute illness compatible with viral hepatitis.

Report all available liver enzyme results for every case under liver function tests (Merlin disease code: 00000).

See graphic for additional information related to the serological course of disease.

