10-ID-08

Committee: Infectious Disease

Title: Public Health Reporting and National Notification for Acute Hepatitis C

I. Statement of the Problem

CSTE position statement 07-EC-02 recognized the need to develop an official list of nationally notifiable conditions and a standardized reporting definition for each condition on the official list. The position statement also specified that each definition had to comply with American Health Information Community recommended standards to support "automated case reporting from electronic health records or other clinical care information systems." In July 2008, CSTE identified sixty-eight conditions warranting inclusion on the official list, each of which now requires a standardized reporting definition.

II. Background and Justification

Background[1]

Although only 802 cases of confirmed acute hepatitis C were reported in the United States in 2006, CDC estimates that approximately 19,000 new HCV infections occurred that year, after adjusting for asymptomatic infection and underreporting. Persons newly infected with HCV are usually asymptomatic, so acute hepatitis C is rarely identified or reported. HCV is transmitted primarily through large or repeated percutaneous exposures to infectious blood, such as injection drug use, receipt of donated blood, blood products, and organs, needlestick injuries, poor injection safety practices in healthcare settings, and birth to an HCV-infected mother. HCV can also be spread infrequently through sex with an HCV-infected person, or sharing personal items contaminated with infectious blood. As there is no vaccine available to prevent acute hepatitis C infection, reporting is particularly needed to identify outbreaks related to invasive medical procedure so that control measures can be implemented.

Justification

Acute hepatitis C meets the following criteria for a nationally and standard notifiable condition, as specified in CSTE position statement 08-EC-02:

- A majority of state and territorial jurisdictions—or jurisdictions comprising a majority of the US population—have laws or regulations requiring standard reporting of acute hepatitis C to public health authorities
- CDC requests standard notification of acute hepatitis C to federal authorities.
- CDC has condition-specific policies and practices concerning the agency's response to, and use of, notifications.

[1] Much of the material in the background is directly quoted from the CDC's hepatitis C website. See the References for further information on this source.

III. Statement of the desired action(s) to be taken

CSTE requests that CDC adopt this standardized reporting definition for acute hepatitis C to facilitate more timely, complete, and standardized local and national reporting of this condition.

IV. Goals of Surveillance

To provide information on the temporal, geographic, and demographic occurrence of acute hepatitis C to facilitate its prevention and control.

V. Methods for Surveillance:

Surveillance for acute hepatits C should use the following recommended sources of data and the extent of coverage listed in Table V.

Table V. Recommended sources of data for case identification and extent of coverage for ascertaining cases of acute hepatitis C.

	Coverage	
Source of data for case ascertainment	Population-wide	Sentinel sites
clinician reporting	X	
laboratory reporting	X	
reporting by other entities (e.g., hospitals, veterinarians, pharmacies)	X	
death certificates	X	
hospital discharge or outpatient records	X	
extracts from electronic medical records	X	
telephone survey		
school-based survey		
other _____		

VI. Criteria for case identification

A. Narrative: A description of suggested criteria for case ascertainment of acute hepatitis C.

Report any illness to public health authorities that meets any of the following criteria:

Clinical evidence: A person who is acutely ill with jaundice or dark urine. Associated symptoms may include: fever, headache, malaise, anorexia, nausea, vomiting, diarrhea or abdominal pain.

Laboratory evidence: A person that tests positive for antibodies to hepatitis C virus (anti-HCV), hepatitis C virus recombinant immunoblot assay (HCV RIBA), or nucleic acid test (NAT) postitive for HCV RNA (including genotype). There must be elevated serum aminotransferase (ALT) levels.

Clinical data: A person whose healthcare record contains a diagnosis of acute hepatitis C.

Administrative data: A person whose death certificate lists acute hepatitis C as a cause of death or a significant condition contributing to death.

Other recommended reporting procedures

- All cases of acute hepatitis C should be reported.
- Reporting should be on-going and routine.
- Frequency of reporting should follow the state health department's routine schedule.

B. Table of criteria to determine whether a case should be reported to public health authorities:

Table VI-B. Table of criteria to determine whether a case should be reported to public health authorities. Requirements for reporting are established under State and Territorial laws and/or regulations and may differ from jurisdiction to jurisdiction. These criteria are suggested as a standard approach to identifying cases of this condition for purposes of reporting, but reporting should follow State and Territorial law/regulation if any conflicts occur between these criteria and those laws/regulations.

Criterion	Reporting		
Clinical evidence			
Acute onset of jaundice or dark urine		N	
Fever		O	O
Headache		O	
Malaise		O	O
Anorexia		O	O
Nausea		O	O
Vomiting		O	O
Diarrhea		O	O
Abdominal Pain		O	O
Healthcare record contains a diagnosis of acute hepatitis C	S		
Death certificate lists acute hepatitis C as a cause of death or a significant condition contributing to death	S		

Laboratory evidence			
Elevated serum aminotransferase levels (ALT) > 400 IU/L, acute onset			N
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 and posted by CDC	S	O	O
Hepatitis C Virus Recombinant Immunoblot Assay (HCV RIBA) positive	S	O	O
Nucleic Acid Test (NAT) for HCV RNA positive	S	O	O

Notes:
S = This criterion alone is sufficient to report a case
N = This criterion in conjunction with all other "N" and any "O" criteria in the same column is required to report a case.
O = At least one of these "O" criteria in each category in the same column (e.g., clinical presentation and laboratory findings)—in conjunction with all other "N" criteria in the same column—is required to report a case. A number following an "O" indicates that this criterion is only required for a specific clinical presentation

C. Disease Specific Data Elements:

Disease-specific data elements to be included in the initial report are listed below.

Epidemiological Risk Factors
During the 2 weeks to 6 months prior to the onset of symptoms did the patient:
Have contact with a person diagnosed with acute or chronic hepatitis C
Undergo hemodialysis
Have an accidental stick or puncture with a sharps contaminated with blood or body fluids
Recieve blood or blood products
    Product
    Date
Undergo surgery or other medical procedures
Undergo dental procedure
Receive any IV infusions and/or injections in an outpatient setting
Have contact with someone else's blood
Receive a tattoo or body piercing
Inject or use non-prescription drugs
Receive treatment for a sexually-transmitted infection

Patient History
The number of female sex partners
The number of male sex partners

Risk Factors for Transmission
Donate blood
    Date of last donation

Date of last donation screened negative for hepatitis C

VII. Case Definition for Case Classification

A. Narrative: Description of criteria to determine how a case should be classified.

Clinical presentation

An acute illness with a discrete onset of any sign or symptom consistent with acute viral hepatitis (e.g., anorexia, abdominal discomfort, nausea, vomiting), and either a) jaundice/dark urine, or b) serum alanine aminotransferase (ALT) levels >400 IU/L.

Laboratory criteria for diagnosis

One or more of the following three criteria:

1. 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/ncidod/diseases/hepatitis/c/sc_ratios.htm), **OR**
2. Hepatitis C Virus Recombinant Immunoblot Assay (HCV RIBA) positive, **OR**
3. Nucleic Acid Test (NAT) for HCV RNA positive (including genotype)

AND, meets the following two criteria:

1. IgM antibody to hepatitis A virus (IgM anti-HAV) negative, **AND**
2. IgM antibody to hepatitis B core antigen (IgM anti-HBc) negative

Case classification:

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

B. Classification Tables:

Table VII-B. Criteria for defining a case of acute hepatitis C.

	Case Definition	
Criterion	Confirmed	
Clinical evidence		
Jaundice or dark urine	N	
Discrete onset of symptoms		
Fever	O	O
Headache	O	

Malaise	O	O
Anorexia	O	O
Nausea	O	O
Vomiting	O	O
Diarrhea	O	O
Abdominal Pain	O	O
Laboratory evidence		
Elevated serum aminotransferase (ALT) levels >400 IU/L		N
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 and posted by CDC	O	O
Hepatitis C Virus Recombinant Immunoblot Assay (HCV RIBA) positive	O	O
Nucleic Acid Test (NAT) for HCV RNA positive	O	O
IgM antibody to hepatitis A virus (IgM anti-HAV) negative	N	N
IgM antibody to hepatitis B core antigen (IgM anti-HBc) negative	N	N

Notes:
N = This criterion in conjunction with all other "N" and any "O" criteria in the same column is required to classify a case.
O = At least one of these "O" criteria in each category in the same column (e.g., clinical presentation and laboratory findings)—in conjunction with all other "N" criteria in the same column—is required to classify a case. A number following an "O" indicates that this criterion is only required for a specific clinical presentation

VIII. Period of Surveillance

Surveillance should be on-going.

IX. Data sharing/release and Print criteria

- Notification to CDC of confirmed cases is recommended for cases of acute hepatitis C.
- Case reports of acute hepatitis C are analyzed weekly internally, and clusters are confirmed with state health departments. Reports of hepatitis C are summarized annually in the *MMWR*. Also, an extensive analysis of data is conducted for publication annually as a *MMWR Surveillance Summary*, along with case reports of acute hepatitis A and B.
- At minimum, all states receive a quarterly report of cases, as well as the annual MMWR and the MMWR surveillance summary for acute viral hepatitis.

- Publication of data will follow this schedule (at a minimum):
    - Quarterly feedback to state health departments
    - Annually in the MMWR annual report of notifiable diseases.
    - Annually in the MMWR surveillance summary of acute viral hepatitis.
- There is no current plan to re-release case data. Aggregate reports are publicly available, and states maintain confidential surveillance databases.

X. References

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7. Council of State and Territorial Epidemiologists, Centers for Disease Control and Prevention. CDC-CSTE Intergovernmental Data Release Guidelines Working Group (DRGWG) Report: CDC-ATSDR Data Release Guidelines and Procedures for Re-release of State-Provided Data. Atlanta: CSTE; 2005. Available from: http://www.cste.org/pdffiles/2005/drgwgreport.pdf or http://www.cdc.gov/od/foia/policies/drgwg.pdf.

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XI. Coordination:

Agencies for Response:

(1) Thomas R. Frieden
Director
Centers for Disease Control and Prevention
1600 Clifton Road, NE
Atlanta, GA 30333
404-639-7000
txf2@cdc.gov

XII. Submitting Author:

(1) Gary Heseltine MD MPH
Epidemiologist
Texas Dept. State Health Services
Emerging and Infectious Disease Branch, MC 1960
PO Box 149347
Austin, TX 78714-9347
Phone: 512-458-7111 ext. 6352
gary.heseltine@dshs.state.tx.

Co-Authors:

(1) Harry F. Hull, Medical Epidemiologist
HF Hull & Associates, LLC
1140 St. Dennis Court
Saint Paul, MN 55116
(651) 695-8114
hullhf@msn.com

(2) Cecil Lynch, Medical Informaticist
OntoReason
7292 Shady Woods Circle
Midvale, UT 84047
(916) 412.5504
clynch@ontoreason.com

(3) R. Gibson Parrish, Medical Epidemiologist
P.O. Box 197
480 Bayley Hazen Road
Peacham, VT 05862
(802) 592-3357
gib.parrish@gmail.com