

HEPATITIS A

Background

This case definition was developed by the Armed Forces Health Surveillance Branch (AFHSB) for the purpose of epidemiological surveillance of a condition important to military-associated populations. Epidemics of hepatitis A threaten wartime operations, particularly in highly endemic areas and during unstable (e.g., rapidly changing) field conditions.¹ In response, in 1995 the Department of Defense mandated screening and hepatitis A immunization of immunologically naïve individuals entering the military and for service members assigned or deployed to geographic areas of high endemicity.²

Clinical Description

Hepatitis A virus (HAV) causes inflammatory liver disease (hepatitis) in affected individuals. The virus is spread through fecal-oral transmission, often through contaminated food, drink, or objects handled by infected persons. HAV infections range from an asymptomatic or mild illness to a severe illness that lasts for months. HAV infections do not cause chronic hepatitis. Recovery from HAV infection is associated with lifelong immunity against a repeat infection.³

Case Definition and Incidence Rules

For surveillance purposes, a case of hepatitis A is defined as:

- *One hospitalization* with any of the defining diagnoses of hepatitis A (see ICD9 and ICD10 code lists below) in *any* diagnostic position; or
- *Two outpatient medical encounters*, occurring *within 14 days* of each other, with any of the defining diagnoses of hepatitis A (see ICD9 and ICD10 code lists below) in *any* diagnostic position; or
- One record of a reportable medical event of a *confirmed* case of hepatitis A.

Incidence rules:

For individuals who meet the case definition:

- The incidence date is considered the date of onset documented in a reportable medical event report, or the first hospitalization or outpatient medical encounter that includes a defining diagnosis of hepatitis A.

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¹ Hoke CE, Binn LN, Egan JE, DeFraités RF. Hepatitis A in the US Army: epidemiology and vaccine development. *Vaccine*. 1992; 10(1):S75-S79.

² Armed Forces Epidemiological Board. Memorandum for the Assistant Secretary of Defense (Health Affairs) and the Surgeons General of the Army, Navy, and Air Force, subject: Recommendations regarding the use of the newly licensed hepatitis A vaccine in military personnel. Department of Defense, Falls Church, Virginia, 28 February 1995.

³ Armed Forces Health Surveillance Center. Viral Hepatitis A, Active Component, U.S. Armed Forces, 2000-2010. *Medical Surveillance Monthly Report (MSMR)*; 2011 August; Vol 18(8): 2-4.



Case Definition and Incidence Rules *(continued)*

- An individual is considered an incident case only *once per lifetime*.

Exclusions:

- Outpatient medical encounters* with evidence of hepatitis A immunization *within one week before or after* the case-defining encounter. The following vaccine administered codes are used to identify instances of hepatitis A immunization: CVX codes: 031, 052, 083, 084, 085, 104; CPT code 90632.
- Individuals who met the case definition for hepatitis A prior to the surveillance period.

Codes

The following ICD9 and ICD10 codes are included in the case definition:

Condition	ICD-10-CM Codes	ICD-9-CM Codes
Hepatitis A	<i>B15 (acute hepatitis A)</i>	--
	- B15.0 (hepatitis A with hepatic coma)	070.0 (viral hepatitis A with hepatic coma)
	- B15.9 (viral hepatitis A without mention of hepatic coma)	070.1 (viral hepatitis A without mention of hepatic coma – infectious hepatitis)

Development and Revisions

- In June of 2014 the case definition was updated to include ICD10 codes.
- This case definition for hepatitis A was developed in August 2011 by the *Medical Surveillance Monthly Report (MSMR)* staff for use in an article on hepatitis A.³ The case definition was developed based on reviews of the ICD9 codes, the scientific literature, and previous AFHSC analyses.

Case Definition and Incidence Rule Rationale

- Case finding for this definition prioritizes reportable medical events over hospitalizations over outpatient medical encounters.
- To capture possible cases of hepatitis A *not* reported through the Armed Forces Reportable Events reporting system, an interval of 14 days between outpatient visits is used to increase specificity. Individuals who are acutely ill at the time of presentation would likely have a follow-up visit within 2 weeks of the initial visit to monitor clinical and laboratory indicators of disease. Further, a 14 day interval is used to prevent the confounding of “true case” outpatient medical encounters



with possibly miscoded immunization visits for the combined hepatitis A and hepatitis B vaccine (Twinrix), which has a vaccine schedule of 0,1 and 6 months.

- Outpatient medical encounters with evidence of a hepatitis A immunization *within one week, before or after* the case-defining encounter may represent screening or “rule out” visits: therefore, the encounters are excluded from contributing to the two outpatient visits required to define a case.

Reports

AFHSB reports on Hepatitis A in the following reports:

- Armed Forces Communicable Disease Weekly Report; Summary of Communicable Reportable Events by Service; Available on the DHA website at: <https://health.mil/Military-Health-Topics/Health-Readiness/Armed-Forces-Health-Surveillance-Branch/Reports-and-Publications>.

Review

Nov 2018	Case definition reviewed and updated by the AFHSB Surveillance Methods and Standards (SMS) working group.
Jun 2014	Case definition reviewed and updated by the AFHSC Surveillance Methods and Standards (SMS) working group.
Oct 2011	Case definition reviewed and adopted by the AFHSC Surveillance Methods and Standards (SMS) working group.
Aug 2011	Case definition developed by AFHSC MSMR staff.

Comments

Armed Forces Reportable Events: Hepatitis A is a reportable medical event in the Armed Forces Reportable Events surveillance system under “Vaccine Preventable” disease.

