

HEPATITIS B

Last revised July 29, 2011

I. IDENTIFICATION

- A. **CLINICAL DESCRIPTION:** An illness with insidious onset of symptoms including anorexia, vague abdominal discomfort, nausea, vomiting, sometimes arthralgias and rash, often progressing to jaundice. Only a small portion of infections are clinically recognized: less than 10% of children and 30-50% of adults with acute infection will have icteric disease.
- B. **REPORTING CRITERIA:** Laboratory confirmation
- C. **LABORATORY CRITERIA FOR CONFIRMATION:**
- Chronic: IgM anti-hepatitis B core antigen (HBcAg) negative and a positive result on one of the following tests: hepatitis B surface antigen (HBsAg), hepatitis B e antigen (HBeAg), or hepatitis B virus (HBV) DNA, **OR** HBsAg positive or HBV DNA or HBeAg positive two times at least 6 months apart (any combination of these tests performed six months apart is acceptable).
 - Acute: IgM anti-HBc positive or HBsAg positive
 - Perinatal: HBsAg positive
- D. **WISCONSIN CASE DEFINITION;**
- Chronic: Laboratory Confirmation.
 - Acute: Laboratory Confirmation **AND** discrete onset of symptoms (anorexia, malaise, abdominal pain) **AND** jaundice (or elevated serum aminotransferase levels).
 - Perinatal: Laboratory confirmation in any infant greater than 1 month and up to 24 months old who was born in the United States or in U.S. territories to an HBsAg-positive mother.

II. ACTIONS REQUIRED / PREVENTION MEASURES

- A. **WISCONSIN DISEASE SURVEILLANCE CATEGORY II:** Report to the patient's local health department either electronically through the Wisconsin Electronic Disease Surveillance System (WEDSS), by mail or fax using an Acute and Communicable Disease Case Report ([F-44151](#)), or by other means within 72 hours upon recognition of a case or suspected case.
- B. **EPIDEMIOLOGY REPORTS REQUIRED:**
- *Electronically*---Report through WEDSS, including appropriate disease-specific tabs
OR
 - *Paper Copy*---Acute and Communicable Disease Case Report ([F-44151](#)) along with:
 - The Viral Hepatitis Case Record ([CDC 53.1](#)) for acute disease only (anti-HBc IgM+ test result or HBsAg+ test result with symptoms of hepatitis). The information collected on this form is also in WEDSS; therefore, it may serve as a helpful worksheet.
- C. **PUBLIC HEALTH INTERVENTIONS:**
- In accordance with Wisconsin Administrative rule DHS 145.05, local public health should follow the methods of control recommended in the current edition of *Control of Communicable Diseases Manual*, edited by David L. Heymann, published by the American Public Health Association.

Wisconsin Division of Public Health Communicable Disease Surveillance Guideline

- In accordance with Wisconsin Admin Rule DHS 145.05, local public health should follow the control methods as set forth in the current edition of Control of Communicable Diseases Manual, an APHA publication.
- Determine pregnancy status if the patient is a woman of child-bearing age (approximately 15-44). Refer pregnant patient to the Perinatal Hepatitis B Prevention Program through their local public health department. See Perinatal Hepatitis B Prevention Program Manual for detailed follow-up recommendations.
- Refer the patient to a medical provider to monitor outcome or progress of infection.
- Exclude patient from school, daycare or work until acute illness has resolved.
- Educate patient on how to protect others from exposure to HBV.
- Persons who are not immune to hepatitis A virus (HAV) and who have liver disease should be vaccinated against HAV.
- Post-exposure prophylaxis* with HBIG and/or hepatitis B vaccine (where appropriate) for:
 - All infants born to mothers who are HBsAg-positive.
 - Unvaccinated infants whose mothers or primary care givers have acute hepatitis B.
 - Sexual contacts of persons with acute hepatitis B.
 - Healthcare workers after occupational exposure depending on vaccination status and immune response.
 - Household contacts and sexual contacts of persons with chronic HBV infection do not need prophylaxis with HBIG but should be vaccinated.
- For further detailed information regarding control measures, please see the additional references cited at the end of this document. The Wisconsin Division of Public Health, Immunization Program should be consulted regarding state-specific guidelines.

*Ideally prophylaxis should be given within 14 days of exposure.

D. PREVENTION MEASURES:

- Hepatitis B vaccine is universally recommended for all infants at 0, 1-2 and 6-18 months of age.
- Perinatal HBV infection can be prevented through:
 - Routine screening of all pregnant women for HBsAg, and
 - Immunoprophylaxis of infants born to HBsAg-positive women (hepatitis B immune globulin (HBIG) + hepatitis B vaccine within 12 hours) or to women with unknown HBsAg status (hepatitis B vaccine within 12 hours + STAT testing of the mother to guide HBIG decisions).
- Hepatitis B vaccine is recommended for all children and adolescents aged < 19 years.
- Vaccination of previously unvaccinated adults at risk of HBV infection. Risk groups may include: Persons with occupational risk, clients and staff of institutions for the developmentally disabled; hemodialysis patients; recipients of certain blood products; household and sexual partners of HBsAg carriers; certain international travelers; injecting drug users; sexually active persons with multiple partners; and persons who are incarcerated.

III. CONTACTS FOR CONSULTATION

A. LOCAL HEALTH DEPARTMENT – REGIONAL OFFICES – TRIBAL AGENCIES:

<http://www.dhs.wisconsin.gov/localhealth/index.htm>

Wisconsin Division of Public Health Communicable Disease Surveillance Guideline

B. REGIONAL IMMUNIZATION PROGRAM REPRESENTATIVES:

<http://www.dhs.wisconsin.gov/immunization/regiondepts.htm>

C. BCDER/ IMMUNIZATION PROGRAM: (608) 267-9959.

D. WISCONSIN STATE LABORATORY OF HYGIENE

Communicable Disease Division

Customer Service: (800) 862-1013 or (608) 262-6386

Clinical Supplies: (800) 862-1088 or (608) 265-2966

IV. RELATED REFERENCES

- Heymann DL, ed. HEPATITIS VIRAL. In: *Control of Communicable Diseases Manual*. 19th ed. Washington, DC: American Public Health Association, 2008:253-261
- Pickering LK, ed. Hepatitis B. In: *Red Book: 2009 Report of the Committee on Infectious Diseases*. 28th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2009:337-356
- Centers for Disease Control and Prevention. Manual for the surveillance of vaccine-preventable disease. Centers for Disease Control and Prevention, Atlanta, GA, 2008. <http://www.cdc.gov/vaccines/pubs/surv-manual>
- A Comprehensive Immunization Strategy to Eliminating Transmission of Hepatitis B Virus Infection in the United States: Recommendations of the Advisory Committee on Immunization Practices (ACIP) Part I: Immunization of infants, children and adolescents. *MMWR* 2005; 54 (No. RR-16)
- A Comprehensive Immunization Strategy to Eliminating Transmission of Hepatitis B Virus Infection in the United States: Recommendations of the Advisory Committee on Immunization Practices (ACIP) Part II: Immunization of Adults. *MMWR* 2006; 55 (No. RR-16)