



BOSTON PUBLIC HEALTH COMMISSION  
**Communicable Disease Control Division**  
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## HEALTH ALERT: Acute Hepatitis B

**Summary: Four cases of acute Hepatitis B virus (HBV) infection have recently been reported to BPHC. All cases are US born and range in age from mid 30s to mid 50s with symptom onset between late June and mid August of 2011. Common risk factors include substance use and unprotected sexual exposures. Providers are encouraged to offer vaccination to adults at high risk of infection, particularly those with no history of immunization or incomplete immunization.**

### EPIDEMIOLOGY

Between late June and mid August, 2011, 4 cases of confirmed acute Hepatitis B infection were reported to BPHC. All are US born and range in age from their mid 30s to mid 50s; 3 are male. Neighborhoods of residence include North Dorchester, Roxbury, and the South End. Risk factors in these cases include injecting drug use, intranasal cocaine use and unprotected sexual exposures. Two cases were hospitalized, and all have recovered. Two cases were co-infected with Hepatitis C. Seven cases of acute HBV have been reported to BPHC to date this year compared to a total of 9 reported in calendar year 2010.

### SYMPTOMS AND DIAGNOSIS

Approximately 50% of acute HBV cases in adults are asymptomatic. Symptomatic cases often present with non-specific malaise, anorexia, nausea, vomiting, abdominal pain, and occasionally arthralgias and rash. Jaundice may develop 3-10 days from initial symptom onset. Fever may be absent or low-grade. Transaminases may be markedly elevated. Diagnosis of recent infection is best confirmed by testing for anti-HB core IgM.

### PREVENTION

In 1991, a national strategy to eliminate HBV infection was implemented in the United States, when routine vaccination of children was first recommended. Nationally the rate of reported new HBV infections has declined by about 82%. However, adults in some age groups are likely to have been missed by population based vaccination efforts and are likely still susceptible to HBV. Patients engaged in drug use and high risk sexual behavior should be screened for HBV infection and vaccinated if not immune.

HBV vaccination is advised for the following groups:

- All infants, beginning at birth
- All children aged <19 years who have not been vaccinated previously
- Susceptible sex partners of Hepatitis B surface antigen (HBsAg)-positive persons
- Sexually active persons who are not in a long-term, mutually monogamous relationship (e.g., >1 sex partner during the previous 6 months)
- Persons seeking evaluation or treatment for a sexually transmitted disease
- Men who have sex with men
- Injection drug users
- Susceptible household contacts of HBsAg-positive persons
- Health care and public safety workers at risk for exposure to blood or blood-contaminated body fluids
- Persons with end-stage renal disease, including predialysis, hemodialysis, peritoneal dialysis, and home dialysis patients
- Residents and staff of facilities for developmentally disabled persons
- Travelers to regions with intermediate or high rates of endemic HBV infection
- Persons with HIV infection
- All other persons seeking protection from HBV infection — acknowledgment of a specific risk factor is not a requirement for vaccination

### REPORTING

Healthcare providers in Boston are required by state and city regulations to report all suspect or confirmed Hepatitis B cases promptly to the Boston Public Health Commission (BPHC) Communicable Disease Control Division at 617-534-5611. In addition, laboratories are required to report results indicative of HBV infection to BPHC. Reporting forms for health care providers and for laboratories are available on the web at: [www.bphc.org](http://www.bphc.org).