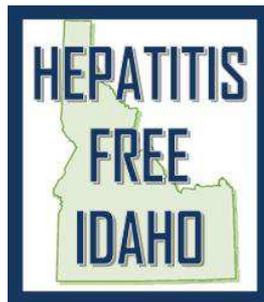
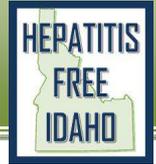


IDAHO HEPATITIS B AND C MEDICAL PROVIDER TOOLKIT



Hepatitis B and Hepatitis C: Who to Test



Most people with viral hepatitis do not know it. Chronic hepatitis B and C infections are associated with cirrhosis, liver cancer, and liver failure, all of which can be prevented or mitigated by early detection, treatment, and lifestyle changes. Serologic testing is the primary means for identifying persons with chronic viral hepatitis.

I. Populations recommended for hepatitis B testing¹

- All pregnant women
- Infants born to hepatitis B surface antigen (HBsAg)-positive mothers
- Persons born in geographic regions with HBsAg prevalence ≥ 2 percent²
- U.S.-born persons not vaccinated as infants whose parents were born in geographic regions with HBsAg prevalence of ≥ 8 percent³
- Household contacts, sex partners, and needle-sharing partners of hepatitis B-infected persons
- Persons with behavioral exposures to hepatitis B
 - Injection drug users
 - Men who have sex with men
- Persons with selected medical conditions
 - Elevated liver enzymes of unknown etiology
 - Renal disease requiring hemodialysis
 - HIV infection
 - Any disease requiring immunosuppressive therapy
- Persons who are the source of blood or body fluid exposures that might warrant post-exposure prophylaxis (e.g., needlestick injury to a healthcare worker)

II. Populations recommended for hepatitis B vaccination, without pre-vaccination serology¹

- Persons under 19 years of age who have not been vaccinated against hepatitis B
- Persons over 19 years of age and under 60 who have diabetes mellitus and have not been vaccinated against hepatitis B (and persons with diabetes mellitus 60 years of age or older at the discretion of the treating provider)
- Persons having more than one (>1) sexual partner in the past six months
- Persons seeking evaluation or treatment for a sexually transmitted disease
- Health care or public safety workers with reasonably anticipated occupational exposures to blood or infectious body fluids
- Persons with select medical conditions:
 - Chronic (long-term) liver disease
 - End-stage renal disease
- Persons planning to travel to a country where at least two percent of the population has hepatitis B (Asia, Africa, the Amazon Basin in South America, the Pacific Islands, Eastern Europe or the Middle East)
- Persons who live or work in a facility for developmentally disabled persons
- Anyone who wishes to be protected from hepatitis B infection

III. Populations recommended for hepatitis C testing¹

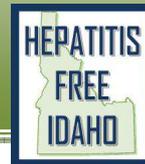
- Persons who have ever injected illegal drugs, including those who injected only once many years ago
- Persons with selected medical conditions
 - All persons with human immunodeficiency virus (HIV) infection
 - Patients with signs or symptoms of liver disease (e.g., abnormal liver enzyme tests)
 - Recipients of clotting factor concentrates made before 1987
 - Recipients of blood transfusions or solid organ transplants before July 1992
 - Recipients of blood or organs from a donor who later tested hepatitis C virus (HCV)-positive
 - Patients who have ever received long-term hemodialysis
- Children born to HCV-positive mothers (to avoid detecting maternal antibody, these children should not be tested before age 18 months)
- Persons with known HCV exposures (e.g., healthcare workers after needlesticks involving HCV-positive blood)
- Persons born during 1945-1965 should receive one-time testing without prior ascertainment of risks listed above

¹Source: Centers for Disease Control and Prevention (CDC). Access CDC recommendations and other clinical guidelines for viral hepatitis prevention, testing, management, and care as well as patient education materials at www.cdc.gov/hepatitis or www.cdph.ca.gov/programs/Pages/ovhp.aspx.

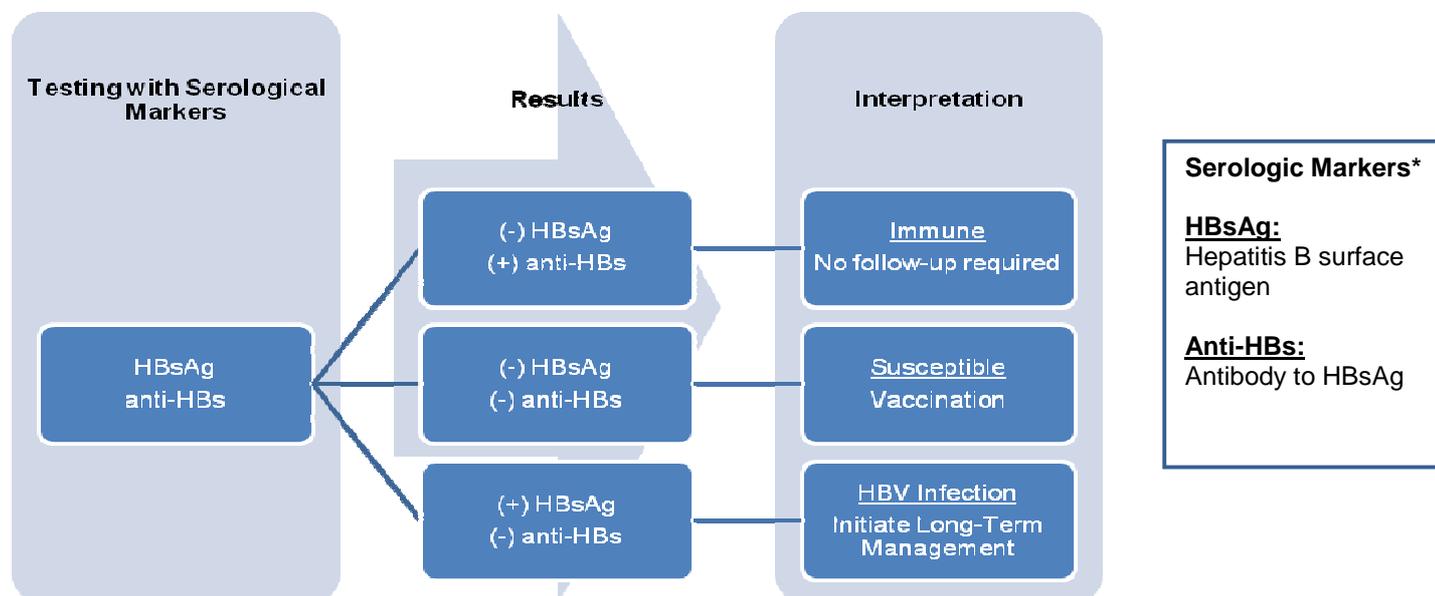
²Regions with ≥ 2 percent HBsAg prevalence include the regions described below as well as South, Central, and Southwest Asia, Japan; Russia; Eastern and Southern Europe; Honduras; Guatemala; North America (Alaska Natives and indigenous populations of Northern Canada); and the areas surrounding the Amazon River basin. (A complete list is available at wwwnc.cdc.gov/travel/destinations/list.aspx.)

³Regions with ≥ 8 percent HBsAg prevalence include Southeast Asia; South and Western Pacific Islands; Africa; the Middle East (except Israel); Haiti; the Dominican Republic; and the interior Amazon River basin. (A complete list is available at wwwnc.cdc.gov/travel/destinations/list.aspx.)

Hepatitis B: Testing and Serology



Hepatitis B is an infection caused by the hepatitis B virus (HBV). Chronic infection with HBV is associated with cirrhosis, liver cancer, and liver failure. These complications can be prevented or mitigated by treatment and lifestyle changes (e.g., reducing or eliminating alcohol use and practicing other forms of liver self-care). Serologic testing is the primary means for identifying persons with chronic HBV infection. An effective vaccine is available to prevent HBV infection.



* Note: Another HBV test is total antibody to hepatitis B core antigen (anti-HBc), which can be used to distinguish whether immunity is due to past infection (anti-HBc-positive) or to previous vaccination (anti-HBc-negative). In patients with chronic HBV infection, anti-HBc is present. In the absence of HBsAg or anti-HBs, an anti-HBc-positive test result has one of four interpretations: 1) recovering from acute HBV infection; 2) distantly immune, test not sensitive enough to detect low level of anti-HBs; 3) susceptible with a false positive anti-HBc; or 4) chronically infected with an undetectable level of HBsAg.

Hepatitis B Vaccination

- 3 doses are administered at 0, 1, 6 months; a combination hepatitis A/hepatitis B vaccine is available and follows the same dosing schedule
- If partially vaccinated, the patient does not need to restart the series
- Vaccine is safe for pregnant and HIV-infected persons
- Post-vaccine serology testing (anti-HBs) is recommended for household, needle-sharing, and sexual contacts of HBsAg-positive persons, HIV-positive persons, and healthcare workers

Principles of Long-Term Hepatitis B Management

- Provide patient with culturally and linguistically appropriate educational materials (see links below)
- Report case to local health department within seven days
- Vaccinate against hepatitis A (unless immune as indicated by presence of total hepatitis A antibody (anti-HAV) in serum)
- Encourage patient's sex partners, household members, and injection-drug sharing contacts to seek HBV testing, medical evaluation, and vaccination
- Counsel patient to minimize alcohol consumption and other liver toxins
- Counsel patient to avoid sharing razors, toothbrushes or personal injection equipment
- Seek a hepatitis B-experienced clinician to evaluate for, manage, and treat chronic HBV infection
- When referring patients, provide the following test results, if possible: CBC with platelets; hepatic panel; PT/INR; anti-HBs; HBsAg; anti-HBc; hepatitis B e antigen (HBeAg); antibody to HBeAg (anti-HBe); HBV DNA; anti-HAV; anti-HCV; anti-HDV (hepatitis Delta); HIV; AFP; ultrasound (if high risk as per AASLD guidelines).¹
- Access clinical guidelines for HBV prevention, testing, management, and care as well as patient education materials at

¹ Source: American Association for the Study of Liver Disease (AASLD): www.aasld.org/practiceguidelines/pages/default.aspx.

Hepatitis B: Billing and Diagnosis Codes



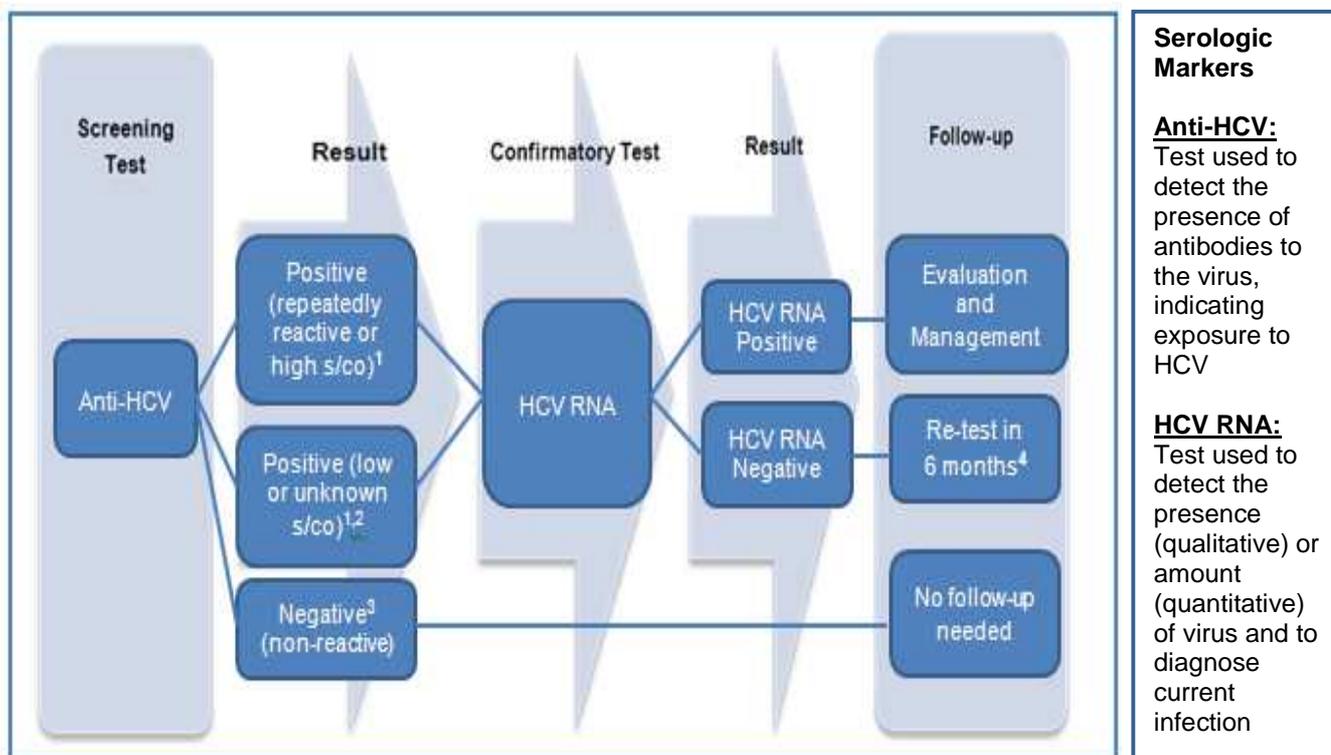
CPT Codes		
90632	Monovalent hepatitis A vaccine for adult dosage	Vaccine Codes
90633	Monovalent hepatitis A vaccine for pediatric/adolescent use(2-dose schedule)	
90634	Monovalent hepatitis A vaccine for pediatric/adolescent use (3-dose schedule)	
90746	Monovalent hepatitis B vaccine for adult dosage	
90743	Monovalent hepatitis B vaccine for adolescent use (2-dose schedule)	
90745	Monovalent hepatitis B vaccine for pediatric use (3-dose schedule)	
90636	Combination hepatitis A/hepatitis B vaccine for adult dosage	
90740	Hepatitis B vaccine for dialysis or immunosuppressed patient (3-dose schedule)	
90747	Hepatitis B vaccine for dialysis or immunosuppressed patient (for 40 mcg dosing and 4-dose schedule)	
86706	Hepatitis B surface antibody (HBsAb)	Testing Codes
87515	Infectious agent detection by nucleic acid (DNA or RNA); hepatitis B virus, direct probe technique	
87516	Infectious agent detection by nucleic acid (DNA or RNA); hepatitis B virus, amplified probe technique	
87517	Infectious agent detection by nucleic acid (DNA or RNA); hepatitis B virus, quantification	
87340	Infectious agent antigen detection by enzyme immunoassay technique, qualitative or semiquantitative, multiple-step method; hepatitis B surface antigen (HBsAg)	
87341	Infectious agent antigen detection by enzyme immunoassay technique, qualitative or semiquantitative, multiple-step method; hepatitis B surface antigen (HBsAg), neutralization	
90741	Immunization administration (includes percutaneous, intra-dermal, subcutaneous, intramuscular and jet injections, one vaccine (single or combination vaccine/toxoid)	Administration Codes
90472	Each additional vaccine (single or combination vaccine); (list separately in addition to the code for primary procedure)	

ICD-9 Diagnosis Codes	
V01.7	Contact with or exposure to communicable diseases, other viral diseases
V05.3	Need for prophylactic vaccination and inoculation against single disease: viral hepatitis
V69.2	High-risk sexual behavior
571.8	Other chronic nonalcoholic liver disease
571.9	Unspecified chronic liver disease without the mention of alcohol
070.3	Chronic hepatitis B without mention of hepatic coma

CPT Codes		
90201-99205	Office or outpatient visit for the evaluation or management of a new patient	E & M Codes
36415	Collection of venous blood by venipuncture	

Hepatitis C: Testing and Serology

Hepatitis C is an infection caused by the Hepatitis C virus (HCV). Chronic infection with HCV is associated with liver failure, cirrhosis, and liver cancer. These complications can be prevented or mitigated by treatment and lifestyle changes (i.e., by reducing or eliminating alcohol use and practicing other forms of liver self-care). Serologic testing is the primary way to identify persons with chronic HCV infection. Currently, no vaccine is available to prevent HCV.



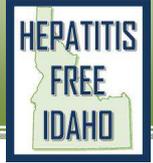
¹ 95% of samples with a high signal-to-cutoff (s/co) ratio will be predictive of a true antibody positive result, regardless of the anti-HCV prevalence or characteristics of the population being tested. A list of the s/co ratios (or threshold values) that are predictive of a true positive for available commercial assays can be retrieved from the Centers for Disease Control and Prevention (CDC) at www.cdc.gov/hepatitis/HCV/LabTesting.htm.

² If a false positive test result is suspected, supplemental HCV testing should be conducted. Options for supplemental testing include repeating the initial HCV antibody test, conducting a recombinant immunoblot assay (RIBA) HCV antibody test, or reflexing to an HCV RNA test. A positive repeat antibody or RIBA test confirms the presence of HCV antibody and should be followed up by HCV RNA testing. A negative repeat HCV antibody or RIBA test rules out the presence of HCV antibody. (Given the high specificity of third generation anti-HCV testing, the need for RIBA testing has declined.)

³ Patients with recent (< 6 months) exposure who test anti-HCV negative may not have yet developed detectable antibodies. HIV-infected persons and other immunocompromised individuals may not develop hepatitis C antibodies. HCV RNA testing should be considered for immunocompromised persons when suspicion of exposure to HCV is high.

⁴ A single negative HCV RNA test result cannot exclude a diagnosis of chronic HCV, as persons may have intermittent viremia. Two positive HCV RNA tests six months apart are needed to diagnose a case of chronic HCV infection. Conversely, two negative HCV RNA tests six months apart are needed to rule out chronic HCV infection.

Hepatitis C: Billing and Diagnosis Codes



CPT Codes		Testing Codes
86803	Hepatitis C antibody	
86804	Hepatitis C antibody; confirmatory test (e.g., immunoblot or RIBA)	
87520	Infectious agent detection by nucleic acid (DNA or RNA); hepatitis C, direct probe technique	
87521	Infectious agent detection by nucleic acid (DNA or RNA); hepatitis C, amplified probe technique	
87522	Infectious agent detection by nucleic acid (DNA or RNA); hepatitis C, quantification	
90201-99205	Office or outpatient visit for the evaluation or management of a new patient	
36415	Collection of venous blood by venipuncture	

ICD-9 Diagnosis Codes	
V01.7	Contact with or exposure to communicable diseases, other viral diseases
V05.3	Need for prophylactic vaccination and inoculation against single disease: viral hepatitis
V69.2	High-risk sexual behavior
571.8	Other chronic nonalcoholic liver disease
571.9	Unspecified chronic liver disease without the mention of alcohol
070.51	Acute hepatitis c without hepatic coma
070.54	Chronic hepatitis C without hepatic coma
070.7	Unspecified viral hepatitis C
070.70	Unspecified viral hepatitis C without hepatic coma

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Evaluation and Management

- Counsel patient on the meaning of the test results: a positive hepatitis C antibody test result indicates exposure to HCV (past or present infection); HCV RNA testing is needed to diagnose current HCV infection
- Report case to local health department within 7 days – forms and contact information for reporting cases to the local health department can be accessed at www.cdph.ca.gov/healthinfo/Pages/ReportableDiseases.aspx
- Vaccinate patients against hepatitis A and B unless immune
- Advise patients to reduce or eliminate intake of alcohol and other liver toxins
- Counsel patients to practice safer injection, follow infection control guidelines in healthcare and in settings such as tattoo parlors, and avoid sharing personal items that might have blood on them, such as razors
- Counsel patients to practice safer sex when engaging with multiple sex partners or infected with HIV
- Provide patient with culturally and linguistically appropriate educational materials (see link below)
- Seek a hepatitis C experienced clinician to evaluate for, manage, and treat chronic HCV infection, either by referral or through clinical consultation
- When referring patients, provide the following test results, if possible: CBC with platelets; hepatic panel; PT/INR; anti-HBs; HBsAg; anti-HAV; anti-HCV; HCV RNA, quantitative; HCV genotype; HIV.¹
- Access clinical guidelines for HCV prevention, testing, management, and care at the CDPH, Office of Viral Hepatitis Prevention website: www.cdph.ca.gov/programs/Pages/HepatitisCGuidelines.aspx

¹ Source: American Association for the Study of Liver Disease (AASLD): www.aasld.org/practiceguidelines/pages/default.aspx.