

Viral Hepatitis Guide for Primary Care Providers

Screening, Vaccination, and Billing

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Hepatitis A

Hepatitis A is a communicable disease caused by the hepatitis A virus (HAV), which affects the liver and is transmitted through the fecal-oral route. It is vaccine preventable and does not result in chronic infection.

Hepatitis A Vaccination Recommendations

The U.S. Centers for Disease Control and Prevention (CDC) recommends routine vaccination for children and for adults at increased risk of infection or severe disease, including in selected settings. Catch-up vaccination for children and adolescents not previously vaccinated is also recommended. In 1996, CDC began recommending routine vaccination for children aged ≥ 2 years who lived in communities with high rates of HAV infection, for populations at increased risk for HAV infection or the adverse consequences of infection, and in outbreak settings. CDC has recommended routine hepatitis A vaccination of children ≥ 2 years in high morbidity states (including California) since 1999 and of children ages 12-23 months in all states since 2006.¹ In 2019, CDC began recommending routine hepatitis A vaccination of people experiencing homelessness following substantial hepatitis A outbreaks among this population and people who use drugs in California and other states.²

Whom to Vaccinate Against HAV ³	How to Vaccinate Against HAV
<ul style="list-style-type: none">• All children 12-23 months of age• All children/adolescents 2-18 years of age who have not previously received vaccination• Any adult not previously vaccinated who wishes to be protected from hepatitis A• People at increased risk for HAV infection or for severe disease from HAV<ul style="list-style-type: none">○ Men who have sex with men (MSM)⁴○ People who use injection or non-injection drugs○ People experiencing homelessness○ People with HIV infection○ People with chronic liver disease○ People traveling to or working in countries with high or intermediate HAV endemicity⁵○ People with occupational risk for exposure (e.g., who work with HAV-infected primates or other material containing HAV in a laboratory setting)○ People who anticipate close personal contact with an international adoptee from a country with high or intermediate endemicity○ Pregnant people who are at increased risk for HAV infection• Healthcare providers may assume that unvaccinated adults ≥ 19 years of age in certain settings are at risk for HAV infection and may offer them immunization.	<p>Monovalent vaccines <i>(for use in people ≥ 1 year)</i></p> <ul style="list-style-type: none">• Havrix^{®6} two-shot series administered at 0 and 6-12 months• Vaqta[®]: two-shot series administered at 0 and 6-18 months <p><i>Note: The routine childhood schedule is listed here, but people can also be immunized after these ages, including during adulthood.</i></p> <p>Combination vaccine <i>(for use in people ≥ 18 years)</i></p> <ul style="list-style-type: none">• Twinrix[®]: Hepatitis B + hepatitis A three-shot series administered at 0, 1, and 6 months or an accelerated 4-shot series administered at 0, 7, 21-30 days, and 12 months

¹ Source: Nelson NP, Weng MK, Hofmeister MG, et al. [Prevention of Hepatitis A Virus Infection in the United States: Recommendations of the Advisory Committee on Immunization Practices, 2020](#). *MMWR Recomm Rep*. 2020;69(5):1-38. Published 2020 Jul 3. doi:10.15585/mmwr.rr6905a1.

² Source: Doshani M, Weng M, Moore KL, Romero JR, Nelson NP. [Recommendations of the Advisory Committee on Immunization Practices for Use of Hepatitis A Vaccine for Persons Experiencing Homelessness](#). *MMWR Morb Mortal Wkly Rep*. 2019;68(6):153-156. Published 2019 Feb 15. doi:10.15585/mmwr.mm6806a6.

³ Source: Nelson NP, Weng MK, Hofmeister MG, et al. [Prevention of Hepatitis A Virus Infection in the United States: Recommendations of the Advisory Committee on Immunization Practices, 2020](#). *MMWR Recomm Rep*. 2020;69(5):1-38. Published 2020 Jul 3. doi:10.15585/mmwr.rr6905a1.

⁴ There are also people who do not identify as male or MSM, but who could be considered for vaccination because of sexual behaviors and/or increased prevalence in the community. Data on prevalence among trans, gender non-conforming, and non-binary individuals is lacking, but some individuals may be considered for vaccination.

⁵ To find vaccination recommendations for travel to specific countries, see [CDC Travelers' Health website](#)

⁶ Brand names used for informational purposes only. CDPH does not endorse any company or its products.

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Whom to Vaccinate Against HAV ³	How to Vaccinate Against HAV
<ul style="list-style-type: none"> ○ Homeless shelters, syringe services and other outreach settings reaching persons at risk for HAV infection ○ Group homes for persons with developmental disabilities ● Offering hepatitis A vaccine in jails and prisons is an effective strategy to reach persons at high risk for HAV infection who are otherwise difficult to access in the community. 	

Billing Codes for Hepatitis A Vaccination

Table 1. Hepatitis A Current Procedural Terminology (CPT) Billing Codes: Vaccination and Administration

Code	Description
90632	Monovalent hepatitis A vaccine for adult dosage, intramuscular use
90633	Monovalent hepatitis A vaccine for pediatric/adolescent dosage, intramuscular use (2-dose schedule)
90634	Monovalent hepatitis A vaccine for pediatric/adolescent dosage, intramuscular use (3-dose schedule)
90636	Combination hepatitis A/hepatitis B vaccine for adult dosage
90460	Immunization administration via any route, through age 18 with counseling by provider, 1 st or only vaccine
90461	Immunization administration through age 18 with counseling by provider, any route, each additional during that encounter - List separately in addition to the code for primary procedure
90471	Immunization administration (includes percutaneous, intra-dermal, subcutaneous, intramuscular, and jet injections, one vaccine-single or combination vaccine/toxoid)
90472	Immunization administration (includes percutaneous, intra-dermal, subcutaneous, intramuscular, and jet injections, each additional vaccine - List separately in addition to the code for primary procedure

Table 2. Hepatitis A ICD-10⁷ Encounter and Diagnosis Codes

Code	Description
Z23	Encounter for prophylactic vaccination
B15.0	Hepatitis A with hepatic coma
B15.9	Hepatitis A without hepatic coma

Table 3. Hepatitis A CPT Billing Codes: Evaluation and Management (E&M)

Code	Description
99201 – 99205*	Office or outpatient visit for the evaluation or management of a new patient
99211 – 99214*	Office or other outpatient visit for the evaluation and management of an established patient
99241 – 99245*	Consultations: Office or other outpatient, initial or follow-up inpatient, and confirmatory
99451	Interprofessional telephone/internet/electronic health assessment and management service provided by a consultative physician to the patient’s treating/requesting physician or other qualified health care professional (reported by the consultant) ⁸
99452	Interprofessional telephone/Internet/electronic health record referral service(s) provided by a treating/requesting physician or other qualified health care professional (QHP) (reported by the requesting/treating physician/QHP)

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* Up-to-date resources on telehealth reimbursement can be found at the [California Telehealth Resource Center’s website](#).

⁷ International Statistical Classification of Diseases and Related Health Problems (ICD), 10th Revision

⁸ Additional information about codes 99451 and 99452 may be found at [American Academy of Pediatrics’ website](#).

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Hepatitis B

Hepatitis B is an infection caused by the hepatitis B virus (HBV). Chronic HBV infection is associated with cirrhosis, liver cancer, and liver failure, yet most people are unaware of their infection. Complications can be prevented or mitigated by early detection, treatment, and behavior changes. Hepatitis B vaccination is currently recommended for both children and adults. CDC made a universal recommendation for hepatitis B vaccination for adults through age 59 years in early 2022. This vaccination strategy removes the need for risk factor screening and disclosure and could increase vaccination coverage and decrease hepatitis B cases.⁹

Hepatitis B Vaccination Recommendations

Table 4. Whom and How to Vaccinate Against Hepatitis B

Whom to Vaccinate Against HBV	How to Vaccinate Against HBV
<p>CDC recommends vaccination for the following groups <u>without</u> a requirement to check pre-vaccination serology^{9, 10,11}</p> <ul style="list-style-type: none"> • All infants • All unvaccinated children and adolescents < 19 years of age • All unvaccinated adults 19-59 years of age • Unvaccinated adults 60 years of age and older who are at risk for infection or who wish to be vaccinated; people at risk include: <ul style="list-style-type: none"> ○ Persons at risk for infection by sexual exposure <ul style="list-style-type: none"> ▪ Sex partners of persons testing positive for HBsAg ▪ Sexually active persons who are not in a long-term, mutually monogamous relationship (e.g., persons with more than one sex partner during the previous 6 months) ▪ Persons seeking evaluation or treatment for a sexually transmitted infection ▪ Men who have sex with men ○ Persons at risk for infection by percutaneous or mucosal exposure to blood <ul style="list-style-type: none"> ▪ Persons with current or recent injection drug use ▪ Household contacts of persons testing positive for HBsAg ▪ Residents and staff members of facilities for persons with developmental disabilities ▪ Health care and public safety personnel with reasonably anticipated risk for exposure to blood or blood-contaminated body fluids ▪ Persons on maintenance dialysis, including in-center or home hemodialysis and peritoneal dialysis, and persons who are predialysis ▪ Persons with diabetes at the discretion of the treating clinician ○ Others <ul style="list-style-type: none"> ▪ International travelers to countries with high or intermediate levels of endemic hepatitis B virus infection (HBsAg prevalence of ≥2%)¹³ ▪ Persons with hepatitis C virus infection 	<p>Monovalent vaccines</p> <ul style="list-style-type: none"> • Enderix-B® and Recombivax HB®: three-shot series administered at 0, 1, 6 months (any age, including in adulthood) • Heplisav-B®: two-shot series administered at 0 and 1 months (≥ 18 years of age) • PreHevbrio: three-shot series administered at 0, 1, 6 months (≥ 18 years of age) <p>Combination vaccines</p> <ul style="list-style-type: none"> • Pediarix®: Hepatitis B + diphtheria + tetanus + pertussis + polio; three dose series administered at age 2, 4, and 6 months, used to complete the series after the initial birth dose (for children 6 weeks-7 years) • Vaxelis®: DTaP + IPV + Hib + HepB; a 3-dose series for infants at ages 2, 4, and 6 months. • Twinrix®: Licensed for ages 18 and above. Hepatitis B + hepatitis A; three dose series administered at 0, 1,

⁹ Weng, M, Doshani, M, Khan, M, et al. [Universal Hepatitis B vaccination in Adults Aged 19-59 Years: Updated Recommendations of the Advisory Committee on Immunization Practices—United States, 2022](https://www.cdc.gov/mmwr/volumes/71/wr/mm7113a1.htm). MMWR 2022; 71(13):477-483.

<https://www.cdc.gov/mmwr/volumes/71/wr/mm7113a1.htm>

¹⁰ Source: CDC. Access CDC recommendations and other clinical guidelines for viral hepatitis prevention, testing, management, and care as well as patient education materials on the [CDC Viral Hepatitis webpage](#) or [CDPH Office of Viral Hepatitis webpage](#)

¹¹ Schillie S, Vellozzi C, Reingold A, et al. [Prevention of Hepatitis B Virus Infection in the United States: Recommendations of the Advisory Committee on Immunization Practices](#). MMWR 2018;67(1):1-31. Published 2018 Jan 12. doi:10.15585/mmwr.rr6701a1

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<ul style="list-style-type: none"> ▪ Persons with chronic liver disease (including, but not limited to, persons with cirrhosis, fatty liver disease, alcoholic liver disease, autoimmune hepatitis, and an alanine aminotransferase or aspartate aminotransferase level greater than twice the upper limit of normal) ▪ Persons with HIV infection ▪ Persons who are incarcerated 	<p>and 6 months or an accelerated 4-shot series administered at 0, 7, 21-30 days, and 12 months</p>
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HBV Vaccination Notes and Special Circumstances

- If partially vaccinated, the patient should complete the series but does not need to restart the series.
- Vaccination is safe and recommended for people living with HIV and pregnant people. Providers should vaccinate pregnant people needing hepatitis B vaccination with Engerix-B, Recombivax HB, or Twinrix.
- Post-vaccine serologic testing (anti-HBs) is recommended for:
 - Household, needle-sharing, and sexual partners of HBsAg-positive people; HIV-positive people; hemodialysis patients; and healthcare and public safety workers at risk for blood or body fluid exposure (test for anti-HBs 1-2 months after completing vaccination series).
 - Infants born to an HBsAg-positive or HBsAg unknown parent (test for HBsAg and anti-HBs at 9-12 months of age).
 - Booster doses may be indicated for people who do not develop effective immune response.
- Adults receiving hemodialysis or with other immunocompromising conditions should receive 1 dose of 40 mcg/mL (Recombivax HB) administered on a 3-dose schedule at 0, 1, and 6 months or 2 doses of 20 mcg/mL (Engerix-B) administered simultaneously on a 4- dose schedule at 0, 1, 2, and 6 months.

Hepatitis B Screening Recommendations

Serologic testing is the primary means for identifying people with hepatitis B infection. The U.S. Preventive Services Task Force (USPSTF) recommends HBV screening of pregnant people and certain adolescents and adults (see Table 5 below).¹² Even if a person has been immunized, one-time screening per USPSTF recommendations may identify a chronic infection that preceded immunization. The Affordable Care Act requires most USPSTF-recommended services, including HBV screening, to be offered without patient cost sharing.¹³

[Assembly Bill \(AB\) 789](#) (Low, Chapter 470, Statutes of 2021) amended California law (Health and Safety Code (HSC) Section 1316.7) to require that adult patients receiving primary care services in a facility, clinic, unlicensed clinic, or other setting where primary care services are provided be offered a screening test for hepatitis B, to the extent that the services are covered under the patient’s insurance, based on the latest USPSTF recommendations, except under specified circumstances. If the patient accepts the offer of testing and the test is hepatitis B surface antigen (HBsAg) positive, the provider must also offer the patient follow up health care or refer the patient to a health care provider who can provide follow up health care.¹⁴ The offer of a screening test must be culturally and linguistically appropriate.

¹² Source: U.S. Preventive Services Task Force [Screening Recommendations for Hepatitis B and Hepatitis C](#)

¹³ The Affordable Care Act requires services that have a USPSTF rating of “A” or “B” to be covered without cost-sharing. Source: Centers for Medicare & Medicaid Services: [Affordable Care Act Implementation FAQs](#)

¹⁴ “Follow-up health care” includes providing medical management and antiviral treatment for chronic hepatitis B according to the latest national clinical practice guidelines recommended by the American Association for the Study of Liver Diseases.

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For patients with negative HBsAg results who have not received the HBV vaccine series, periodic screening may be useful for those who report continued risk for acquiring HBV, such as persons who continue to inject drugs and men who have sex with men. Clinical judgment should be used to determine screening frequency.

Table 5. Whom and How to Screen for Hepatitis B

Whom to Screen for Hepatitis B ^{15,16}	How to Screen for Hepatitis B
<ul style="list-style-type: none"> • All adults receiving primary care services who accept the offer of HBV screening, as required by Health and Safety Code 1316.7¹⁷ • People born in areas with intermediate/high HBV infection prevalence ($\geq 2\%$)¹⁸ • U.S.-born people not vaccinated as infants whose parents were born in regions with a very high prevalence of HBV infection ($\geq 8\%$), such as sub-Saharan Africa and central and Southeast Asia¹⁹ • Men who have sex with men²⁰ • People with certain health conditions <ul style="list-style-type: none"> ○ People with HIV ○ People with elevated ALT/AST of unknown etiology ○ People with end-stage renal disease, including hemodialysis patients ○ People receiving immunosuppressive therapy • People who currently inject or have previously injected drugs • Household contacts or sexual partners of people with HBV infection • Pregnant people, for each pregnancy, at first prenatal visit, or at delivery if HBsAg status is unknown or who are at new/continued risk for infection • Infants born to HBsAg-positive birthing parent (<i>note: positive total anti-HBc tests in infants often indicate presence of maternal antibodies, so infants should not be tested for anti-HBc</i>) • Donors of blood, plasma, organs, tissues, or semen 	<p>HBsAg can be used as an initial screen. Adding Anti-HBs and total anti-HBc may be helpful to distinguish acute, chronic, or resolved infection.</p> <ul style="list-style-type: none"> • HBsAg: Hepatitis B surface antigen – positivity indicates current infection (acute or chronic) • Anti-HBs: Antibody to hepatitis B surface antigen - positivity indicates immunity due to past, resolved infection or vaccination • Total anti-HBc: Total antibody to hepatitis B core antigen – positivity indicates past or present infection. In the absence of HBsAg or anti-HBs, an anti-HBc-positive test result has one of four interpretations*

* Anti-HBc is present during acute and chronic infection and persists for life. In the absence of anti-HBs or HBsAg, anti-HBc may indicate: 1) resolved infection (most common); 2) false positive anti-HBc (thus susceptible); 3) occult chronic hepatitis B infection (with undetectable HBsAg); or 4) resolving acute infection.

¹⁵ Source: CDC. Access CDC recommendations and other clinical guidelines for viral hepatitis prevention, testing, management, and care as well as patient education materials on the [CDC Hepatitis webpage](#).

¹⁶ U.S. Preventive Services Task Force [Screening Recommendations for Hepatitis B and Hepatitis C](#)

¹⁷ [AB 789 / Health and Safety Code Section 1316.7](#) does not require a provider to offer a screening test when the provider reasonably believes that one of the following conditions applies: patient is being treated for a life threatening emergency; patient has previously been offered or received screening and provider determines screening does not need to be offered again; patient lacks capacity to consent; patient is being treated in emergency department of a general acute care hospital.

¹⁸ Regions with ≥ 2 percent HBsAg prevalence are essentially all regions except Australia, New Zealand, Western Europe, North America, Argentina, Chile, Paraguay, and Uruguay. A complete list is available at [CDC Travelers' Health website](#).

¹⁹ Regions 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 Amazon basin. See complete list at the [CDC Travelers' Health website](#).

²⁰ There are also people who do not identify as male or MSM, but who could be considered for screening because of sexual behaviors and/or increased prevalence in the community. Data on prevalence among transgender and non-binary individuals is lacking, but these individuals may also be considered for screening.

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Testing and Serology for Hepatitis B

Table 6. HBV Screening Test Results, Interpretation, and Management ^{21, 22}

Test Results: HBsAg	Test Results: Anti-HBc	Test Results: Anti-HBs	Interpretation	Management	Vaccinate?
+	+	-	Acute ²³ or Chronic HBV	Manage per American Association for the Study of Liver Disease (AASLD) guidelines or refer to an HBV specialist	No
-	+	+	Past HBV infection, resolved	No further management unless immunocompromised or undergoing chemotherapy or immunosuppressive therapy	No
-	+	-	Unclear; four possibilities: 1) resolved infection 2) false positive Anti-HBc 3) “low level” chronic infection, or 4) resolving acute infection <i>See CDC HBV Serologic Test Fact Sheet</i>	HBV DNA testing if patient immunocompromised	Yes, if not from area of intermediate/high endemicity
-	-	+	Immune	No further testing	No
-	-	-	Uninfected and not immune	No further testing	Yes

Initial Management of Persons Diagnosed with Hepatitis B Infection

- Provide patient with in-language educational materials (see Additional Hepatitis B Resources below)
- Report case to local health department or [via CalREDIE provider portal](#) within seven days; forms and contact information for reporting cases in your jurisdiction can be accessed from your local health department or on the [CDPH reportable diseases webpage](#)
- Vaccinate against hepatitis A (unless immune as indicated by total hepatitis A antibody (anti-HAV))
- 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
- Counsel people who could become pregnant or are pregnant regarding the importance of discussing the hepatitis B diagnosis with their prenatal care provider
- Seek a hepatitis B-experienced clinician to evaluate for, manage, and treat chronic HBV infection

Additional Hepatitis B Resources

- [American Association for the Study of Liver Disease \(AASLD\) Practice Guidelines](#)
- CDC: [Hepatitis B Questions and Answers for Health Professionals](#)
- [Hepatitis B Foundation – Patient Education Fact Sheets](#) (available in multiple languages)
- [Hepatitis B Management: Guidance for the Primary Care Provider](#) (University of Washington)

²¹ Adapted from Terrault NA, Lok ASF, McMahon BJ, et al. [Update on prevention, diagnosis, and treatment of chronic hepatitis B: AASLD 2018 hepatitis B guidance](#). *Hepatology*. 2018;67(4):1560-1599. doi:10.1002/hep.29800

²² CDC, [Interpretation of Hepatitis B Serologic Test Results Fact Sheet](#)

²³ In acute HBV infection, IgM anti-HBc is also positive.

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- [Immunization Action Coalition](#)
- [Physician’s Guide to Hepatitis B, In-language materials](#) (Stanford Medicine Asian Liver Center)
- [San Francisco Hep B Free Project ECHO](#) (training on treating HBV for primary care providers)

Billing Codes for Hepatitis B Vaccination, Testing, and Diagnosis

Table 7. Hepatitis B CPT Billing Codes: Vaccination and Administration

Codes	Descriptions
90739	Monovalent HBV vaccine for adult dosage, intramuscular use (2-dose schedule)
90746	Monovalent HBV vaccine for adult dosage, intramuscular use (3-dose schedule)
90743	Monovalent HBV vaccine for adolescent dosage, intramuscular use, (2-dose schedule)
90744	Hepatitis B vaccine for pediatric/adolescent dosage, intramuscular use (3-dose schedule)
90636	Combination hepatitis A/hepatitis B vaccine for adult dosage
90740	Hepatitis B vaccine for dialysis or immunosuppressed patient, intramuscular use (3-dose schedule)
90747	Hepatitis B vaccine for dialysis or immunosuppressed patient, intramuscular use, (for 40 mcg dosing and 4-dose schedule)
90759	PreHevbrio Hepatitis B vaccine (Hep B) 3-antigen (S, Pre-S1, Pre-S2), 10mcg dosage, 3 dose schedule, for intramuscular use
90460	Immunization administration via any route, through age 18 with counseling by provider, 1st or only vaccine
90461	Immunization administration through age 18 with counseling by provider—any route, each additional during that encounter - List separately in addition to code for primary procedure
90471	Immunization administration (includes percutaneous, intra-dermal, subcutaneous, intramuscular, and jet injections, one vaccine-single or combination vaccine/toxoid)
90472	Immunization administration (includes percutaneous, intra-dermal, subcutaneous, intramuscular, and jet injections), each additional vaccine - List separately in addition to code for primary procedure
G0010	Administration of HBV vaccine

Table 8. Hepatitis B CPT Billing Codes: Screening

Codes	Descriptions
G0499	Hepatitis B screening in non-pregnant, high risk individual includes hepatitis B surface antigen (HBsAg) followed by a neutralizing confirmatory test for initially reactive results, and antibodies to HBsAg (Anti-HBs) and hepatitis B core antigen (Anti-HBc)
86317	Hepatitis B surface antibody (Anti-HBs), quantitative; <i>may be used for post vaccine serologic testing of infants born to infected birthing parents</i> ²⁴
86704	Hepatitis B core antibody (HBcAb or anti-HBc), total – <i>may be used for pregnant people</i>
86705	Hepatitis B core antibody (HBcAb or anti-HBc), IgM antibody
86706	Hepatitis B surface antibody (HBsAb or anti-HBs), qualitative – <i>may be used for pregnant people; for post vaccine serologic testing of infants born to infected birthing parents, test should allow determination of protective level of anti-HBs (i.e., ≥10 mIU/mL)</i>
87340	Infectious agent antigen detection by enzyme immunoassay technique, (e.g., enzyme immunoassay [EIA], enzyme-linked immunosorbent assay [ELISA], immunochemiluminometric assay [IMCA]) qualitative or semiquantitative, multiple-step method; hepatitis B surface antigen (HBsAg)– <i>may be used for pregnant people and post vaccine serologic testing of infants born to infected birthing parents</i>
87516	Infectious agent detection by nucleic acid (DNA or RNA); HBV, amplified probe technique
87517	Infectious agent detection by nucleic acid (DNA or RNA); HBV, quantification
87341	Infectious agent antigen detection by enzyme immunoassay technique, (e.g., enzyme immunoassay [EIA], enzyme-linked immunosorbent assay [ELISA], immunochemiluminometric assay [IMCA]) qualitative or semiquantitative, multiple-step method; hepatitis B surface antigen (HBsAg), neutralization – <i>may be used for pregnant people</i>
91299	Unlisted diagnostic gastroenterology procedure—If physician owns the equipment and is performing the FibroScan in their office

²⁴ Additional information about post vaccination serologic testing for infants born to hepatitis B- infected birthing parents can be found on the [CDC’s website](#).

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Codes	Descriptions
G0499	Hepatitis B screening in non-pregnant, high risk individual includes hepatitis B surface antigen (HBsAg) followed by a neutralizing confirmatory test for initially reactive results, and antibodies to HBsAg (Anti-HBs) and hepatitis B core antigen (Anti-HBc)
86317	Hepatitis B surface antibody (Anti-HBs), quantitative; <i>may be used for post vaccine serologic testing of infants born to infected birthing parents</i> ²⁴
36415	Collection of venous blood by venipuncture

Table 9. Hepatitis B and General Viral Hepatitis ICD-10 Encounter and Diagnosis Codes

Codes	Descriptions
B19.10	Unspecified viral hepatitis B without hepatic coma
B16.1	Acute viral hepatitis B with delta agent, without hepatic coma
B16.9	Hepatitis B acute infection without delta agent and without mention of hepatic coma
B18.1	Chronic viral hepatitis B without delta agent
B18.0	Chronic viral hepatitis B with delta agent
K74.00	Hepatic fibrosis, unspecified
K74.01	Hepatic fibrosis, early fibrosis
K74.02	Hepatic fibrosis, advanced fibrosis
B17.9	Acute viral hepatitis, unspecified
B19.9	Unspecified viral hepatitis without hepatic coma
O09.90 – O09.93	Supervision of high-risk pregnancy, unspecified
O98.411	Pregnancy complicated by care of/management affected by viral hepatitis, first trimester
O98.412	Pregnancy complicated by care of/management affected by viral hepatitis, second trimester
O98.413	Pregnancy complicated by care of/management affected by viral hepatitis, third trimester
O98.419	Pregnancy complicated by care of/management affected by viral hepatitis, unspecified trimester
Z00.00	Encounter for general medical examination of adult without abnormal finding
Z00.01	Encounter for general medical examination of adult with abnormal finding
Z00.8	Encounter for other general examination
Z11.59	Encounter for screening for other viral disease
Z20.5	Contact with / suspected exposure to viral hepatitis
Z20.828	Contact with / suspected exposure to other viral communicable diseases
Z23	Encounter for prophylactic vaccination
Z34.00- Z34.93	Encounter for supervision of normal pregnancy
Z72.51	High-risk sexual behavior, heterosexual
Z72.52	High-risk sexual behavior, homosexual
Z72.53	High-risk sexual behavior, bisexual
Z72.89	Other problems related to lifestyle
Z86.19	Personal history of other infectious and parasitic diseases (e.g., history of HBV, HCV)

Table 10. Hepatitis B CPT Billing Codes: Evaluation & Management

Codes	Descriptions
99201- 99205*	Office or outpatient visit for the evaluation or management of a new patient
99211-99214*	Office or other outpatient visit for the evaluation and management of an established patient
99241-99245*	Consultations: Office or other outpatient, initial or follow-up inpatient, and confirmatory
99451	Interprofessional telephone/internet/electronic health assessment and management service provided by a consultative physician to the patient’s treating/requesting physician or other qualified health care professional (reported by the consultant) ²⁵
99452	Interprofessional telephone/Internet/electronic health record referral service(s) provided by a treating/requesting physician or other qualified health care professional (QHP) (reported by the requesting/treating physician/QHP)

²⁵ Additional information about codes 99451 and 99452 may be found at [American Academy of Pediatrics’ website](https://www.aapedia.org/).

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Hepatitis C

Hepatitis C is an infection caused by the hepatitis C virus (HCV). Chronic HCV is associated with cirrhosis, liver cancer, and liver failure, yet most people are unaware of their infection. HCV infection can be treated and cured in 8-12 weeks with all oral direct-acting antiviral medications. There is no vaccine against HCV.

Hepatitis C Screening Recommendations

Serologic testing is the primary means for identifying people with hepatitis C infection. CDC,²⁶ USPSTF,²⁷ and AASLD/ Infectious Diseases Society of America (IDSA)²⁸ guidelines recommend HCV screening of adults 18-79 years of age and pregnant people, and routine screening for people of all ages at ongoing risk for infection (see Table 11). The Affordable Care Act requires most USPSTF-recommended services, including HCV screening, be offered without patient cost sharing.²⁹

[AB 789](#) (Low, Chapter 470, Statutes of 2021) amended California law (HSC 1316.7) to require that adult patients receiving primary care services in a facility, clinic, unlicensed clinic, or other setting where primary care services are provided be offered a screening test for **hepatitis C**, to the extent that the services are covered under the patient's insurance, based on the latest USPSTF recommendations, except under specified circumstances. If the patient accepts the offer of testing and the test is positive, the provider must also offer the patient follow up health care or refer the patient to a health care provider who can provide follow up health care, including a hepatitis C diagnostic test (HCV RNA).³⁰ The offer of a screening test must be culturally and linguistically appropriate.

²⁶ Schillie S, Wester C, Osborne M, Wesolowski L, Ryerson AB. [CDC Recommendations for Hepatitis C Screening Among Adults - United States, 2020](#). *MMWR Recomm Rep*. 2020;69(2):1-17. Published 2020 Apr 10. doi:10.15585/mmwr.rr6902a1

²⁷ Source: U.S. Preventive Services Task Force [Screening Recommendations for Hepatitis B and Hepatitis C](#)

²⁸ Source: [AASLD/IDSA Recommendations for Hepatitis C Testing](#)

²⁹ The Affordable Care Act requires services that have a USPSTF rating of "A" or "B" to be covered without cost-sharing. Source: Centers for Medicare & Medicaid Services: [Affordable Care Act Implementation FAQs](#)

³⁰ "Follow-up health care" includes providing medical management and antiviral treatment for hepatitis C according to the latest national clinical practice guidelines recommended by the American Association for the Study of Liver Diseases.

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Table 11. Screening for Hepatitis C

Whom to Screen for Hepatitis C	How to Screen for Hepatitis C
<p>Universal HCV Screening:^{31, 32}</p> <ul style="list-style-type: none"> • At least once in a lifetime for all adults 18-79 years of age • Hepatitis C screening for all pregnant people during each pregnancy • All adults receiving primary care services who accept the offer of HCV screening, as required by Health and Safety Code Section 1316.7³³ <p>Groups recommended for one-time HCV testing, regardless of age or setting prevalence among people with recognized conditions or exposures:³⁴</p> <ul style="list-style-type: none"> • Anyone requesting HCV testing, regardless of risk factors, due to reluctance to disclose stigmatized behaviors • People with HIV³⁵ • People who ever injected drugs and shared needles, syringes, or other drug preparation equipment, including those who injected once or a few times many years ago • People with selected medical conditions, including: <ul style="list-style-type: none"> ○ people who ever received maintenance hemodialysis ○ people with persistently abnormal ALT levels • Prior recipients of transfusions or organ transplants, including: <ul style="list-style-type: none"> ○ people who received clotting factor concentrates produced before 1987 ○ people who received a transfusion of blood or blood components before July 1992 ○ people who received an organ transplant before July 1992 ○ healthcare, emergency medical, and public safety personnel after needle sticks, sharps, or mucosal exposures to HCV positive blood • Children born to birthing parents with hepatitis C infection <p>Groups recommended for periodic HCV testing while risk factors persist:³⁶</p> <ul style="list-style-type: none"> • People who currently inject drugs and share needles, syringes, or other drug preparation equipment • People with selected medical conditions, including: <ul style="list-style-type: none"> ○ people who ever received maintenance hemodialysis ○ people with HIV 	<p>Two tests are needed in combination to screen for HCV, and to distinguish chronic or resolved infection:</p> <ul style="list-style-type: none"> • Anti-HCV: The presence of hepatitis C antibodies indicate past or present hepatitis C infection. A reactive result is consistent with past HCV infection that has resolved, current HCV infection or biologic false positivity for HCV antibody. Testing for HCV RNA is needed to identify current infection. • HCV RNA: The presence of HCV RNA indicates current infection. <p>Importance of HCV antibody testing with reflex to HCV RNA:</p> <p>AASLD recommends ordering hepatitis C antibody screening with an automatic reflex to HCV RNA. A positive anti-HCV test alone is not sufficient to diagnose hepatitis C infection; an HCV RNA test is needed to determine if the patient is currently infected. Ordering a reflex test is an effective way of ensuring an HCV RNA test is completed if the anti-HCV test is reactive and does not require the patient to return for another blood draw. Some national commercial laboratories perform reflex testing as the default; others only do so when requested on the lab slip by the ordering provider.</p>

³¹ Except in settings where the prevalence of HCV infection (HCV RNA-positivity) is <0.1%

³² Source: CDC. Access CDC recommendations and other clinical guidelines for viral hepatitis prevention, testing, management, and care as well as patient education materials on the [CDC Hepatitis webpage](#) or [CDPH Office of Viral Hepatitis webpage](#)

³³ [AB 789 / Health and Safety Code Section 1316.7](#) does not require a provider to offer a screening test when the provider reasonably believes that one of the following conditions applies: patient is being treated for a life threatening emergency; patient has previously been offered or received screening and provider determines screening does not need to be offered again; patient lacks capacity to consent; patient is being treated in emergency department of a general acute care hospital.

³⁴ Source: [CDC Hepatitis C Frequently Asked Questions for Health Professionals](#), accessed January 22, 2021

³⁵ Source: Workowski KA, Bachmann LH, Chan PA et al. [Sexually Transmitted Infections Treatment Guidelines, 2021](#). *MMWR Recomm Rep*. 2021;60(4): 1-192. Published 2021 Jul 23.

³⁶ Source: [CDC Hepatitis C Frequently Asked Questions for Health Professionals](#), accessed January 22, 2021

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Testing and Serology for Hepatitis C³⁷

Figure 1: Recommended Sequence for Identifying Current Hepatitis C Infection

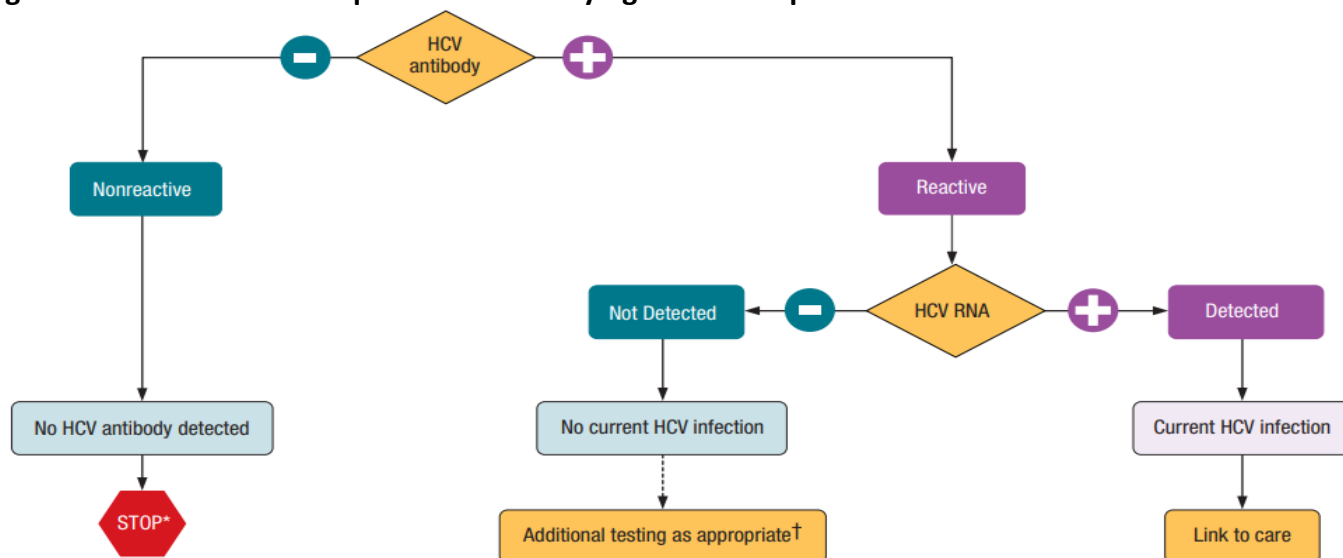


Figure prepared by Centers for Disease Control and Prevention.

* For persons who might have been exposed to HCV within the past 6 months, testing for HCV RNA is recommended. For persons who are immunocompromised, testing for HCV RNA should be performed (particularly if liver transaminases are elevated). Retest periodically as appropriate.

† To differentiate past, resolved HCV infection from biologic false positivity for HCV antibody, testing with another HCV antibody assay can be considered. Repeat HCV RNA testing if the person tested is suspected to have had HCV exposure within the past 6 months or has clinical evidence of HCV disease, or if there is concern regarding the handling or storage of the test specimen.

Table 12. HCV Test Result Interpretation and Further Action³⁸

Test Result	Interpretation	Further Action
HCV antibody nonreactive	No HCV antibody detected	Sample can be reported as nonreactive for HCV antibody. No further action required. If recent exposure in person tested is suspected, test for HCV RNA.*
HCV antibody reactive	Presumptive HCV infection	A repeatedly reactive result is consistent with current HCV infection, or past HCV infection that has resolved, or biologic false positivity for HCV antibody. Test for HCV RNA to identify current infection.
HCV antibody reactive, RNA detected	Current HCV infection	Provide person tested with appropriate counseling and link person tested to care and treatment.†
HCV antibody reactive, RNA not detected	No current HCV infection‡	No further action required in most cases. If distinction between true positivity and biologic false positivity for HCV antibody is desired, and if sample is repeatedly reactive in the initial test, test with another HCV antibody assay. In certain situations, [§] follow up with HCV RNA testing and appropriate counseling.

* If HCV RNA testing is not feasible and person tested is not immunocompromised, do follow-up testing for HCV antibody to detect seroconversion. If the person is immunocompromised, consider testing for HCV RNA.

† It is recommended before initiating antiviral therapy to confirm HCV RNA positivity.

‡ A reactive HCV antibody with negative HCV RNA could also indicate current HCV infection in a person undergoing HCV treatment with an intermittently undetectable viral load. To rule out this scenario, clarify if person is currently taking HCV direct-acting antiviral therapy. Perform follow up viral load testing after

³⁷ Source: CDC. [Recommended Testing Sequence for Identifying Current Hepatitis C Virus Infection.](#)

³⁸ Source: CDC. [Interpretation of Results of Tests for Hepatitis C Virus \(HCV\) Infection and Further Actions.](#)

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treatment per HCV treatment guidelines to assess for evidence of sustained virologic response (cure).³⁹
§ If the person tested is suspected of having HCV exposure within the past 6 months, or has clinical evidence of HCV disease, or if there is concern regarding the handling or storage of the test specimen.

Initial Management of Persons Diagnosed with Hepatitis C Infection⁴⁰

- Counsel patient on meaning of test results; ensure patients with reactive anti-HCV receive HCV RNA testing; and provide patient with culturally and linguistically appropriate educational materials.
- Vaccinate patients against hepatitis A and hepatitis B unless immune (or infected with hepatitis B).
- Advise patients to reduce or eliminate intake of alcohol and other liver toxins.
- Counsel patients to reduce the risk for transmitting hepatitis C to others:
 - If injecting, counsel on practicing safer injection, refer to [local harm reduction services](#) and [syringe service programs](#), and, if desired, [substance use disorder treatment](#).
 - Follow infection control guidelines and avoid sharing personal items that might have blood on them, such as razors, nail clippers, toothbrushes, and tattoo and piercing equipment.
 - Carry naloxone if patient or their friends or family members are at risk for opioid overdose.
- Persons with HIV infection and those with multiple sexual partners or sexually transmitted infections should be encouraged to use barrier precautions to prevent sexual transmission. Other persons with HCV infection should be counseled that the risk of sexual transmission is low and may not warrant barrier protection. People who inject drugs should be offered HIV pre-exposure prophylaxis.
- Evaluate for, manage, and treat chronic hepatitis C infection, either by referral or through clinical consultation with an experienced hepatitis C treatment provider.
 - Hepatitis C can be effectively managed and treated in primary care settings; multiple resources exist to train primary care providers and other non-specialty care providers to treat hepatitis C.
- When referring patients, provide the test results listed in the [AASLD simplified treatment algorithm](#).
- Report case to local health department or [via CalREDIE provider portal](#); methods for reporting cases can be accessed from your local health department or the [CDPH reportable diseases webpage](#).

Additional Hepatitis C Resources

- [Association for the Advanced Study of Liver Diseases \(AASLD\) HCV Treatment Guidelines](#)
- A primer on HCV for primary care providers, including information on HCV medications and non-invasive liver disease staging methods, can be found at [University of Washington Hepatitis C Online](#)
- California Department of Health Care Services [Medi-Cal Hepatitis C Treatment Policy](#)
 - According to DHCS, “Treatment is recommended for all patients with chronic HCV infection, except those with a short life expectancy who cannot be remediated by HCV therapy, liver transplantation, or another directed therapy.”
- CDC [patient education materials](#) for people living with and risk for hepatitis C infection
- [CDPH Issue Brief: Hepatitis C Treatment Among People Who Inject Drugs \(PDF\)](#)
 - According to AASLD, “Active or recent drug use or a concern for reinfection is not a contraindication to HCV treatment.”
- CDPH [Office of Viral Hepatitis Prevention](#) HCV information, including fact sheets and [surveillance data](#)
- Video-conferencing-based training for primary care providers in California to learn how to treat hepatitis C is available at [UCSF Hepatitis C Project ECHO](#) and [USC Hepatitis C Project ECHO](#)

³⁹ Source: AASLD/IDSA: [Recommendations for Testing, Managing, and Treating Hepatitis C](#).

⁴⁰ Source: AASLD/IDSA. HCV Guidance: Recommendations for Testing, Managing, and Treating Hepatitis C. Accessed February 10, 2021, at www.hcvguidelines.org.

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Billing Codes for Hepatitis C Testing and Diagnosis

Table 13. Hepatitis C CPT Codes: Testing

Codes	Descriptions
86803*	Hepatitis C antibody
G0472*	Hepatitis C antibody screening for individual at high risk and other covered indication(s)
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
87902	Infectious agent genotype analysis by nucleic acid (DNA or RNA); hepatitis C virus
3266F	Hepatitis C, genotype test
91299	Unlisted Diagnostic Gastroenterology Procedure - If physicians own the equipment and is performing the FibroScan in the physician's office.
36415	Collection of venous blood by venipuncture

Table 14. Hepatitis C ICD-10 Diagnosis Codes

Codes	Descriptions
Z20.5	Contact with / suspected exposure to viral hepatitis
Z20.828	Contact with / suspected exposure to other viral communicable diseases
Z23	Encounter for prophylactic vaccination
Z72.51	High-risk sexual behavior, heterosexual
Z72.52	High-risk sexual behavior, homosexual
Z72.53	High-risk sexual behavior, bisexual
Z00.0 [†]	Encounter for general medical examination of adult without abnormal finding
Z00.01 [†]	Encounter for general medical examination of adult with abnormal finding
Z00.8 [†]	Encounter for other general examination
Z11.59	Encounter for screening for other viral disease
K74.00	Hepatic fibrosis, unspecified
K74.01	Hepatic fibrosis, early fibrosis
K74.02	Hepatic fibrosis, advanced fibrosis
B17.10	Acute hepatitis C without hepatic coma
B18.2	Chronic hepatitis C
B19.20	Unspecified viral hepatitis C without hepatic coma
B17.9	Acute viral hepatitis, unspecified
B19.9	Unspecified viral hepatitis without hepatic coma
Z86.19	Personal history of other infectious and parasitic diseases (e.g., history of hepatitis B; history of hepatitis C)
Z72.89 [§]	Other problems related to lifestyle
F11.10 – F16.99	Substance abuse, use, and dependence
F19.10 – F19.99	Other psychoactive substance abuse, use, and dependence
F19.20 [§]	Other psychoactive substance abuse, uncomplicated

Table 15. Hepatitis C CPT Codes: Evaluation and Management

Codes	Descriptions
99201-99205 [†]	Office or outpatient visit for the evaluation or management of a new patient
99211 -99214 [†]	Office or other outpatient visit for the evaluation and management of an established patient
99241-99245 [†]	Consultations: Office or other outpatient, initial or follow-up inpatient, and confirmatory
99451	Interprofessional telephone/internet/electronic health assessment and management service provided by a consultative physician to the patient's treating/requesting physician or other qualified health care

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Codes	Descriptions
	professional (reported by the consultant) ⁴¹
99452	Interprofessional telephone/Internet/electronic health record referral service(s) provided by a treating/requesting physician or other qualified health care professional (QHP) (reported by the requesting/treating physician/QHP)

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* [Effective 6/1/20](#), HCPCS code G0472, and CPT® codes 86803 & 86804 may be billed with any ICD-10-CM code

† Current resources on telehealth reimbursement policies in California, which are rapidly evolving each year, are available at the [California Telehealth Resource Center's website](#).

§ [Medicare covers](#) hepatitis C screening of people at risk for hepatitis C (people who use or have used injection drugs, had a blood transfusion before 1992, born between 1945-1965) and annual ongoing screening for people who continue to use injection drugs. (As of October 2021, Medicare has not yet issued a National Coverage Determination for hepatitis C screening of all adults as recommended by USPSTF.) The initial encounter should include diagnosis code Z72.89; follow up encounters for annual testing should include diagnosis codes Z72.89 and F19.20. Single screening of all people with a history of blood transfusion prior to 1992 should be assigned ICD-10 diagnosis code Z72.89 for use with Healthcare Common Procedure Coding System (HCPCS) G0472.

⁴¹ Additional information about codes 99451 and 99452 may be found at [American Academy of Pediatrics' website](#).

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Reporting to Public Health

California Code of Regulations (CCR) Title 17, Section 2500 requires health care providers to report certain diseases (cases or suspected cases) to the local health officer of the jurisdiction where the patient resides. “Health care provider” means a physician and surgeon, a veterinarian, a podiatrist, a nurse practitioner, a physician assistant, a registered nurse, a nurse midwife, a school nurse, an infection control practitioner, a medical examiner, a coroner, or a dentist. A list of reportable diseases, along with required reporting timelines, can be found on [the CDPH Division of Communicable Disease Control website](#).

Hepatitis A Reporting

Acute hepatitis A infection should be reported by electronic transmission (including FAX), telephone, or mail within one working day of identification using the [Hepatitis A Case Report Form](#).

Hepatitis B and C Reporting

Hepatitis B and hepatitis C infections (specify acute, chronic, or perinatal) should be reported by electronic transmission (including fax), telephone, or mail within seven calendar days of identification.

There are multiple reporting forms that may be used for hepatitis B and C. They can be found at:

- [Acute Hepatitis B and Hepatitis C Case Report Form](#)
- [Confidential Morbidity Report Form](#) (used for chronic hepatitis B and chronic hepatitis C)
- [Perinatal Hepatitis B Case Report Form](#)
- [Perinatal Hepatitis C Case Report Form](#)

Reporting forms for viral hepatitis and all other communicable diseases can be obtained from your local health jurisdiction (LHJ) or downloaded from the [CDPH Communicable Disease Control Forms webpage](#). In [participating LHJs](#), health care providers can also submit communicable disease reports electronically through the California Reportable Diseases Information Exchange ([CalREDIE Provider Portal](#)).

Appendix A. Patient Self-Assessment for Viral Hepatitis

Hepatitis A, hepatitis B, hepatitis C are transmitted in different ways; some are preventable with a vaccine. Most people do not know they are infected until they are tested. For each question below, please check if any of the statements apply to you. If any do, your provider may discuss vaccination and or testing with you.

1. *Should you be vaccinated against hepatitis A (HAV)?*

None of the below apply to me

Yes, at least one of the below applies to me

- I wish to be protected from HAV infection and have not been vaccinated.
- I am under 18 years of age and have not been vaccinated against HAV.
- I am pregnant.
- I am a man who has sex with men.⁴²
- I have injected drugs or shared drug injection equipment/needles/syringes.
- I am currently experiencing homelessness.
- I have chronic (long-term) liver disease.
- I am HIV-positive.
- I am planning to travel outside of North America or will have close contact with someone who is from outside of North America.
- I am a health care or a public safety worker with reasonably anticipated occupational exposures to blood or infectious body fluids.

2. *Should you be vaccinated against hepatitis B (HBV)?*

None of the below apply to me

Yes, at least one of the below applies to me

- I wish to be protected from HBV infection and have not been vaccinated.
- I am under 18 years of age and have not been vaccinated against HBV.
- I am 18-59 years of age and have not been vaccinated against HBV.
- I am 60 years of age or older and would like to be vaccinated because I have one of these risk factors:
 - I have diabetes
 - I have had more than one sexual partner in the past six months.
 - I am seeking sexually transmitted infection testing and treatment.
 - I live, have sex with, or share needles with someone who has HBV.
 - I am a health care or a public safety worker with reasonably anticipated occupational exposures to blood or infectious body fluids.
 - I have chronic (long-term) liver disease.
 - I am HIV-positive, have hepatitis C, or am on immunosuppressive therapy.
 - I have end-stage renal disease.
 - I am planning to travel to one of the following areas: Asia, Africa, Ecuador, Peru, Bolivia, Chile, Argentina, Uruguay, Guyana, Suriname, the interior Amazon Basin in South America, Eastern Europe, Central Asia or the Middle East, the Pacific Islands, or Australia.
 - I live or work in a facility for people with developmental disabilities.

⁴² There are also people who do not identify as male or MSM, but who could be considered for vaccination because of sexual behaviors and/or increased prevalence in the community. Data on prevalence among trans, gender non-conforming, and non-binary individuals is lacking, but these individuals may be considered for vaccination and/or screening.

3. *Should you be tested for hepatitis B (HBV)?*

None of the below apply to me

Yes, at least one of the below applies to me

- I wish to be tested for hepatitis B.
- I was born in one of the following areas: Asia, Africa, Ecuador, Peru, Bolivia, Chile, Argentina, Uruguay, Guyana, Suriname, the Amazon Basin in South America, Eastern Europe, Central Asia or the Middle East, the Pacific Islands, or Australia.
- I was not vaccinated for HBV as an infant.
- My birth parent was infected with hepatitis B when I was born.
- I am pregnant.
- I am HIV-positive, have hepatitis C, or am on immunosuppressive therapy.
- I have had abnormal liver enzyme test results for an unknown reason.
- I have been on hemodialysis.
- I have had a sexual partner who was infected with HBV.
- I have lived in same house with someone infected with HBV.
- I am a man who has sex with men.⁴³
- I have injected drugs or shared drug injection equipment/needles.
- I am a health care or public safety worker with a known, recent occupational exposure to hepatitis B-infected blood or bodily fluids (e.g., through an accidental needle stick).

4. *Should you be tested for hepatitis C?*

None of the below apply to me

Yes, at least one of the below applies to me

- I have never been tested for hepatitis C.
- I wish to be tested for hepatitis C.
- I am between 18 and 79 years of age.
- I have injected illicit drugs or shared injection drug use equipment, even once, many years ago.
- I received donated blood or donated organs before 1992 and/or blood clotting products before 1987.
- I have been on hemodialysis.
- I am a health care or public safety worker with a known, recent occupational exposure to hepatitis C-infected blood or bodily fluids (e.g., through an accidental needle stick).
- I am HIV-positive.
- I have had signs or symptoms of liver disease (e.g., abnormal liver enzyme tests, jaundice).

For administrative use only. If patient responded “yes” to any of the above:

#1: consider administering first dose of HAV vaccine (*barring known previous vaccination or immunity due to previous infection*)

#2: consider administering first dose of HBV vaccine (*barring known previous vaccination or immunity due to previous infection*)

#3: consider ordering test for HBV based on clinical considerations discussed above and per HSC 1316.7

#4: consider ordering test for HCV (anti-HCV, *if not previously infected with HCV*) w/reflex to HCV RNA

⁴³ There are also people who do not identify as male or MSM, but who could be considered for testing because of sexual behaviors and/or increased prevalence in the community. Data on prevalence among trans, gender non-conforming, and non-binary individuals is lacking, but these individuals may be considered for testing.

Appendix B.

Special Populations Recommendations Quick Reference

<p>Men Who Have Sex with Men⁴⁴</p> <ul style="list-style-type: none"> • Hepatitis A vaccine • Hepatitis B vaccine and screening • Hepatitis C screening - <i>if 18-79 years of age</i> 	<p>People Who Use(d) Injection or Non-Injection Drugs</p> <ul style="list-style-type: none"> • Hepatitis A vaccine • Hepatitis B vaccine and screening • Hepatitis C screening
<p>Infants, Children, and Adolescents</p> <ul style="list-style-type: none"> • Hepatitis A vaccine • Hepatitis B vaccine • Hepatitis B screening – <i>if born to HBsAg-positive birthing parent</i> • Hepatitis C screening – <i>if ≥18 months of age and born to HCV RNA positive birthing parent</i> 	<p>Pregnant People</p> <ul style="list-style-type: none"> • Hepatitis A vaccine - <i>if identified as at increased risk for infection</i> • Hepatitis B vaccine - <i>if identified as at increased risk for infection</i> • Hepatitis B screening – <i>if HBsAg status unknown or at increased risk for infection</i> • Hepatitis C screening
<p>People on Dialysis/Hemodialysis or with End Stage Renal Disease</p> <ul style="list-style-type: none"> • Hepatitis B vaccine and screening • Hepatitis C screening 	<p>People Who Are Incarcerated</p> <ul style="list-style-type: none"> • Hepatitis A vaccine - <i>for prevention and control of HAV outbreaks</i> • Hepatitis B vaccine • Hepatitis C screening - <i>if 18-79 years of age</i>
<p>People with Hepatitis C Infection</p> <ul style="list-style-type: none"> • Hepatitis A vaccine • Hepatitis B vaccine 	<p>People Experiencing Homelessness</p> <ul style="list-style-type: none"> • Hepatitis A vaccine • Hepatitis C screening - <i>if 18-79 years of age</i>
<p>People with Diabetes Mellitus</p> <ul style="list-style-type: none"> • Hepatitis B vaccine - <i>if 19-59 years of age, and 60 years of age and older at the discretion of the treating clinician</i> 	<p>People with Occupational Exposure Risk</p> <ul style="list-style-type: none"> • Hepatitis A vaccine • Hepatitis B vaccine • Hepatitis C screening – <i>after exposure to HCV positive blood</i>
<p>People Who are HIV Positive</p> <ul style="list-style-type: none"> • Hepatitis A vaccine • Hepatitis B vaccine and screening • Hepatitis C screening 	<p>People with Chronic Liver Disease / Persistent Abnormal ALT Levels</p> <ul style="list-style-type: none"> • Hepatitis A vaccine • Hepatitis B vaccine and screening • Hepatitis C screening
<p>People Traveling to Certain Countries⁴⁵</p> <ul style="list-style-type: none"> • Hepatitis A vaccine • Hepatitis B vaccine 	<p>Adults Requesting Vaccination/Screening</p> <ul style="list-style-type: none"> • Hepatitis A vaccine • Hepatitis B vaccine and screening • Hepatitis C screening

⁴⁴ There are also people who do not identify as male or MSM, but who could be considered for vaccination and/or screening because of sexual behaviors and/or increased prevalence in the community. Data on prevalence among trans, gender non-conforming, and non-binary individuals is lacking, but some individuals may be considered for vaccination and/or screening.

⁴⁵ To find vaccination recommendations for travel to specific countries, see [CDC Travelers' Health website](#)