

IN THIS ISSUE: Universal Hepatitis B Vaccination in Adults Aged 19–59 Years: Updated ACIP Recommendations

Universal Hepatitis B Vaccination in Adults Aged 19–59 Years: Updated Recommendations of the Advisory Committee on Immunization Practices (ACIP)

Introduction

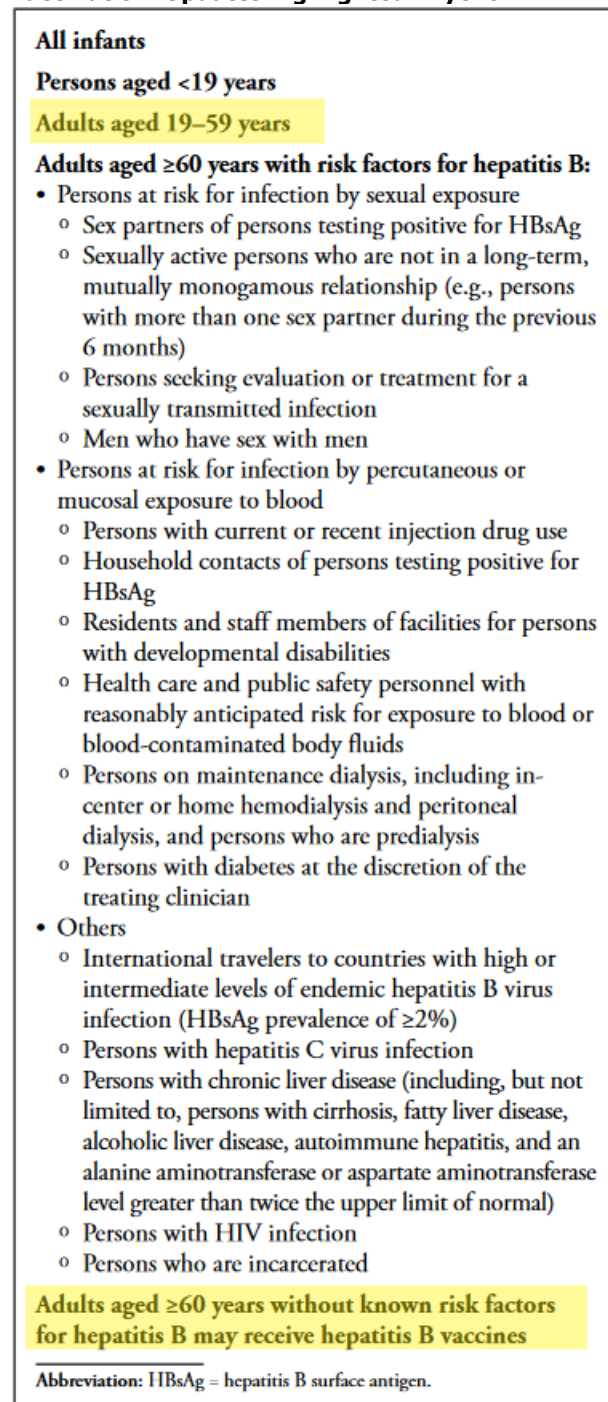
Hepatitis B (HepB) is a vaccine-preventable, communicable disease of the liver caused by HBV. Since HepB vaccine was introduced in 1982, the number of reported HepB cases has declined substantially. However, the rate of reported acute HepB cases has remained stable over the past decade.^{1,2} The Advisory Committee on Immunization Practices (ACIP) recently updated recommendations for HepB vaccination in hopes of increasing vaccination coverage and decreasing HepB cases.¹ A summary of persons recommended to receive HepB vaccination is presented in Figure 1. Recommended dosing and scheduling is in Table 1. Providers who have questions about the updated recommendations can contact the Washoe County Health District (WCHD) Immunization Program at 775-328-2402.

ACIP HepB Update Highlights

1. Expanded age range for universal HepB vaccination now includes adults aged 19–59 years. Approximately one half of acute HepB cases reported in 2019 occurred among adults aged 30–49 years while one in five cases occurred in adults aged 50–59 years. However, HepB vaccination coverage among adults aged ≥19 years is low (30%). A universal recommendation for HepB vaccination 1) eliminates the need for risk factor screening and disclosure before vaccination, and 2) could increase the number of persons who receive vaccination before the onset of chronic liver disease and other comorbidities (e.g., obesity or diabetes) that might make vaccination less effective.¹

2. Adults aged ≥60 years without known risk factors for hepatitis B may receive HepB vaccines. Previously providers were advised to administer HepB vaccine to all patients who requested it. The new language for adults aged ≥60 years without known risk factors is intended to prompt all providers to offer HepB vaccination to patients in that cohort, rather than wait for a patient to request vaccination.¹

Figure 1: Persons recommended to receive hepatitis B vaccination. Updates highlighted in yellow.



Source: <https://www.cdc.gov/mmwr/volumes/71/wr/pdfs/mm7113a1-H.pdf>

Table 1: Recommended doses and schedules of hepatitis B vaccine for adults aged ≥18 years and persons aged 11–19 years, by vaccine type and age group*

HepB vaccine*/Age group, yrs	Dose (µg)	Volume (mL)	Schedule
Recombivax HB			
11–15	10	1	2 doses at 0 and 4–6 mos [†]
11–19	5	0.5	3 doses at 0, 1, and 6 mos [†]
≥20	10	1	
Adults on hemodialysis and other immunocompromised adults aged ≥20	40	1	
Engerix-B			
11–19	10	0.5	3 doses at 0, 1, and 6 mos
≥20	20	1	
Adults on hemodialysis and other immunocompromised adults aged ≥20	40	2	4 doses at 0, 1, 2, and 6 mos [§]
Heplysav-B			
≥18 [¶]	20	0.5	2 doses at 0 and 1 mos
Twinrix (HepA-HepB combination vaccine)			
≥18	20	1	3 doses at 0, 1, and 6 mos (standard) or 4 doses at 0 d, 7 d, 21–30 d, and 12 mos (accelerated)
PreHevbrio (ACIP-recommended in 2022)			
≥18 [¶]	10	1	3 doses at 0, 1, and 6 mos

Abbreviations: ACIP = Advisory Committee on Immunization Practices; HepA = hepatitis A; HepB = hepatitis B.

* If the HepB vaccination schedule is interrupted, the series does not need to be restarted. If a 3-dose series is interrupted after the first dose, the second dose should be administered as soon as possible; the second and third doses should be separated by an interval of ≥8 weeks. If only the third dose has been delayed, it should be administered as soon as possible. The final dose of a 3-dose series must be administered ≥8 weeks after the second dose and ≥16 weeks after the first dose; the minimum interval between the first and second doses is 4 weeks. Inadequate doses of hepatitis B vaccine or doses received after a shorter-than-recommended dosing interval should be readministered, using the correct dosage or schedule. Vaccine doses administered ≤4 days before the minimum interval or age are considered valid. Because of the unique accelerated schedule for Twinrix (<https://www.fda.gov/media/119351/download>), the 4-day guideline does not apply to the first 3 doses of this vaccine when administered on a 0-day, 7-day, 21–30-day, and 12-month schedule. PreHevbrio (<https://www.fda.gov/media/154561/download>) is a three-antigen HepB vaccine approved by the Food and Drug Administration in 2021 and recommended by ACIP in 2022.

[†] A 2-dose schedule of Recombivax HB adult formulation (10 µg) (<https://www.fda.gov/media/74274/download>) is licensed for children and adolescents aged 11–15 years. When scheduled to receive the second dose, persons aged ≥16 years should be switched to a 3-dose series, with doses 2 and 3 consisting of the pediatric formulation administered on an appropriate schedule.

[§] Engerix-B (<https://www.fda.gov/media/119403/download>) for adults on hemodialysis and is administered as a series of 4 doses (2 mL each) as a single 2-mL dose or as two 1-mL doses on a 0-, 1-, 2-, and 6-month schedule. Recombivax HB for adults on dialysis is a 3-dose series.

[¶] The safety and effectiveness of Heplysav-B and PreHevbrio have not been established in adults on hemodialysis. Data are not available to assess the effects of Heplysav-B and PreHevbrio on breastfed infants or on maternal milk production and excretion. Data on Heplysav-B (<https://www.fda.gov/media/108745/download>) and PreHevbrio are currently insufficient to inform vaccine-associated risks in pregnancy. Thus, providers should vaccinate pregnant persons needing HepB vaccination with Engerix-B, Recombivax HB, or Twinrix.

Source: <https://www.cdc.gov/mmwr/volumes/71/wr/pdfs/mm7113a1-H.pdf>

Reporting

The list of reportable communicable diseases and reporting forms can be found at:

<http://tinyurl.com/WashoeDiseaseReporting>

Report communicable diseases to WCHD. To report a communicable disease, please call 775-328-2447 or fax your report to the WCHD at 775-328-3764.

Acknowledgement

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References

1 Weng MK, Doshani M, Khan MA, et al. Universal Hepatitis B Vaccination in Adults Aged 19–59 Years: Updated Recommendations of the Advisory Committee on Immunization Practices — United States, 2022. *MMWR Morb Mortal Wkly Rep* 2022;71:477–483. Accessed April 2022
https://www.cdc.gov/mmwr/volumes/71/wr/mm7113a1.htm?s_cid=m7113a1_x.

2 Centers for Disease Control and Prevention. Hepatitis B Information. Accessed April 2022 <https://www.cdc.gov/hepatitis/hbv/index.htm>.