# Hepatitis B (HepB) CDC recommendations- tabular CDSS rules (optimal)

Updated on 2024-05-01

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| **Vaccine** | **#** | **Age1** | **Age2** | **SpecialCondition** | **Immunization record** | | | **MedIndication1** | **MedIndication2** | **MedIndication3** | **Todo1** | **Todo2** | **Todo3** | **Todo4** | **Note-display** | **Note** |
|  |  |  |  |  | **Y/N** | **Dose** | **Adm date** |  |  |  |  |  |  |  |  |  |
| **HepB (monovalent HepB vaccine)** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Minimal age: birth |
| **Regular and catch-up schedule** | | | | | | | | | | | | | | | | |
|  | 1 | Birth | <= 18 yrs |  | N |  |  |  |  |  | Admin 1st dose at birth | Schedule 2nd dose (>= 4 wks AND <= 8 wks) from 1st dose | Schedule 3rd dose >= 8 wks from 2nd dose AND >= 16 wks from 1st dose AND (>= 24 wks AND <= 18 mon) of age |  |  | Minimal age for the final dose is 24 wks |
|  | 2 | >= 8 weeks | <= 18 yrs |  | N |  |  |  |  |  | Admin 1st dose | Schedule 2nd dose >= 4 wks from 1st dose | Schedule 3rd dose >= 8 wks from 2nd dose AND >= 16 wks from 1st dose AND >= 24 wks of age |  |  |  |
| **Mother is HBsAg-negative** | | | | | | | | | | | | | | | | |
|  | 3 | Birth |  | Medically stable and Infant >= 2 kg |  |  |  | Mother is HBsAg-negative |  |  | Admin 1st dose within 24 hrs of birth | Schedule 2nd dose >= 4 wks of the 1st dose | Schedule 3rd dose >= 8 wks from 2nd dose AND >= 16 wks from 1st dose AND >= 24 wks of age |  |  |  |
|  | 4 | Birth |  | Infant < 2 kg |  |  |  | Mother is HBsAg-negative |  |  | Admin 1st dose when >= 1 mon of age or hospital discharge, whichever is earlier | Schedule 2nd dose >= 4 wks from 1st dose | Schedule 3rd dose >= 8 wks from 2nd dose AND >= 16 wks from 1st dose AND >= 24 wks of age |  |  |  |
| **Mother is HBsAg-positive** | | | | | | | | | | | | | | | | |
|  | 5 | Birth |  | Infant >= 2 kg |  |  |  | Mother is HBsAg-positive |  |  | Admin single-antigen HepB vaccine and Hepatitis B immune globulin (HBIG) in separate limbs within 12 hrs of birth | Schedule 2nd dose >= 4 wks from 1st dose | Schedule 3rd dose >= 8 wks from 2nd dose AND >= 16 wks from 1st dose AND >= 24 wks age |  |  |  |
|  | 6 | Birth | <=18 yrs | Infant < 2 kg |  |  |  | Mother is HBsAg-positive |  |  | Admin single-antigen HepB vaccine and Hepatitis B immune globulin (HBIG) in separate limbs within 12 hrs of birth | Schedule 2nd dose >= 4 wks from 1st dose | Schedule 3rd dose >= 4 wks from 2nd dose | Schedule 4th dose >= 8 wks from 3rd dose AND >= 16 wks from 2nd dose AND >= 24 wks of age |  |  |
|  | 7 | >= 9 mon | <= 12 mon | Infant completes HepB vaccine series |  |  |  | Mother is HBsAg-positive | Postvaccination serologic testing for anti-HBs and HBsAg;  HBsAg-negative infants with anti-HBs levels ≥10 mIU/ mL |  | No further action |  |  |  |  |  |
|  | 8 | >= 9 mon | <= 12 mon | Infant completes HepB vaccine series |  |  |  | Mother is HBsAg-positive | Postvaccination serologic testing for anti-HBs and HBsAg;  HBsAg-negative infants with anti-HBs <10 mIU/mL |  | Admin a single dose of HepB vaccine and schedule a postvaccination serologic testing between 4 wks and 8 wks from now | Infants whose anti-HBs remains <10 mIU/mL, admin one dose HepB and schedule another dose>= 4 wks | Schedule a Postvaccination serologic testing for anti-HBs and HBsAg between 4wks and 8 wks of final dose |  |  |  |
|  | 9 | >= 9 mon | <= 12 mon | Infant completes HepB vaccine series |  |  |  | Mother is HBsAg-positive | Postvaccination serologic testing for anti-HBs and HBsAg;  HBsAg-negative infants with anti-HBs <10 mIU/mL |  | Admin a dose of HepB vaccine and schedule a 2nd dose >= 4 wks from now | Admin a 3rd dose HepB vaccine >= 8 wks from 2nd dose >= 16 wks from 1st dose AND >= 24 wks age | Schedule a  postvaccination serologic testing between 4wks and 8 wks of final dose |  |  | Alternative strategy based on clinical circumstances or family preference, no evidence to show more benefit of this strategy |
|  | 10 | >= 9 mon | <= 12 mon | Infant completes HepB vaccine series |  |  |  | Mother is HBsAg-positive | Postvaccination serologic testing for anti-HBs and HBsAg;  HBsAg-positive infants |  | Should be referred for appropriate follow-up |  |  |  |  |  |
| **Mother’s HBsAg status is unknown** | | | | | | | | | | | | | | | | |
|  | 11 | Birth |  | Infant > 2 kg |  |  |  | Mother’s HBsAg status is unknown |  |  | Admin HepB vaccine within 12 hrs of birth |  |  |  |  |  |
|  | 12 | Birth |  | Infant < 2 kg |  |  |  | Mother’s HBsAg status is unknown |  |  | Admin HepB vaccine and HBIG (in separate limbs) within 12 hrs of birth | Schedule 2nd dose >= 4wks from birth | Schedule 3rd dose >= 4 wks from 2nd dose | Schedule 4th dose >= 8 wks AND > 16 wks from 2nd dose AND >= 24 wks of age |  |  |
|  | 13 | Birth | <= 7 days | Infant > 2 kg |  |  |  | Mother’s HBsAg status is unknown; if mother is HBsAg-positive |  |  | Admin HepB vaccine and HBIG (in separate limbs) ASAP, no later than 7 days of age | Schedule 2nd dose >= 4 wks from the first dose | Schedule 3rd dose >= 4 wks from 2nd dose | Schedule 4th dose >= 8 wks from 3rd dose AND >= 16 wks from 2nd dose AND >= 24 wks of age |  |  |
| **Special situations** | | | | | | | | | | | | | | | | |
|  | 14 |  |  |  |  |  |  | Hemodialysis patients |  |  | Annual anti-HBs testing, if with anti-HBs level <10 mIU/mL, administer a booster dose |  |  |  |  |  |
|  | 15 |  |  |  |  |  |  | Other immunocompromised persons, HIV-infected  persons, hematopoietic stem-cell transplant recipients, persons receive chemotherapy | For persons with an ongoing risk for exposure |  | Annual anti-HBs testing, if with anti-HBs level <10 mIU/mL, administer a booster dose |  |  |  |  |  |
|  | 16 |  |  |  |  |  |  | Severe allergic reaction (e.g., anaphylaxis) after a previous dose or to a vaccine component, including yeast |  |  | **Do not administer** |  |  |  |  | Contraindication |
|  | 17 |  |  |  |  |  |  | Moderate or severe acute illness with or without fever |  |  | Only admin if benefits outweigh risks for an adverse reaction |  |  |  |  | Precaution |
| **Heplisav-B** | | | | | | | | | | | | | | | | |
|  | 18 | >= 18 yrs |  |  | N |  |  |  |  |  | Admin 1st dose | Schedule a 2nd dose >= 4 wks from 1st dose |  |  |  |  |
|  | 19 | >=18 yrs |  |  |  |  |  | Pregnancy |  |  | **Do not administer** |  |  |  |  | Contraindication |
| **Recombivax HB** | | | | | | | | | | | | | | | | |
|  | 20 | >= 11 yrs | <= 15 yrs |  | N |  |  |  |  |  | Admin 1st dose | Schedule a 2nd dose >= 4 mon from 1st dose |  |  |  |  |
| **Combined HepA and HepB: Twinrix** | | | | | | | | | | | | | | | | |
|  | 21 | >= 18 yrs |  |  | N |  |  |  |  |  | Admin 1st dose | Schedule a 2nd dose = 4 wks from 1st dose | Schedule a 3rd dose = 6 mon from 1st dose |  |  |  |
|  | 22 | >=18 yrs |  |  | N |  |  |  |  |  | Admin 1st dose | Schedule a 2nd dose = 7 days from 1st dose | Schedule a 3rd dose between (21 to 30 days )from 1st dose | Schedule a booster = 12 mon from 1st dose |  |  |
| Pregnant women who are identified as being at risk for HBV infection during pregnancy (e.g., having more than one sex partner during the previous 6 months, been evaluated or treated for an STI, recent or current injection drug use, or having had an HBsAg-positive sex partner) should be vaccinated. | | | | | | | | | | | | | | | | |
| use monovalent HepB vaccine for doses administered before age 6 weeks | | | | | | | | | | | | | | | | |