Hepatitis A

Vaccine Administration

Vaccine doses, routes, and schedules are found on this page; administration errors are included if applicable. Other issues related to this vaccine are found on the *Medical Summary* page.

See also Prevaccination Serological Testing in Special Considerations.

Note: Because hepatitis A virus (HAV) has a relatively long incubation period, the vaccine may not prevent the disease in individuals who have an unrecognized HAV infection at the time of vaccination.

U.S. health care providers must provide the most current *Vaccine Information Statement* (VIS) for hepatitis A vaccine to the patient (or parent/legal guardian of a child) before each dose of vaccine is given. If combination hepatitis A-hepatitis B (HepA-HepB) vaccine is administered, a VIS for HepA vaccine and a VIS for HepB vaccine must be provided.

Hepatitis A and Hepatitis A Combination Vaccines

Table: Summary of Hepatitis A and Hepatitis A Combination Vaccines for Normal Hosts

Brand	Age	Dose and Route	Primary Schedule	Primary Booster	Follow-up Boosters	Accelerated Schedules
Havrix	≥ 6 mos	Age 1-18 yrs: 0.5 mL IM[1] Age ≥ 19 yrs: 1 mL IM[1]	0 and 6-12 mos[2]	None	None	For travel, age 6-11 mos: 1 dose (noncountable). At age ≥ 12 mos, give 2 additional age-appropriate doses following the routine schedule. One dose given anytime before travel will provide adequate protection for most healthy persons.
Vaqta	≥ 6 mos	Age 1-18 yrs: 0.5 mL IM[1] Age ≥ 19 yrs: 1 mL IM[1]	0 and 6-18 mos[2]	None	None	
Twinrix (HepA-HepB)	≥ 18 yrs	1 mL IM	0, 1, and 6 mos	None	None	0, 7, 21-30 days, + 12 mos booster[3]

IM = intramuscularly

1. May also be administered subcutaneously; avoid buttocks (may result in suboptimal immune response)
2. If the second dose is administered less than 6 months after the first dose, the dose is invalid and must be repeated.
3. Should be considered for departures occurring in less than 6 months if hepatitis B virus protection is needed. The 4-day grace period does not apply to this accelerated schedule. Do not use this schedule unless at least 2 doses can be given prior to departure because the HAV antigen content in a dose of Twinrix is half that of the HAV antigen content in a dose of the monovalent adult HepA vaccine. In this circumstance, use monovalent HepA and HepB vaccines separately. The 0, 7-, and 21-day schedule is also approved for use in persons aged ≥ 16 years in Australia, Europe, and the U.K., and in persons aged ≥ 19 years in Canada. Many travel-medicine clinicians use the accelerated schedule for children when necessary.

A complete HepA vaccine series consists of any of the following:

- 2 doses of HepA vaccine
- 3 doses of Twinrix
- 2 doses of Twinrix + 1 dose HepA vaccine
- 1 dose of Twinrix + 2 doses of HepA vaccine

If a HepA vaccination series was begun with but not completed with Twinrix, additional HepA-containing vaccine is required because the HAV antigen content in a dose of Twinrix is half that in a dose of adult HepA vaccine. The single-antigen HepA vaccines (Havrix and Vaqta) are interchangeable, although completion of a vaccination series with the same product is preferable.

Immune Globulin Intramuscular (IGIM)

When indicated for the prevention of hepatitis A in immunocompromised persons, IG should be administered using the same dose and schedule as that used for immunocompetent persons.

Pediatric and Adult

Dose/Route/Schedule

Children: Administer IM in the anterolateral thigh for children aged < 1 year and in the deltoid, upper outer quadrant of the gluteal muscle, or ventrogluteal site for older children. The maximum amount that should be given at one injection site is 5 mL per site for large children and adolescents and 1 to 3 mL per site for smaller children and infants.

Adults: Administer IM in the deltoid, ventrogluteal site, or upper outer quadrant of the gluteal muscle. The maximum dose that should be given at one injection site is 5 mL for adults.

When used for preexposure prophylaxis, dose is dependent upon duration of stay.

- For a stay of up to 1 month: 0.1 mL/kg IGIM
- For a stay of up to 2 months: 0.2 mL/kg IGIM
- For stays of more than 2 months: repeat dose of 0.2 mL/kg IGIM every 2 months
- Administer before or within 2 weeks of exposure

Postexposure Prophylaxis

When indicated (see Indications for Vaccination):

HepA vaccine: Give 1 dose IM as soon as possible, ideally within 2 weeks of exposure.

- HepA vaccine is preferred over IG for all persons aged ≥ 12 months (aged ≥ 6 months in Canada). See below for persons aged < 1 year.
- Twinrix is not approved for postexposure prophylaxis.

Immune Globulin: 0.1 mL/kg given IM; administer as soon as possible after household or institutional exposure, ideally within 2 weeks of exposure.

- Preferred as a single agent for:
  - Children aged < 12 months
  - Persons for whom vaccine is contraindicated
  - Persons for whom HepA vaccine is indicated but unavailable
- May be administered in addition to HepA vaccine for:
  - Persons aged > 40 years (aged ≥ 60 years in Canada) who are household contacts, sexual contacts, or caretakers of the index case
  - Persons of any age based on the following considerations: altered immune status, underlying conditions (especially chronic liver disease or infection), provider's risk assessment, and availability of IG.
- See also *Immune Globulin.*

Accelerated, Altered, or Lapsed Schedules

Vaccine doses administered ≤ 4 days before the minimum interval or age (known as the "grace period") are considered valid, but this grace period should not be used when scheduling future vaccination visits. Local mandates might supersede this 4-day guideline. The 4-day grace period does not apply to the 4-dose accelerated HepA-HepB vaccine schedule. Doses administered ≥ 5 days before the minimum age or interval should not be counted as valid doses and should be repeated as age appropriate. The repeat dose should be spaced after the invalid dose according to the recommended minimum interval. A first dose in a series, administered ≥ 5 days before the minimum age is invalid, and the dose should be repeated when the

child reaches at least the minimum age. For live vaccines, a minimum interval of 28 days is recommended between the repeat dose and the invalid dose. See Table: Recommended and Minimum Ages and Intervals between Vaccine Doses.

Accelerated

If earlier protection is needed for travel, see Table: Summary of Hepatitis A Vaccines.

Altered

HepA-HepB vaccine

- Children aged 1-15 years (Twinrix [adult formulation]): 2 doses, 1 each at 0, 6 to 12 months
  - Approved in Australia and Canada

Lapsed

An interruption in a vaccination schedule does not require restarting the entire series of a vaccine or toxoid nor does it require the addition of extra doses. The series should be resumed with the next dose in the series, and any subsequent doses should be administered at the same interval as if the series had not been interrupted.

Administration Errors

Any vaccination dose administered using less than the standard age-appropriate dose volume (e.g., wrong formulation or inappropriately divided doses) may result in inadequate protection and should not be counted as a valid dose. The person should be revaccinated with a full standard age-appropriate dose unless serologic testing indicates an adequate response has developed. However, if 2 half-volume doses of a vaccine are administered on the same clinic day to a person who should have received a full volume dose (e.g., pediatric formulation administered to an adult), these 2 doses can count as 1 full dose.

If the second dose of HepA vaccine is administered less than 6 months after the first dose, the second dose is invalid. The dose should be repeated 6 months after the invalid second dose; however, if the repeat dose (third dose) is administered anytime ≥ 6 months after the first dose, the series is considered complete.

Travax content represents decision-relevant, expert synthesis of real-time data reconciled with new and existing available advice from authoritative national and international bodies. National body recommendations such as ACIP/CDC may differ from the manufacturers' recommendations as found in vaccine package inserts. Travax recommendations may differ from those of individual countries' public health authorities.