Postexposure prophylaxis (PEP)

All nonimmune people who are exposed to hepatitis A virus (HAV) and have not been vaccinated should receive PEP within 14 days after the date of last exposure.

Definition of hepatitis A immunity

Persons are considered immune if they have:
- received 2 doses of HAV vaccine; or
- a history of IgM or total anti-HAV positivity during or up to four months after consistent clinical illness; or
- are IgG anti-HAV positive.

Pre- or post-vaccination testing are not indicated. Most adults will be protected within 2-4 weeks after one dose of vaccine. HAV vaccine has been routinely recommended for California children since 1999, and most children and adolescents in California are immune to HAV.

PEP recommendations

- Persons ≥12 months of age, regardless of pre-existing medical conditions, SHOULD receive a dose of single-antigen HAV vaccine. In addition to vaccine, a dose of intramuscular (IM) immune globulin (IG) (*0.1 mL/kg*) MAY also be administered to people ≥40 years of age based on the provider’s risk assessment.
- Persons ≥12 months of age who are immunocompromised (e.g., have chronic liver disease) SHOULD be administered a dose of intramuscular (IM) immune globulin (IG) (*0.1 mL/kg*) and a dose of HAV vaccine.
- Infants <12 months of age and/or persons for whom vaccine is contraindicated (who are allergic to a vaccine component) SHOULD receive intramuscular (IM) immune globulin (IG) (*0.1 mL/kg*) instead of HAV vaccine.

Persons receiving both vaccine and IG for post-exposure prophylaxis may receive them simultaneously, or they may receive either available product first and the second product as it can be accessed, providing it is administered within the 14-day PEP window. Vaccine and IG should be administered at anatomically distant sites (such as different limbs). For additional guidance on administration of IG, see: http://tinyurl.com/yxtyhdv6

PEP should be given as soon as possible during the appropriate time window. The efficacy of combined HAV/HBV vaccine (Twinrix®) for PEP has not been studied so it is not recommended.

Local health departments and medical providers may wish to evaluate the likelihood and intensity of HAV exposure (e.g., possible commercial food exposure vs. known household or sexual contact) when making decisions and recommendations about PEP regimens.

*In July 2017, the recommended dose for IMIG (GamaSTAN® S/D) for HAV pre- and post-exposure prophylaxis was increased by the manufacturer due to declining HAV antibody levels in the U.S. blood supply. IMIG (GamaSTAN® S/D) is available in 2 mL and 10 mL single use vials. One source of IG is FFF Enterprises, which can be reached 24/7 at: 1-800-843-7477.

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*Although the CDC HAV guidance does not provide a definition of immunocompromised, IDSA guidance (http://tinyurl.com/y23xo8fd) defines patients with high-level immunosuppression as those:
- with combined primary immunodeficiency disorder (e.g., severe combined immunodeficiency);
- who are receiving cancer chemotherapy;
- on treatment for ALL within and until at least 6 months after completion of immunosuppressive chemotherapy;
- within 2 months after solid organ transplantation;
- who have received a bone marrow transplant until at least 12 months after finishing all immunosuppressive treatment, or longer in patients who have developed graft-versus-host disease;
- with HIV infection with a CD4 T lymphocyte count <200 cells/mm3 (age >5 years) and percentage <15 (all ages) (some experts include HIV-infected persons who lack recent confirmation of immunologic status or measles immunity);
- receiving daily corticosteroid therapy with a dose ≥20 mg (or >2 mg/kg/day for patients who weigh <10 kg) of prednisone or equivalent for ≥14 days; or
- receiving certain biologic immune modulators, such as a tumor necrosis factor-alpha (TNF-α) blocker or rituximab.
Vaccine should be given in addition to IG to potentially provide longer-term protection for immunosuppressed persons but vaccine response may be limited. Clinical guidance should be obtained if patient’s immune status is unclear.

**Exposed susceptible pregnant women**

Pregnant women who become infected with hepatitis A have an increased risk of gestational complications and preterm labor. Pregnant women who are exposed to HAV should be offered vaccine; it may be reasonable to offer IG in addition to vaccine for PEP, particularly if the woman is a household or sexual contact of a case.

**Incompletely immunized people**

Most persons have protective levels of antibody after one dose of HAV vaccine. Persons who have had one prior dose of vaccine may receive their second dose if it has been at least 6 months since their first dose.

**Persons exposed to HAV >2 weeks prior to consult**

The efficacy of PEP when given >2 weeks of exposure is unknown. IG is not recommended >2 weeks after exposure, but vaccine may be given to susceptible people at any time to protect against future exposures.

**Pediatric vs. adult formulations of HAV vaccine**

Single-antigen HAV vaccines are available in a pediatric formulation containing half the dose and volume of the adult formulation. When the adult formulation is unavailable, adults may be given two doses of the same pediatric HAV vaccine (2 pediatric doses = 1 adult dose).

**HAV vaccine contraindications and precautions**

- HAV vaccine should not be administered to persons with a history of a severe allergic reaction to a previous dose of HAV vaccine or vaccine component.
- Pregnant women may be given HAV vaccine as PEP. Although the safety of HAV vaccination during pregnancy has not been determined, because HAV vaccine is produced from inactivated HAV, the theoretical risk to the fetus is expected to be low.
- Because HAV vaccine is inactivated, no special precautions need to be taken when vaccinating immunocompromised persons.

For more information about hepatitis A vaccine, see: https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5507a1.htm

**Administration of HAV vaccine with other vaccines**

HAV vaccine may be administered simultaneously with Td, Tdap, DTaP, OPV/IPV, Hib, HepB, MMR, cholera, Japanese encephalitis, rabies, typhoid (oral and IM), or yellow fever vaccines.

For more information about HAV PEP

See 2018 ACIP recommendations on the use of hepatitis A vaccine for postexposure prophylaxis and preexposure prophylaxis for international travel at: https://www.cdc.gov/mmwr/volumes/67/wr/mm6743a5.htm

For more information about IMIG

The only U.S. IMIG product is GamaSTAN® S/D. More information about this product is available at: http://tinyurl.com/y4bvlkqx