

## Post-Exposure Prophylaxis Guidelines for Hepatitis A

### **Background:**

Post-exposure prophylaxis (PEP) with hepatitis A vaccine or immune globulin (IG) will reduce the risk of illness in persons exposed to the hepatitis A virus if administered within 14 days of exposure. The sooner PEP is administered, the more protective it will be.

### **Recommendation of the CDC Advisory Committee on Immunization Practices (ACIP), February 2018:**

Hepatitis A vaccines should be administered for post-exposure prophylaxis for all persons aged  $\geq 12$  months. In addition to hepatitis A vaccine, IG may be administered to persons age  $>40$  years depending on the providers' risk assessment.

### **PEP Options:**

- a) Hepatitis A vaccine: A single dose can protect a person for more than 10 years and a complete 2 dose series (administered at least 6 months apart) is assumed to provide lifelong protection.
- b) Immune globulin ("IG", trade name GamaSTAN<sup>®</sup> S/D, manufactured by Grifols): passive protection post-exposure, at 0.1mL/kg (same dose administered pre-exposure for up to 1 month of travel). It is useful for contacts at high risk of contracting the disease who are not expected to respond normally to vaccination or who are at individually high risk of life-threatening infection, including those who are immunocompromised or have chronic liver disease.

IG and vaccine work about the same for PEP in persons aged 1 to 40 years of age. Practical concerns for limited IG availability have led to the use of vaccine alone for persons over 40 also if IG is unavailable in a timely manner, which is especially common in large outbreaks.

### **What types of contacts need PEP within 14 days of exposure?**

At risk contacts are those previously unvaccinated persons who may have been exposed to the virus during the infectious period of a serologically-confirmed case patient (2 weeks before symptom onset through 1 week after symptom onset).

- a) Household contacts (persons who spend the night in the home during the infectious period)
  - In addition, evaluate need for PEP vaccine for any other persons who ate food prepared at home by an infectious case. Decision to vaccinate depends on whether they handled food served uncooked or after it was cooked, whether poor hygiene is suspected and whether case had diarrhea at the time.
- b) Sexual contacts
- c) Persons who shared drugs (injection or non-injection) or drug equipment
- d) Caregivers (e.g., of an infected child or ill person), *excluding* healthcare personnel using appropriate infection prevention precautions
- e) Food handlers who work in an establishment if a fellow food handler is diagnosed.
- f) Child care center contacts – PEP for all previously unvaccinated staff and attendees, **if**:
  - One or more cases are diagnosed in child attendees or employees, *or*

- Cases are diagnosed in 2 or more households of attendees
  - In above situations: if no infants in diapers are in the facility, limit PEP to contacts of the patient
  - If an outbreak of  $\geq 3$  cases linked to a child care center occurs, consider extending vaccine PEP to include the household members of center attendees who wear diapers.
- g)** Consider PEP for all previously unvaccinated residents and employees of facilities in settings where close personal contact occurs regularly and hygiene standards are difficult to maintain (e.g., corrections facility [or ward, if wards are kept separate], homeless shelter, psychiatric facility, group home or residential facility for the disabled).

**Exposures not routinely needing PEP, but PEP may be recommended if additional factors present:**

- h)** Patrons of establishments where a food handler is diagnosed are not normally considered in need of PEP because the risk of transmission is very low. May be considered if the food handler directly handled uncooked or cooked foods without gloves and had diarrhea or poor hygiene. Also may consider if food handler worked in a setting where repeated exposures may have occurred (e.g., institutional cafeteria).
- i)** Healthcare workers are not routinely considered at risk because standard hand hygiene is protective. DO administer PEP to co-workers in a unit or facility if a healthcare worker is diagnosed with hepatitis A. PEP to patients may be considered if a healthcare worker worked while likely infectious, without gloves and had diarrhea or poor hygiene.
- j)** Classmates or work mates if the patient acquired HAV outside the class or work setting are not routinely recommended for PEP. Administer vaccine if evidence of transmission in that setting is present.

**What to do with an exposed person more than 14 days since exposure:** Do not use IG. Vaccinate persons who may be at ongoing risk, or are part of a risk group. Such persons should be educated that vaccination will help in the future but may not prevent them from becoming ill due to a past exposure.

**Vaccine and IG considerations by age and health status:**

- 1. All susceptible contacts aged 1 year and older: Administer hepatitis A vaccine**
  - a. No vaccine needed for persons who have received a complete 2-dose hepatitis A vaccine series (documented in writing) or who have received a single dose of hepatitis A vaccine within the past 6 months.
  - b. No documented immunization history: administer a single dose of hepatitis A vaccine (monovalent) as soon as possible. The only contraindication to vaccination is a history of anaphylaxis to a previous dose of the vaccine or a vaccine component.
  - c. History of incomplete hepatitis A vaccination, i.e., 1 dose >6 months earlier: vaccinate to complete series for long term protection.
- 2. Certain unimmunized contacts aged  $\geq 1$  year: IG (0.1mL/kg IM), in addition to vaccine:**
  - a. Immunocompromised persons and persons with chronic liver disease (see definitions lists on last page) aged 12 months and up, if a sexual, household, or drug equipment sharing contact of a case. See definitions of immunocompromised persons below. If in

short supply and exposures occur among HIV+ persons, prioritize IG to unvaccinated HIV+ persons with CD4 <200.

- b. If IG is readily available and acceptable, persons of the following ages who are close contacts of an infectious case may be offered IG in addition to vaccine:
  - i. Persons 40-49 (lowest priority)
  - ii. Persons 50-59 (middle priority)
  - iii. Persons 60+ (highest priority for IG, slowest response to vaccine)
3. **Susceptible infants <12 months: administer IG (0.1mL/kg) only.** Wait at least 3 months to administer MMR and varicella vaccines typically given at 1 year of age to prevent vaccine interference. MMR or varicella vaccines inadvertently administered earlier would be invalid and would need to be repeated  $\geq 3$  months after IG *and*  $\geq 28$  days after the invalid dose(s).
4. **Certain *previously vaccinated* persons:**
  - a. Give PEP IG and vaccine to any previously vaccinated stem cell transplant patient who is an at-risk contact, if they were not re-vaccinated post-transplant
  - b. [case-by-case consideration] Consider PEP IG and vaccine for at-risk contacts who are severely immunocompromised or persons who receive IG regularly for an immunocompromising condition.

**Definitions:**

*Immunocompromised, includes persons*

- With congenital or acquired immunodeficiency
- With HIV infection
- With chronic renal failure/undergoing hemodialysis
- Who have received solid organ, bone marrow, or stem cell transplants
- Who have iatrogenic immunosuppression, e.g., diseases requiring treatment with immunosuppressive drugs/biologics (e.g., TNF-alpha inhibitors), including long-term systemic corticosteroids and radiation therapy. Immune status relative to the dose of immunosuppressive drugs should be assessed by the provider.
- Who are otherwise less capable of developing a normal response to immunization (e.g., persons with diabetes mellitus, elderly, hemodialysis patients)

*Chronic liver disease, includes persons with*

- Hepatitis B virus infection
- Hepatitis C virus infection
- Cirrhosis from any cause
- Fatty liver disease (hepatic steatosis)
- Alcoholic liver disease
- Autoimmune hepatitis
- Alanine aminotransferase [ALT] or aspartate aminotransferase [AST] level greater than twice the upper limit of normal) or persistently elevated for 6 months