Post-Exposure Prophylaxis (PEP) for Hepatitis A Virus (HAV) Infection

Standing Order: All registered nurses and licensed practical nurses employed or contracted by [name of local health department] may administer post-exposure prophylaxis as outlined below to contacts of persons diagnosed with laboratory-confirmed hepatitis A infection.

Assessment:
1. Subjective Findings:
Suspected contact to laboratory-confirmed HAV case (serology positive for HAV IgM or NAAT, WITH jaundice or bilirubin ≥ 3.0 mg/dl, OR ALT >200 IU/L AND with clinically compatible acute illness onset) presenting to health department requesting evaluation for hepatitis A PEP.

2. Objective Findings: Provide PEP to the following contacts of persons diagnosed with laboratory-confirmed acute HAV infection:
   - Previously unvaccinated (or vaccination status unknown) household contacts
   - Previously unvaccinated (or vaccination status unknown) sexual contacts
   - Contacts who have shared injection drugs and drug paraphernalia
   - Ongoing, close personal contacts
   - Previously unvaccinated (or vaccination status unknown) staff and attendees of regulated child care facilities
     - one or more cases of HAV are recognized in children or employees
     - cases are recognized in two or more households of child care attendees
   - In regulated child care facilities that do not provide care to children who wear diapers, PEP should only be administered to classroom contacts of an infected patient
   - Co-workers of an infected food handler (if the co-workers are also food employees)
   - Patrons of an eating establishment if, during the time the affected food employee was likely to be infectious, the food employee both directly handled uncooked foods or foods after cooking and had diarrhea or poor hygienic practices

Note: food employee definition: an individual working with unpackaged food, food equipment or utensils, or food-contact surfaces.

Plan of Care
1. Implementation:

A. Screening
Ask the individual if they have ever been told by a provider that they have an immunocompromising condition. This includes the following conditions:
   - Congenital or acquired immunodeficiency
   - HIV infection
   - Chronic renal failure/Undergoing dialysis
   - Solid organ, bone marrow, or stem cell transplant recipients
   - Persons with diseases requiring treatment with immunosuppressive drugs/biologics (e.g., tumor necrosis alpha inhibitors), long-term systemic corticosteroids, radiation therapy

Individuals who indicate ‘yes’ to any of the above conditions should receive both hepatitis A vaccine AND immune globulin (IG).

Ask the individual if they have ever been told by a provider that they have chronic liver disease. This includes the following conditions:
   - Hepatitis B infection
   - Hepatitis C infection
   - Cirrhosis (any etiology)
   - Fatty liver disease (hepatic steatosis)
   - Alcoholic liver disease
   - Autoimmune hepatitis
   - Alanine aminotransferase (ALT) or aspartate amino transferase (AST) level more than twice the upper limit of normal or persistently elevated for 6 months

Individuals who indicate ‘yes’ to any of the above conditions should receive both hepatitis A vaccine AND immune globulin (IG).
B. Administration
- Administer 0.5 mL hepatitis A vaccine to healthy persons aged 12 months to 18 years of age
- Administer 1.0 mL hepatitis A vaccine to healthy persons aged 19 years or older
- Administer hepatitis A vaccine to healthy persons 12 months of age and older if IG is not available
- Administer Immune Globulin (IG), 0.10 mL/kg to
  1. Persons under 12 months of age
  2. Persons for whom vaccine is contraindicated (persons who have had a life-threatening allergic reaction after a dose of hepatitis A vaccine, or who have a severe allergy to any component of vaccine)
- Administer both hepatitis A vaccine AND IG to persons who report being told by a provider they are immune compromised or have chronic liver disease (see table below)

2. Nursing Action:
- PEP should be administered within 2 weeks of the most recent exposure to a person with laboratory confirmed hepatitis A virus infection. (Because children younger than 5 years can be asymptomatic during acute HAV infection and may also shed HAV virus for prolonged periods, review indications for child care centers with the Communicable Disease Branch Epidemiologist on call).
- Serologic testing of contacts is not recommended due to cost and potential for delay in PEP.
- Contact (919-733-3419) the epidemiologist on-call at the Communicable Disease Branch to confer and verify that the case is laboratory confirmed and to determine which contacts need PEP.
- Administer vaccine intramuscularly in the deltoid muscle using a 22-25 g, 1-1 ½ " needle
- Administer IG deep into large muscle mass. No more than 5 mL should be administered in one site in an adult or large child. Lesser amounts (maximum 3 mL in one site) should be given to small children and infants.
- Teach contacts about the importance of personal hygiene and proper handwashing, also explaining that persons newly infected are contagious before they become symptomatic.
- Document the vaccination per agency and state Immunization Branch policy. Use of state-supplied hepatitis A vaccine is documented in the N.C. Immunization Registry.
  - Record the date the vaccine was administered, the manufacturer and lot number, the vaccination site and route, and the name and title of the person administering the vaccine.
- Note administration of PEP to identified contacts in the N.C. Electronic Disease Surveillance System (NC EDSS).

3. Criteria for Notifying Physician:
- Contact [name of local health department] medical director if there is any question about whether to carry out any treatment or other provision of this order.

4. Follow-up Requirements:
- The second dose is not necessary for PEP. A second dose should not be administered any sooner than 6 months after the first dose, regardless of HAV exposure risk
- Report any adverse reactions to hepatitis A vaccine to the federal Vaccine Adverse Event Reporting System (VAERS)

Approved by: ___________________________ Date Signed ___________________
Local Health Department Medical Director

Effective Date: ______________
Expiration Date: ______________
Legal Authority: Nurse Practice Act, G.S. 90-171.20(7) (f) & (8) (c)
References:
http://dx.doi.org/10.15585/mmwr.mm6743a5