Hepatitis A Vaccination Guidance for MMDHD, CMDHD, DHD#10

There has been a large and sustained outbreak of hepatitis A in southeastern Michigan for over a year. Those with history of injection and non-injection drug use, homelessness or transient housing, and incarceration are thought to be at greater risk in this outbreak setting. For more information see www.michigan.gov/hepatitisaoutbreak.

The rate of infections in our area has been stable. Two cases, one in Isabella county and one in Clare county, have been counted in the outbreak as these infections were caused by the same strain of virus as the larger outbreak. There is potential risk for continued spread of this outbreak to our area but no outbreak is occurring at this time. The few cases that have occurred in our jurisdiction have been handled successfully with post exposure treatment with no secondary cases. Therefore, pre-exposure vaccination should be considered in high risk groups but recommendations do not need to be carried out as aggressively as in the outbreak areas of the state at this time.

Priority One:

Be prepared to provide post-exposure prophylaxis in the event of an acute hepatitis A case. Anywhere from a few to a few hundred individuals may need urgent administration of PEP after a case of acute hepatitis A infection is identified. Therefore, preparedness for these incidences is critical. Ensure local hospitals and providers are aware they will be needed to order and administer IG and are aware of the new higher dose of IG recommended for PEP. Ensure that procedures are in place to procure sufficient vaccine through ordering or through vaccine sharing.

Post-exposure Prophylaxis for Hepatitis A (based on https://www.cdc.gov/hepatitis/hav/havfaq.htm#protection with modifications to fit this situation)

Persons who have been exposed recently to hepatitis A virus (HAV) and who have not been vaccinated should be administered one dose of single-antigen hepatitis A vaccine and/or immune globulin (IG) as soon as possible, **within 2 weeks after exposure**. The guidelines vary by age and health status:

- For healthy persons aged 12 months–40 years (or older), single-antigen hepatitis A vaccine at the age-appropriate dose is preferred to IG because of the vaccine's advantages, including long-term protection and ease of administration, as well as the equivalent efficacy of vaccine to IG.
- For persons aged >40 years, IG is preferred **because of the absence of information** regarding vaccine performance in this age group and because of the more severe manifestations of hepatitis A in older adults. The magnitude of the risk of HAV transmission from the exposure should be considered in decisions to use vaccine or IG in this age group.
    - **HOWEVER: given the limited availability of IG, the associated risks/side effects of IG, and growing evidence of vaccine effectiveness over the age of 40 for PEP, vaccine is typically considered acceptable in adults to age 75 years unless they have an immunocompromising condition**
    - **If IG is given, vaccine is typically given as well even in face of immunocompromised condition as it likely does help**
- For those that are pregnant, both vaccine and IG should be administered.
- Vaccine can be used if IG cannot be obtained.

- IG should be used for children aged <12 months, immunocompromised persons, persons with chronic liver disease, and persons who are allergic to the vaccine or a vaccine component (see **Footnote**).

The recommended dosage of IG (GamaSTAN S/D) is 0.1 mL/kg. There is no maximum dosage of GamaSTAN S/D for hepatitis A prophylaxis (NOTE: this is a new dose as of September 2017). More information on immune globulin dosing is available at https://www.cdc.gov/mmwr/volumes/66/wr/mm6636a5.htm?s_cid=mm6636a5_e

Footnote:

IG is indicated for persons at increased risk of severe or fatal hepatitis A infection. These persons include adults >40 years of age (particularly adults 75 years and older), persons with chronic liver disease (e.g., cirrhosis), and those who are immunocompromised.

- IG is indicated for persons with decreased response to hepatitis A vaccine, such as immunocompromised persons. Immunocompromised persons include, but are not limited to persons:
  - with congenital or acquired immunodeficiency;
  - with HIV/AIDS;
  - with chronic renal failure/undergoing hemodialysis;
  - who have received solid organ, bone marrow, or stem cell transplants;
  - who have iatrogenic immunosuppression (diseases requiring treatment with immunosuppressive drugs [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); and
  - who are otherwise less capable of developing a normal response to immunization.

CDC does not have official guidance to define all subgroups of persons recommended to receive IG. Further clinical guidance should be obtained for patients whose immune status is unclear.

Groups that should receive PEP after exposure:

***Close personal contacts*.** Close personal contacts of persons with serologically confirmed hepatitis A (i.e., through a blood test), including:

- household and sex contacts and
- persons who have shared injection drugs with someone with hepatitis A.

Consideration should also be given to providing IG or hepatitis A vaccine to persons with other types of ongoing, close personal contact with a person with hepatitis A (e.g., a regular babysitter or caretaker).

Child-care center staff, attendees, and attendees' household members.

- Post-exposure prophylaxis (PEP) should be administered to all previously unvaccinated staff and attendees of child-care centers or homes if 1) one or more cases of hepatitis A is recognized in children or employees or 2) cases are recognized in two or more households of center attendees.

- In centers that provide care only to older children who no longer wear diapers, PEP should be administered only to classroom contacts of the index patient (not to children or staff in other classrooms).
- When an outbreak occurs (i.e., hepatitis A cases in three or more families), PEP should also be considered for members of households that have diaper-wearing children attending the center.

***Persons exposed to a common source, such as an infected food handler*.** If a food handler receives a diagnosis of hepatitis A, post-exposure prophylaxis (PEP) should be administered to other food handlers at the same establishment. Because transmission to patrons is unlikely, PEP administration to patrons typically is not indicated but may be considered if 1) during the time when the food handler was likely to be infectious, the food handler both directly handled uncooked foods or foods after cooking and had diarrhea or poor hygienic practices, and 2) patrons can be identified and treated within 2 weeks of exposure.

In settings in which repeated exposures to HAV might have occurred (e.g., institutional cafeterias), stronger consideration of PEP use might be warranted.

Other group setting:

PEP is not routinely recommended when a single case of hepatitis A is identified in a school (other than a child care setting in which children wear diapers), in an office or other work setting, a corrections facility, or homeless shelter, and if the source of infection is outside of the setting. Similarly, hospital-based health-care workers are not recommended to receive PEP when a person who has hepatitis A is admitted to the facility; instead, careful hygienic practices should be emphasized.

https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5507a1.htm

If it is determined that hepatitis A has been spread among students in a school or among patients and staff in a hospital, PEP should be administered to unvaccinated persons who have had close contact with an infected person. Similarly, if hepatitis A has spread among occupants or staff in a homeless shelter or corrections facility, PEP should be administered to unvaccinated persons who have had close contact with an infected person.

Priority Two:

Encourage vaccination to high risk individuals, particularly those that may travel to the affected area (southeastern Michigan). Utilize private stock vaccine and bill insurance. In those that are considered extremely high risk and do not have insurance, communicate with the state regarding the ability to use state purchased vaccine. You can reach out to police, correction officers, EMS, etc. if you have sufficient resources and vaccine and wish to do so. You may also handle requests to vaccinate as they come. Michigan State Police and MDHHS continue to send out fliers and alerts advising anyone working with high risk populations (regardless of whether or not they work in the outbreak area) to get vaccinated so requests for vaccinations will continue.

High risk individuals include:

- Men who have sex with men (MSM)
- Persons with a history of substance abuse

- Persons currently homeless or in transient living
- Correctional facility inmates
- Individuals that work with or care for any of the above population on an ongoing basis

and

- Persons with underlying liver disease

Priority Three:

Healthcare workers and Food Handlers: in areas outside of the outbreak area, individuals in these categories can be provided vaccine, particularly if at higher risk of working with or being part of the high risk group described above. Vaccination of these individuals should be done utilizing private stock vaccine and billed to insurance.

Priority Four:

Anyone desiring vaccination: Adults who are routinely recommended to get vaccinated against hepatitis A include those who are: traveling to countries where hepatitis A is common, MSM, use illegal drugs, have chronic liver disease such as hepatitis B or C, are being treated with clotting-factor concentrates, work with hepatitis A-infected animals or in hepatitis A research laboratory, expect to have close personal contact with an international adoptee from a country where hepatitis A is common.

Anyone else requesting vaccination may also be vaccinated but should be vaccinated utilizing private stock vaccine and billed to insurance.