



# Updated ACIP routine recommendations for use of hepatitis A vaccine

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# Work group considerations

# Work Group Considerations

- The Hepatitis Vaccines Work Group deliberated on the following topics:
  - Hepatitis A catch-up vaccination
  - Vaccination of pregnant women
  - Vaccination of persons with chronic liver disease
  - Vaccination of persons in institutions for persons with developmental disabilities
  - Post-exposure prophylaxis
  - Future: Vaccination of HIV and immunocompromised persons

# Hepatitis A catch-up vaccination

- Despite the cost-effectiveness results, the work group proposes updating the permissive catch-up language to a routine catch-up recommendation for children age 2-18 years in order to improve population protection from HAV and vaccine uptake in children age greater than 2 years
  - Decreasing hepatitis A incidence in the US and reduced exposure to HAV has resulted in decreasing anti-HAV seroprevalence among adults, and an increasing proportion of susceptible adults
  - Vaccinating adolescents will lead to increased adult protection quicker than waiting for the universal vaccine cohort to reach adulthood

## Hepatitis A catch-up vaccination, cont.

- The cohort of children vaccinated in 2006, when HepA vaccine was routinely recommended for all children age 12-23 months, will reach adolescence (age 13) in 2018 and adulthood (age 19) in 2024
- National vaccination coverage among adolescents age 13-17 in 2013 for 1 and  $\geq 2$  doses of hepatitis A vaccine was 62.5% and 51.0%, respectively

# Hepatitis A catch-up vaccination, cont.

## ▪ **Current Recommendation (2006)**

- Recommended for use at age 12-23 months in all states
- Continue existing vaccination programs for ages 2-18 years
- Consider catch-up vaccination in outbreaks and areas with increasing disease rates
- Any person wishing to obtain immunity

## ▪ **DRAFT**

- Recommended for all children age 12-23 months
- Children and adolescents age 2-18 years who have not previously received hepatitis A vaccine should be vaccinated routinely at any age with an appropriate dose and schedule
- [OR Recommended for all children aged 12 months to 18 years]
- Consider adult catch-up vaccination in outbreaks and areas with increasing disease rates
- Any person wishing to obtain immunity

# Pregnancy

- Current Hepatitis A recommendation (2006), Contraindications and Precautions:
  - The safety of hepatitis A vaccination during pregnancy has not been determined; however, because hepatitis A vaccine is produced from inactivated HAV, the theoretic risk to the developing fetus is expected to be low
  - The risk associated with vaccination should be weighed against the risk for hepatitis A in pregnant women who might be at high risk for exposure to HAV

# Pregnancy

- 2017 immunization Schedule: Hepatitis A vaccines, Pregnancy, “Recommended for adults with additional medical conditions or other indications”
- Moro et al. study:
  - Searched VAERS for AEs reports in pregnant women who received Hep A or Hep AB from Jan. 1, 1996-April 5, 2013
  - VAERS received 139 reports of AEs in pregnant women; 7 (5.0%) were serious; no maternal or infant deaths were identified; Sixty-five (46.8%) did not describe any AEs.
  - Conclusion: This review of VAERS reports did not identify any concerning pattern of AEs in pregnant women or their infants following maternal hepatitis A or hepatitis AB immunizations during pregnancy



# Pregnancy

- **Current (2006)**

- Contraindications and Precautions:
- The safety of hepatitis A vaccination during pregnancy has not been determined; however, because hepatitis A vaccine is produced from inactivated HAV, the theoretic risk to the developing fetus is expected to be low. The risk associated with vaccination should be weighed against the risk for hepatitis A in pregnant women who might be at high risk for exposure to HAV.

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- Pregnant women with any of the conditions that increase the risk of either acquiring or having a severe outcome from HAV infection (e.g., having chronic liver disease, clotting-factor disorders, travelers, users of injection and non-injection drugs, and women who work with nonhuman primates) should be vaccinated during pregnancy if not previously vaccinated
- Pregnant women at risk for HAV infection during pregnancy should also be counseled concerning all options to prevent HAV infection

# Chronic Liver Disease

- **Current Recommendation (2006)**

- Vaccination of Persons with Chronic Liver Disease:
- Susceptible persons with chronic liver disease should be vaccinated. Available data do not indicate a need for routine vaccination of persons with chronic HBV or HCV infections without evidence of chronic liver disease. Susceptible persons who are either awaiting or have received liver transplants should be vaccinated

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- Epidemiology: Persons with chronic liver disease (e.g., cirrhosis, fatty liver disease, alcoholic liver disease, autoimmune hepatitis) are not at increased risk for HAV infection unless they have fecal-oral exposure to hepatitis A. However, concurrent acute HAV infection may increase the risk for more severe liver disease.
- Vaccination: Vaccination for persons with chronic liver disease (including, but not limited to, those with hepatitis C virus (HCV) infection, hepatitis B virus (HBV) infection, cirrhosis, fatty liver disease, alcoholic liver disease, autoimmune hepatitis, and liver function tests >2 times the upper limit of normal). Susceptible persons who are either awaiting or have received liver transplants.

# Institutions for Persons with Developmental Disabilities

- Current (2006)
- Background
  - Historically, HAV infection was highly endemic in institutions for persons with developmental disabilities. As fewer children have been institutionalized and as conditions in institutions have improved, the incidence and prevalence of HAV infection have decreased, although outbreaks can occur in these settings.

# Hepatitis A Outbreak: Group Homes, Michigan, 2013

- 8 cases
- 5 Group Homes
- 261 contacts who warranted post-exposure prophylaxis
  - 225 (86.2%) were confirmed to have received immunoglobulin (IG) or hepatitis A vaccine or both
- Disabled adults are now typically cared for in group homes, where residents live in close quarters and are often incontinent and nonverbal
- These factors, as well as lack of contact precautions and hand washing might have contributed to the spread of HAV in this outbreak, similar to how transmission among diapered children in daycare settings was linked to community outbreaks of HAV infection during the pre-vaccine era

# Hepatitis A Outbreak: Residential Facility, S. Korea, 2011

- Outbreak of hepatitis A occurred at a residential facility for the disabled in 2011, Korea
- 16 cases
- Contacts: 51 residents and 31 teachers and staff members
- The initial source of infection was not identified; however the possibility that the HAV outbreak was started by person-to-person spread is high, and volunteers are suspected to be the most likely infection source

# Settings providing services to children and adults

- **Current Recommendation (2006)**
- **Risk for Hepatitis A in Other Groups and Settings**
- Historically, HAV infection was highly endemic in institutions for persons with developmental disabilities. As fewer children have been institutionalized and as conditions in institutions have improved, the incidence and prevalence of HAV infection have decreased, although outbreaks can occur in these settings.
- **DRAFT**
- Historically, HAV infection was highly endemic in institutions for persons with developmental disabilities. Now, persons with developmental disabilities typically live in group homes or residential facilities. Outbreaks can occur in these settings.
- All residents and health care personnel should be offered hepatitis A vaccination if they have not previously completed vaccination

# Questions for discussion

- What are ACIP members' opinions on:
  - Routine hepatitis A catch-up vaccination
  - Vaccination of pregnant women with any of the conditions that increase the risk of either acquiring or having a severe outcome from HAV infection
  - Vaccination of persons with chronic liver disease
  - Vaccination of persons in institutions for persons with developmental disabilities

For more information, contact CDC  
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