**Contraindications**

**Hepatitis A vaccines (WHO position paper)**

Contraindications to hepatitis A vaccination include a known allergy to any of the vaccine components.

**General**

**Hepatitis A vaccines (WHO position paper)**

Currently, four inactivated vaccines against HAV are internationally available. All four vaccines are safe and effective, with long-lasting protection. None of the vaccines are licensed for children less than one year of age.

The (HAV) vaccines are given parenterally, as a two-dose series, 6-18 months apart. The dose of vaccine, vaccination schedule, ages for which the vaccine is licensed, and whether there is a paediatric and adult formulation varies from manufacturer to manufacturer.

**WHO recommended standards for surveillance of selected vaccine-preventable diseases**

Recommended types of surveillance for acute viral hepatitis:

- Routine monthly reporting of aggregated data on suspected cases, and, if available, the number of confirmed cases of each type of hepatitis should be reported from the peripheral level to the intermediate and central levels.
- Designated reporting sites at all levels should report at a specified frequency (e.g. weekly or monthly) even if there are zero cases (often referred to as zero reporting).

**WHO recommended standards for surveillance of selected vaccine-preventable diseases**

(A)cute viral hepatitis:

- All outbreaks should be investigated immediately and confirmed serologically.

**Hepatitis A vaccines (WHO position paper)**

The results of appropriate epidemiological and cost-benefit studies should be carefully considered before deciding on national policies concerning immunization against hepatitis A. As part of this decision process, the public health impact of hepatitis A should be weighed against the impact of other vaccine-preventable infections, including diseases caused by hepatitis B, Haemophilus influenzae type b, rubella and yellow fever.
Hepatitis A vaccines (WHO position paper)

In countries highly endemic for hepatitis A, almost all persons are infected in childhood with the virus without showing symptoms, effectively preventing clinical hepatitis A in adolescents and adults. In these countries, large-scale vaccination programmes are not recommended.

In countries of intermediate disease endemicity, where a relatively large proportion of the adult population is susceptible to HAV, and where hepatitis A represents a significant public health burden, large-scale childhood vaccination may be considered as a supplement to health education and improved sanitation.

In regions of low disease endemicity, vaccination against hepatitis A is indicated for individuals with increased risk of contracting the infection, such as travellers to areas of intermediate or high endemicity.

Hepatitis A vaccines (WHO position paper)

Contraindications to hepatitis A vaccination include a known allergy to any of the vaccine components.

Hepatitis A vaccines (WHO position paper)

Hepatitis A vaccine may be administered with all other vaccines included in the Expanded Programme on Immunization and with vaccines commonly given for travel. Concurrent administration of immune serum globulin does not appear to influence significantly the formation of protective antibodies.

Hepatitis A vaccines (WHO position paper)

Post-marketing surveillance studies are needed to monitor vaccine-induced long-term protection, and to determine the need for booster doses of vaccine.

Hepatitis A vaccines (WHO position paper)

In developed countries with low endemicity of hepatitis A and with high rates of disease in specific high-risk populations, vaccination of those populations against hepatitis A may be recommended. The high-risk groups include injection-drug users, homosexual men, persons travelling to high-risk areas, and certain ethnic or religious groups. However, it should be noted that vaccination programmes targeting specific high-risk groups may have little impact on the overall national incidence of disease.

Hepatitis A vaccines (WHO position paper)

The use of hepatitis A vaccine to control community-wide outbreaks has been most successful in small, self-contained communities, when vaccination is started early in the course of the outbreak, and when high coverage of multiple-age cohorts is achieved. Vaccination efforts should be supplemented by health education and improved sanitation.
Hepatitis A vaccines (WHO position paper)

The decision to include hepatitis A vaccine in routine childhood immunization services should be made in the context of the full range of immunization interventions available. This includes hepatitis B, Hib, rubella and yellow fever, and, in the near future, pneumococcal vaccines, all of which are likely to have a more profound public health impact.

Weekly epidemiological record No. 28-29, 2012, 87, 261276

WHO recommends that vaccination against HAV be integrated into the national immunization schedule for children aged 1 year if indicated on the basis of incidence of acute hepatitis A, change in the endemicity from high to intermediate, and consideration of cost-effectiveness.

Weekly epidemiological record No. 28-29, 2012, 87, 261276

Vaccination against hepatitis A should be part of a comprehensive plan for the prevention and control of viral hepatitis, including measures to improve hygiene and sanitation and measures for outbreak control.

Weekly epidemiological record No. 28-29, 2012, 87, 261276

Countries should collect and review the information needed to estimate their national burden of hepatitis A.

Weekly epidemiological record No. 28-29, 2012, 87, 261276

Economic evaluation, including cost-effectiveness analyses of relevant immunization strategies can serve as a useful additional element for decision-making.

Weekly epidemiological record No. 28-29, 2012, 87, 261276

In highly endemic countries almost all persons are asymptomatically infected with HAV in childhood, which effectively prevents clinical hepatitis A in adolescents and adults. In these countries, large-scale vaccination programmes are not recommended.

Weekly epidemiological record No. 28-29, 2012, 87, 261276

Countries with improving socioeconomic status may rapidly move from high to intermediate hepatitis A endemicity. In these countries, a relatively large proportion of the adult population is susceptible to HAV and large-scale hepatitis A vaccination is likely to be cost-effective and is therefore encouraged.
Targeted vaccination of high-risk groups should be considered in low and very low endemicity settings to provide individual health benefits. Groups at increased risk of hepatitis A include travellers to areas of intermediate or high endemicity, those requiring life-long treatment with blood products, men who have sex with men, workers in contact with non-human primates, and injection drug users. In addition, patients with chronic liver disease are at increased risk for fulminant hepatitis A and should be vaccinated.

The use of hepatitis A vaccine rather than passive prophylaxis with immune globulin should be considered for pre-exposure prophylaxis (e.g. for travellers to areas of higher hepatitis A endemicity) and post-exposure prophylaxis (e.g. for close contacts of acute cases of hepatitis A).

Recommendations for hepatitis A vaccination in outbreak situations depend on the epidemiologic features of hepatitis A in the community and the feasibility of rapidly implementing a widespread vaccination programme. The use of a single dose regimen of hepatitis A vaccine to control community-wide outbreaks has been most successful in small self-contained communities, when vaccination was started early in the course of the outbreak, and when high coverage of multiple age-cohorts was achieved. Vaccination efforts should be supplemented with health education and improved sanitation.

Currently, inactivated HAV vaccines are licensed for intramuscular administration in a 2-dose schedule with the first dose given at the age 1 year, or older. The interval between the first (primary) dose and the second (booster) dose is flexible (from 6 months up to 45 years), but is usually 6-18 months. The live attenuated vaccine is administered as a single subcutaneous dose.

National immunization programmes may consider inclusion of single-dose inactivated hepatitis A vaccines in immunization schedules. This option seems to be comparable in terms of effectiveness, and is less expensive and easier to implement than the classical 2-dose schedule. However, until further experience has been obtained with a single-dose schedule, in individuals at substantial risk of contracting hepatitis A, and in immunocompromised individuals, a 2-dose schedule is preferred.
Apart from severe allergic reaction to the previous dose, there is no contraindication to the use of inactivated hepatitis A vaccines. These vaccines can be administered simultaneously with any of the vaccines routinely used in childhood immunization programmes or for travel prophylaxis. Inactivated hepatitis A vaccines should also be considered for use in pregnant women at definite risk of HAV infection.

Severe allergy to components included in the live attenuated hepatitis A vaccine is a contraindication to their use, and as a rule, live vaccines should not be used in pregnancy or in severely immunocompromised patients.

Following introduction, assessment of the impact of hepatitis A vaccines is important, using information on morbidity and mortality generated by surveillance and study data. Duration of the protection induced by one- and 2-dose schedules should be regularly monitored. In particular, the possible use of a single-dose schedule should be accompanied by monitoring and evaluation plans.

**Hepatitis B**

**WHO recommended standards for surveillance of selected vaccine-preventable diseases**

Recommended types of surveillance for acute viral hepatitis: _Routine monthly reporting of aggregated data on suspected cases, and, if available, the number of confirmed cases of each type of hepatitis should be reported from the peripheral level to the intermediate and central levels._

_Designated reporting sites at all levels should report at a specified frequency (e.g. weekly or monthly) even if there are zero cases (often referred to as zero reporting)._
New Vaccines

Hepatitis A vaccines (WHO position paper)

The results of appropriate epidemiological and cost-benefit studies should be carefully considered before deciding on national policies concerning immunization against hepatitis A. As part of this decision process, the public health impact of hepatitis A should be weighed against the impact of other vaccine-preventable infections, including diseases caused by hepatitis B, Haemophilus influenzae type b, rubella and yellow fever.

Hepatitis A vaccines (WHO position paper)

In countries highly endemic for hepatitis A, almost all persons are infected in childhood with the virus without showing symptoms, effectively preventing clinical hepatitis A in adolescents and adults. In these countries, large-scale vaccination programmes are not recommended.

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In regions of low disease endemicity, vaccination against hepatitis A is indicated for individuals with increased risk of contracting the infection, such as travellers to areas of intermediate or high endemicity.

Hepatitis A vaccines (WHO position paper)

The decision to include hepatitis A vaccine in routine childhood immunization services should be made in the context of the full range of immunization interventions available. This includes hepatitis B, Hib, rubella and yellow fever, and, in the near future, pneumococcal vaccines, all of which are likely to have a more profound public health impact.

Outbreak Control

WHO recommended standards for surveillance of selected vaccine-preventable diseases

(A)cute viral hepatitis:
_ All outbreaks should be investigated immediately and confirmed serologically.

Hepatitis A vaccines (WHO position paper)

The use of hepatitis A vaccine to control community-wide outbreaks has been most successful in small, self-contained communities, when vaccination is started early in the course of the outbreak, and when high coverage of multiple-age cohorts is achieved. Vaccination efforts should be supplemented by health education and improved sanitation.
Policy

Hepatitis A vaccines (WHO position paper)

Currently, four inactivated vaccines against HAV are internationally available. All four vaccines are safe and effective, with long-lasting protection. None of the vaccines are licensed for children less than one year of age.

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Hepatitis A vaccines (WHO position paper)

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Hepatitis A

**Hepatitis A vaccines (WHO position paper)**

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In regions of low disease endemicity, vaccination against hepatitis A is indicated for individuals with increased risk of contracting the infection, such as travellers to areas of intermediate or high endemicity.

**Contraindications to hepatitis A vaccination include a known allergy to any of the vaccine components.**

**Hepatitis A vaccines (WHO position paper)**

Hepatitis A vaccine may be administered with all other vaccines included in the Expanded Programme on Immunization and with vaccines commonly given for travel. Concurrent administration of immune serum globulin does not appear to influence significantly the formation of protective antibodies.

**Post-marketing surveillance studies are needed to monitor vaccine-induced long-term protection, and to determine the need for booster doses of vaccine.**

**Hepatitis A vaccines (WHO position paper)**

In developed countries with low endemicity of hepatitis A and with high rates of disease in specific high-risk populations, vaccination of those populations against hepatitis A may be recommended. The high-risk groups include injection-drug users, homosexual men, persons travelling to high-risk areas, and certain ethnic or religious groups. However, it should be noted that vaccination programmes targeting specific high-risk groups may have little impact on the overall national incidence of disease.

The use of hepatitis A vaccine to control community-wide outbreaks has been most successful in small, self-contained communities, when vaccination is started early in the course of the outbreak, and when high coverage of multiple-age cohorts is achieved. Vaccination efforts should be supplemented by health education and improved sanitation.

**Additional references:**
- WER 2000, vol. 75, 5, pp 38-44
Hepatitis A vaccines (WHO position paper)

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Research

Hepatitis A vaccines (WHO position paper)

Post-marketing surveillance studies are needed to monitor vaccine-induced long-term protection, and to determine the need for booster doses of vaccine.

Schedule

Hepatitis A vaccines (WHO position paper)

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Travellers

Hepatitis A vaccines (WHO position paper)

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Hepatitis A vaccines (WHO position paper)

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VPD Surveillance

WHO recommended standards for surveillance of selected vaccine-preventable diseases

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- Designated reporting sites at all levels should report at a specified frequency (e.g. weekly or monthly) even if there are zero cases (often referred to as zero reporting).

Vaccine Administration

Hepatitis A vaccines (WHO position paper)

Hepatitis A vaccine may be administered with all other vaccines included in the Expanded Programme on Immunization and with vaccines commonly given for travel. Concurrent administration of immune serum globulin does not appear to influence significantly the formation of protective antibodies.