## 4. Hepatitis A vaccines and long-term protection

### 4a) Inactivated hepatitis A vaccine

**Author(s):** Ott J, Wiersma S  
**Date:** 2011-09-28  
**Question:** Should inactivated hepatitis A vaccine be used for long-term protection against hepatitis A?  
**Settings:** General population

<table>
<thead>
<tr>
<th>Quality assessment</th>
<th>No of patients</th>
<th>Effect</th>
<th>Quality</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inactivated hepatitis A vaccine</td>
<td>Control</td>
<td>Relative (95% CI)</td>
<td>Absolute</td>
<td></td>
</tr>
<tr>
<td><strong>anti-HAV antibodies &gt;5 years after immunization (follow-up 5-14 years; measured with: GMC, GMT, or % seroprotection post vaccination)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8 observational studies</td>
<td>Serious</td>
<td>no serious inconsistency</td>
<td>no serious indirectness</td>
<td>serious</td>
</tr>
<tr>
<td><strong>anti-HAV antibodies 14 years after immunization (children, 3-dose, Havrix) (follow-up mean 14 years)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 observational studies</td>
<td>no serious risk of bias</td>
<td>no serious inconsistency</td>
<td>no serious indirectness</td>
<td>no serious imprecision</td>
</tr>
</tbody>
</table>

1 Loss to follow-up reported to be up to 50% and increased with duration of follow-up. There is also a risk of confounding because other factors potentially associated with antibody response are not considered.  
2 Results had wide ranges and wide confidence intervals and often only reported GMC/GMT and not ranges of data.  
3 Results listed as mean geometric titer or concentration.  
4 Three different schedules were used (0, 1, 2 mo; 0, 1, 6 mo; 0, 1, 12 mo) in this study.  
5 Seroprotection rate ranged from 86-100% depending on schedule.
Bibliography


4b) Live attenuated hepatitis A vaccine

**Author(s):** Ott J, Wiersma S  
**Date:** 2011-09-28  
**Question:** Should single dose live attenuated hepatitis A vaccine be used for long-term protection against hepatitis A?  
**Settings:** general population

<table>
<thead>
<tr>
<th>Quality assessment</th>
<th>No of patients</th>
<th>Effect</th>
<th>Quality</th>
<th>Importance</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>anti-HAV antibodies (follow-up 7-15 years; measured with: GMC, GMT, or % seroprotection post vaccination; Better indicated by lower values)</strong></td>
<td>5 observational studies</td>
<td>Serious¹</td>
<td>no serious inconsistency</td>
<td>no serious indirectness</td>
</tr>
<tr>
<td><strong>anti-HAV antibodies 15 years after immunization (children, 1-dose, H2 strain LA) (follow-up mean 15 years; Better indicated by lower values)</strong></td>
<td>1 observational studies</td>
<td>Serious¹</td>
<td>no serious inconsistency</td>
<td>no serious indirectness</td>
</tr>
</tbody>
</table>

¹ Loss to follow-up not always reported. There is also a risk of confounding because other factors potentially associated with antibody response are not considered.
² Confidence intervals not consistently reported and studies often only reported GMC and not ranges of data.
³ Initially enrolled participants, not clear how many were lost to follow-up.
⁴ GMC 128, no CI reported. 81% seroconversion rate. No hepatitis A cases reported.
References


