Vaccine Side Effects

While vaccines are very safe, like any medicine they do sometimes cause reactions. Mostly, these are mild "local" reactions (soreness or redness where the shot is given) or a low-grade fever. They may last a day or two and then go away. Sometimes more serious reactions are associated with vaccines. These are much less common. Some of them are clearly caused by the vaccine; some have been reported after vaccination but are so rare that it is impossible to tell if they were caused by the vaccine or would have happened anyway. We will mention any side effects specifically associated with each vaccine in the descriptions below.

Some children also have allergies, and occasionally a child will have a severe allergy to a substance that is component of a vaccine. There is a very small risk (estimated at around one in a million) that any vaccine could trigger a severe reaction in a child who has such an allergy. Should one of these allergic reactions occur, it would happen within several minutes to several hours after the vaccination, and would be characterized by hives, difficulty breathing, paleness, weakness, hoarseness or wheezing, a rapid heart beat, and dizziness. Doctors' offices are equipped to deal with these reactions. Always tell your provider if your child has any known allergies.

Vaccine Precautions

A child who has had a severe (life-threatening) **allergic reaction** to a previous dose of any vaccine should not get another dose of that vaccine. A child with a known severe (life-threatening) **allergy** to any vaccine component should not get a vaccine containing that component.

If a child has any **moderate or severe illness** on the day any vaccine is scheduled, it should probably be delayed until the child has recovered. A mild illness or fever is usually not a reason to delay an immunization.

We will mention any additional precautions for each vaccine in the following descriptions.

2. Hepatitis A Vaccine

Hepatitis A vaccine is made from inactivated (killed) hepatitis A virus. It is 94%–100% effective in preventing hepatitis A. Because it has been available only since 1995, we don't know yet how long immunity will last, but mathematical modeling suggests that it should protect for 20 years or more. The vaccine is not licensed for children younger than 1 year of age.

Until late 2005 hepatitis A vaccine was recommended only for certain children: those who live in states where risk of hepatitis A is highest and those who live in communities with high levels of hepatitis A, including Alaska Native villages, American Indian reservations, some Hispanic communities, and some religious communities. Travelers to countries where the disease is common should also get the vaccine.

In October of 2005 it was decided to change the recommendation to include routine vaccination of all children between 12 and 23 months of age. At the time this booklet is being written, this recommendation has not been formally published.

Two doses of hepatitis A vaccine are recommended, the second dose given 6–18 months after the first. For travelers who don't have time to get the second dose before their departure, one dose provides good short-term protection.

Hepatitis A Vaccine Side Effects

Mild local reactions, like **pain or swelling** where the shot is given, are reported in up to half of people who get the vaccine. Less than 1 person in 10 reports fatigue or mild fever. No serious reactions have been associated with the vaccine.

Hepatitis A Vaccine Precautions

In addition to the normal precautions for all vaccines, shown on page 30, children who are known to have a **severe allergy to alum** should not get hepatitis A vaccine.

Combination Vaccines

Several vaccines are sometimes combined into a single shot. These are called combination vaccines. Some combination vaccines are used routinely — DTaP is a combination; so is MMR. There are currently four other combination vaccines available for children. One combines DTaP and Hib vaccines; the second Hib and hepatitis B; the third combines DTaP, hepatitis B, and polio, and the fourth combines measles, mumps, rubella and varicella. The advantage of combination vaccines is, of course, that your children get the protection of all the component vaccines while getting fewer injections.

Each of these vaccines has certain restrictions, and not all providers carry them. But ask your provider about them if you are interested in reducing the number of shots your child must get for complete vaccine coverage.