

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.

8. Polio Vaccine

The polio vaccine used in the United States contains 3 types of inactivated (killed) polio virus. It is sometimes called IPV (Inactivated Polio Vaccine). We once used another type of polio vaccine — a liquid that was swallowed, called OPV (Oral Polio Vaccine). This vaccine is no longer available in the United States but is still used in other parts of the world. The first inactivated polio vaccine (the Salk vaccine) was licensed in 1955, and the vaccine we use today (an improved version) has been in use since 1987. The vaccine protects 99% of children who get at least 3 doses.

Children should get four doses of polio vaccine, the first 3 doses at 2, 4, and 6–18 months of age, and a booster dose at 4–6 years.

Polio Vaccine Side Effects

Inactivated polio vaccine is a very safe vaccine. It is not known to produce any side effects other than a little soreness and redness where the shot is given. The old oral vaccine, OPV, could actually cause polio, although rarely. This cannot happen with IPV.

Polio Vaccine Precautions

In addition to the normal precautions for all vaccines, shown on page 30, a child who is known to have a **severe allergy** to the antibiotics **neomycin**, **streptomycin**, or **polymyxin B** should not get polio 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.

This document can be found on the CDC website at:

http://www.cdc.gov/vaccines/vpd-vac/polio/downloads/pg_side-effects_polio.pdf