

# Parents' Guide to Childhood Immunization

## Polio

Polio is a disease that has caused paralysis in millions of children worldwide over the years. In the United States, 6,000 people died and another 27,000 were paralyzed during a major epidemic in 1916. Polio reached a peak in the United States in the 1950s, when parents were terrified that the disease would leave their children unable to walk or force them to spend the rest of their life in an iron lung. With the appearance of the Salk and Sabin polio vaccines, the disease began to disappear, and there is no longer any wild polio in the country. Polio is caused by a virus that lives in the throat and intestinal tract. It is spread mainly through contact with the feces of an infected person (for instance, by changing diapers). Some children who get polio don't feel ill at all. Others, have the symptoms of a common cold, sometimes accompanied by pain and stiffness in the neck, back and legs. But some children get severe muscle pain, and within a week can be paralyzed — in other words, lose the use of their muscles. Usually paralysis affects a child's legs, but it can also affect other muscles, including those that control breathing. There is no treatment for polio, and some children die from it. Even though there is no polio in the United States, it is still common in some parts of the world. We are working towards eliminating it from the rest of the world within the next few years.

## 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 three doses. Children should get four doses of polio vaccine, the first three 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 needs.

This document can be found on the CDC website at:

[http://www.cdc.gov/vaccines/vpd-vac/polio/downloads/pg\\_why\\_vacc\\_polio.pdf](http://www.cdc.gov/vaccines/vpd-vac/polio/downloads/pg_why_vacc_polio.pdf)