

Polio Vaccine

Benefits

Protects against polio, which can cause muscle weakness, stiffness, paralysis, and death.

Keeps others safe. Not every child can get vaccinated due to allergies. To avoid polio, these children rely on the community to get vaccinated.

Side effects

The polio vaccine that is used in the US has an excellent safety record. The most common side effects are redness and soreness at the site of injection, as well as a mild fever lasting 1-2 days. Allergic reactions to the vaccine happen in fewer than 1 in a million children.

Concerns

Can the polio virus give you polio?

No. In countries where cases of polio are still regularly reported, a “live” polio vaccine is used because it is slightly more effective. This is the oral polio vaccine (OPV), and it can cause polio in rare cases. In the US the inactivated polio vaccine (IPV) is used. This vaccine is injected into the arm and cannot cause polio.

If polio is no longer found in the United States, why does my child need the shot?

Polio is not found in the United States and in most countries around the world because of a widespread vaccination campaign. Health experts hope that we are getting close to being able to eradicate this disease throughout the entire world (like what we did with smallpox). Once we do that, no one will need the vaccine. However, in the meantime, the only way to stop the spread of the disease is to continue vaccinations.

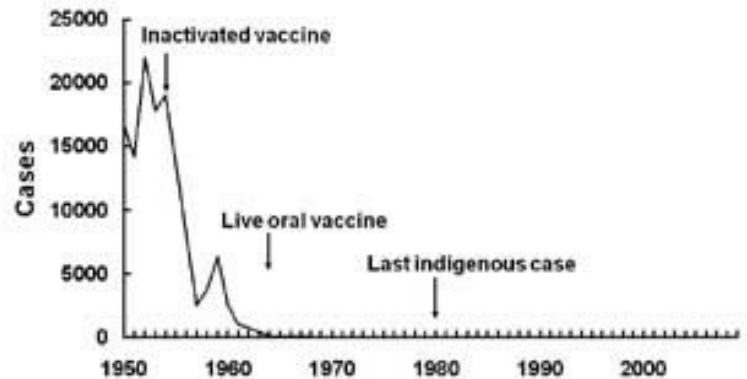
Can the polio vaccine cause cancer?

No. In the 1960’s some strains of the polio vaccine were inadvertently exposed to the SV40 virus. This virus has been linked to some types of cancer in hamsters, though studies have shown no link to human cancer. The virus was eliminated from the vaccine lines over 50 years ago, in 1963, and the current vaccine carries no cancer risk.

Can the polio vaccine cause infertility?

No. Although there have been rumors that the vaccine causes infertility, there is no evidence to support this. Virtually all Americans have received the polio vaccine, and infertility rates in this country are actually improving.

Cases of Polio in the United States by Year



Does the polio vaccine contain aluminum, mercury, formaldehyde, or thimerosal?

The polio vaccine has never contained thimerosal or mercury. It contains a tiny amount of aluminum, the same amount that is in 1 day of infant formula or 1 week of breast milk. The vaccine also contains 0.02mg of formaldehyde, 1/50 the amount that an infant produces naturally and that circulates in his or her bloodstream.

Where does the polio vaccine come from?

The polio vaccine comes from viruses that are grown in laboratory cell cultures that originated in monkeys. Viruses use these cells to replicate, and then scientists separate and kill the viruses. This makes the viruses inactive and therefore safe to be used in immunizations.

Do any of these sources have ties to pharmaceutical companies?

The sources used for this handout are the Center for Disease Control (CDC), the World Health Organization (WHO), Cancer.gov, CBS News, and the Children's Hospital of Philadelphia (CHoP). While some employees at the WHO, CDC, Cancer.gov, and CHoP have ties to pharmaceutical companies, all those organizations are up-front about these connections. The CDC in particular took steps in 2006 to make its vaccine recommendation unit more independent and less subject to bias.

References:

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<http://www.cancer.gov/newscenter/newsfromnci/2004/sv40>

<http://www.cbsnews.com/news/us-infertility-rates-falling-says-cdc/>

<http://www.chop.edu/service/vaccine-education-center/vaccine-safety/vaccine-ingredients/aluminum.html>

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