

What parents need to know about vaccines

Immunization is a preventive measure that can protect people against serious diseases. Parents naturally have many questions about vaccines, so we've collected the most common questions and provided up-to-date answers. For more information on immunizations and vaccine safety, please visit www.healthoregon.org/imm.



How do vaccines prevent disease?

Vaccines protect people from disease by strengthening a body's immune response. A vaccine's antigens help a body make infection-fighting antibodies to combat disease invaders. Vaccines will make people immune to a disease without having to suffer through that disease.

Are these diseases really dangerous?

Yes. Many vaccine-preventable diseases, such as smallpox, are no longer around so we have forgotten how horrible they are. But up until the 1960s, parents were terrorized by polio, a devastating disease that struck healthy children and still exists in many parts of the world. With the development of vaccines, children are now protected from diseases that caused thousands of children to die. For example, since 1991 when children started receiving the Hib vaccine that prevents a serious bacterial infection, the rate of Hib-related diseases declined 99 percent, from 20,000 cases per year to approximately 35 cases.

Isn't it better for children to gain immunity naturally by getting the disease instead of the immunization?

Natural infection can come at a high price: Chicken pox or pneumococcus can lead to pneumonia; rubella can cause birth defects; Hib can cause brain damage; and children can die from any vaccine-preventable disease. A child may have a mild case or even no symptoms at all, but he or she could pass on the disease to a child who can't be immunized because of age or a medical condition.

Aren't infants too young to get shots?

No. Many of the diseases that vaccines prevent occur in very young infants. Fortunately, most babies are born with sturdy immune systems that are very capable of making a protective immune response to vaccines. Vaccines don't weaken the immune system — they boost it.

Are so many shots safe for my baby?

Several studies have determined that simultaneous vaccination with multiple vaccines have no adverse effect on a normal child's immune system. Another advantage of multiple immunizations is that children have fewer shots, fewer office visits and less discomfort. Spreading out vaccines may leave children unnecessarily vulnerable to disease. Plus, vaccines are more efficient than ever. The original smallpox vaccine had 200 antigens in just one shot; today, there are only about 130 antigens in **all** of the routinely recommended immunizations combined.

Why do children get so many more shots now?

As science progresses, children and adults are protected against more and more vaccine-preventable diseases. In the 1920s, there was just one vaccine: smallpox. At that time, hundreds of thousands of children got diphtheria — many of them died from it. Today we have vaccines for diseases that used to affect children every day.

Do vaccines cause autism?

No. Many studies that included hundreds of thousands of children across the globe have compared kids who got vaccines with kids who didn't — there is no difference in the autism rate. Vaccines do not cause diseases, they prevent them.

Is mercury in vaccines harmful?

There is no mercury in routine childhood vaccines. In 2001, the Food and Drug Administration (FDA) required vaccine manufacturers to stop using mercury preservatives in childhood vaccinations. Manufacturers previously used thimerosal and other types of ethyl mercury that are rapidly eliminated from the body. The only vaccine that still contains a mercury preservative is the flu vaccine that comes in a multi-dose vial. But the amount of mercury in a flu vaccine is five times less than in a tuna sandwich.

Is aluminum in vaccines harmful?

There is aluminum all around us in water, food and air; it is the most common metal found in nature. Some vaccines include a small amount of aluminum to boost immunity, but aluminum is present in breast milk and baby formula. Babies quickly eliminate aluminum from their bodies with no danger to their health.

References:

The Children's Hospital of Philadelphia:

www.chop.edu/service/vaccine-education-center/vaccine-safety

Centers for Disease Control and Prevention:

www.cdc.gov/vaccinesafety;

www.cdc.gov/vaccines/spec-grps/infants/parent-questions.htm

Immunization Action Coalition: www.immunize.org