

VACCINES

Separating Fact from Myth

VACCINES ARE A VITAL PART OF YOUR CHILD'S HEALTHY DEVELOPMENT. THEY HELP PROTECT AGAINST SERIOUS ILLNESSES BEFORE YOUR CHILD IS EXPOSED TO THEM. BUT DESPITE DECADES OF RESEARCH AND PROVEN SAFETY, MYTHS AROUND CHILDHOOD VACCINES CAN MAKE IT HARDER FOR PARENTS TO FEEL CONFIDENT IN THEIR DECISIONS. LET'S SET THE RECORD STRAIGHT.

Myth: Vaccines contain harmful ingredients.

Fact: All ingredients in vaccines are present in small, safe amounts. Many are already found in our environment, food, and even our own bodies.

Thimerosal, a preservative previously used in multi-dose vaccines, contains ethylmercury—not the more toxic methylmercury. Thimerosal was eliminated from all pediatric vaccines in 1999, and any concerns about Thimerosal today are unfounded. Formaldehyde, used to inactivate viruses, is naturally produced by the human body and found in household items and some foods. In fact, formaldehyde is produced at higher rates by the body's own metabolic system. Aluminum, used as an adjuvant to boost immune response, is also present in breast milk, infant formula, and water.

The doses in vaccines are significantly lower than what we are naturally exposed to and have been thoroughly tested for safety.

Myth: Vaccines cause autism or sudden infant death syndrome (SIDS).

Fact: Multiple large-scale studies have found no link between vaccines and autism or SIDS.

A 1998 study that falsely claimed a link between the MMR vaccine and autism has been discredited and retracted due to unethical research practices and falsified data. Reliable studies since then have reaffirmed that vaccines do not cause autism.

While SIDS and autism often emerge around the same age children receive vaccinations, there is no causal relationship between the two.

Myth: It's better to get the disease than to get vaccinated.

Fact: Many vaccine-preventable diseases can cause severe complications, long-term health problems, or death.

For example, measles can cause pneumonia, brain swelling, or blindness. The flu hospitalizes over 200,000 people in the U.S. each year and kills tens of thousands. Vaccines simulate infection to build immunity—but without the risk of serious illness.

Myth: I don't need to vaccinate my child because others are vaccinated.

Fact: Relying on others for protection is risky and undermines herd immunity—which protects infants, people with weakened immune systems, and those who cannot be vaccinated.

Herd immunity means having a high enough percentage of people in a population (or herd) who are immune to a disease that there are few susceptible people left to infect. Therefore, it's very difficult for a disease to spread. If too many people opt out, diseases can resurge, as seen with recent measles outbreaks in under-vaccinated communities.

Myth: Vaccines can give you the disease.

Fact: Most vaccines are inactivated or contain only parts of a virus or bacteria, making it impossible to contract the illness from them.

Live vaccines (like those for chickenpox or MMR) may cause mild symptoms—such as a rash—which are a sign your immune system is responding, not that you're sick. The process of producing antibodies can sometimes cause a low fever or minor swelling, but not the actual disease.

The oral polio vaccine, which is no longer used in the U.S., carried a very rare risk of causing polio. Today, all polio vaccines used in the U.S. are inactivated and cannot cause the disease.

Myth: Babies get too many vaccines too soon.

Fact: Your baby's immune system is stronger than you think. Vaccines are scheduled to offer protection when your child is most vulnerable to serious illness. The timing is based on years of scientific data to ensure safety and effectiveness.

Most children are exposed to up to 6,000 antigens every day, far more than what's in any combination of vaccines on the current immunization schedule.

Vaccines in this age group help prevent:

- *Hepatitis B*
- *Diphtheria, Tetanus, and Pertussis (DTaP)*
- *Polio*
- *Haemophilus influenzae type b (Hib)*
- *Pneumococcal disease (PCV)*
- *Rotavirus*
- *Measles, Mumps, and Rubella (MMR) – first dose around 12–15 months*
- *Varicella (chickenpox) – first dose around 12–15 months*
- *Hepatitis A – starting at 12 months*

The Takeaway

Vaccines are one of the safest and most effective tools for protecting your child. They are supported by decades of research, ongoing monitoring, and real-world data.

If you have questions, your healthcare provider is the best person to help you make informed decisions based on facts—not fear.

