



# Myths Surrounding Childhood Vaccines

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Immunizations date back to the late 1700's and the smallpox vaccine. Since that time, the number of vaccines that have been developed to prevent disease has jumped to over one dozen. During this time, death rates and injuries from these diseases have dropped dramatically. Vaccines consist of either weakened or killed viruses or bacteria (which will not make a child ill) known as antigens. These antigens stimulate the child's natural immune system into producing antibodies to fight such an infection if the need arises. Vaccine manufacturers and the Food and Drug Administration (FDA) work very hard to ensure that the vaccines are safe and effective. The protection from potential disease far outweighs the very small risk of serious problems and side effects from the vaccines.

There are a number of myths that surround childhood vaccines. A few of these myths include:

**#1 – "Vaccines against illnesses that are no longer seen in the United States do not need to be given."** We live in a global community and even though many vaccine preventable illnesses are rarely, if ever, seen in the US, world travelers and immigrants can easily transmit these diseases back into the general population. If vaccine rates diminish within the United States, these diseases will return.

**#2 – "Mercury is still in the vaccines."** The preservative thimerosal that contained a form of mercury has been removed from almost all children's vaccines since 2001. The only vaccines that still contain thimerosal are some seasonal flu vaccines and some H1N1 vaccines.

**#3 – "Getting so many vaccines can overwhelm the immune system and cause serious illness or adverse reactions."** In truth, children's immune systems are more than capable of combating far more antigens than they encounter via immunizations. Children are bombarded every day with viruses and bacteria that their immune systems easily handle without harming their health. Currently, there is no consensus as to an upper limit on how

many vaccines the body can handle at one time.

The Center for Disease Control (CDC) reports that most vaccine adverse events are minor and temporary, such as a sore arm or mild fever or a lump under the skin where the shot was given. The CDC has also stated that "so few deaths can plausibly be attributed to vaccines that it is hard to assess the risk statistically." The Health and Human Services' Vaccine Adverse Events Reporting site between 1990 and 1992 looked at all deaths reported and found that only one might even possibly be associated with a vaccine. Through the CDC, the Vaccine Safety Datalink Project continually monitors patterns to determine if adverse events are a side effect or are unrelated to the vaccine.

**#4 – "The flu shot causes the flu."** The flu shot does not contain a live virus so it is impossible to get the flu from this shot. It is not uncommon to feel a bit achy after the vaccine as the body mounts its immune response and for 2 weeks after getting the flu shot, one is still susceptible to coming down with the flu.

A good resource for more information on some of the controversies surrounding immunizations is Dr. Ari Brown's book, *Baby 411: Clear Answers & Smart Advice for Your Baby's First Year* (Windsor Peak Press).

As to when your child should be immunized, you should talk to your pediatrician. Esse Health pediatricians follow the CDC, the Advisory Committee on Immunization Practices (ACIP) and the American Academy of Pediatrics guidelines for immunizations. There are only a few special circumstances that would prevent vaccinating a child. There are some vaccines that should not be given to children fighting certain types of cancers or diseases, or who might be taking drugs that lower the body's ability to resist infection. If you have a concern or question about giving these vaccinations and when to give them, ask your pediatrician. That is what we are here for!

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