



Vaccination Myths and Facts

Myth 1: Better hygiene and sanitation will make diseases disappear. Vaccines will no longer be necessary.

Fact 1: Hand washing and clean water are important to stop the spread of many diseases. However, many infections can still spread regardless of how clean we are. Vaccination is essential to stop the spread of infectious diseases. If people are not vaccinated, diseases that are uncommon, such as measles, can come back.

Myth 2: Vaccines have several damaging and long-term side-effects that are yet unknown. Vaccination can even be fatal.

Fact 2: Vaccines are very safe. Before a vaccine is approved for public use, it is tested thoroughly for many years. Even after vaccines have been approved for the public, vaccines continue to be monitored. Reactions to vaccinations are monitored by the Vaccine Adverse Event Reporting System (VAERS), a national vaccine safety surveillance program. VAERS helps to ensure that the benefits of vaccines continue to be far greater than the risks. Most vaccine reactions are usually minor and temporary, such as a sore arm or mild fever. Although very serious health events can happen, they are extremely rare.

Myth 3: The DTaP (diphtheria, tetanus and pertussis) and the polio vaccines cause sudden infant death syndrome (SIDS).

Fact 3: There is no evidence that these vaccines cause SIDS. Ninety percent of SIDS cases occur before an infant reaches the age of 6 months. The rate of SIDS is highest between 1 and 4 months of age. Unfortunately, this is the age group when children are scheduled to be vaccinated against DTaP and polio. The SIDS deaths are co-incidental to vaccination and would have occurred even if the child had not been given the vaccines.

Myth 4: Vaccine-preventable diseases are almost eliminated in the United States, so there is no reason to be vaccinated.

Fact 4: Although many vaccine preventable diseases have become uncommon in the United States, they have not been eliminated from the rest of the world. Measles, for example, is still common in some countries in Europe, Asia, the Pacific, and Africa. In 2014, there was large outbreak of measles at the Disneyland theme park in California. The majority of people who got measles were unvaccinated. Measles is very contagious and easily spreads among people who have not been vaccinated. Vaccines can protect us at home or when we are on vacation from diseases that we may not know are around us.

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Myth 5: Giving a child more than one vaccine at a time can increase the risk of harmful side-effects, which can overload the child's immune system.

Fact 5: There is no evidence that giving multiple vaccines at the same time can hurt a child's immune system. Children are exposed daily to several hundred foreign substances that can cause an immune response. In addition, offering multiple vaccines at once decreases the number of clinic visits. This saves time and money. Combined vaccination is also less painful to children because, in the case of MMR, it means fewer injections.

Myth 6: Influenza is just a nuisance, and the vaccine isn't very effective.

Fact 6: Influenza is a serious disease. Each year, hundreds of people in Boston are affected by it. Pregnant women, small children, the elderly and anyone with a chronic condition, like asthma or heart disease, are at higher risk for severe infection and death. It is important for pregnant women to get the vaccine to protect their newborns since currently there is no vaccine for babies under the age of six months. The vaccine protects against the 3-4 strains of flu expected to circulate in that particular year.

Myth 7: Vaccines contain mercury which is dangerous.

Fact 7: Some vaccines contain Thimerosal, an organic, mercury-containing compound that is used as a preservative. It is the mainly used in multi-dose vials. Studies have shown that thimerosal is safe and that the amount used in vaccines does not cause a health risk.

Myth 8: Vaccines cause autism

Fact 8: No. There is no evidence to link vaccine and autism.

