Parents Should Know:

Vaccine Myths and Facts

Myth: Better hygiene and sanitation will make diseases disappear – vaccines are not necessary.

Fact: The diseases we can vaccinate against will return if we stop vaccination programs. While better hygiene, hand washing and clean water help protect people from infectious diseases, many infections can spread regardless of how clean we are. If people are not vaccinated, diseases that have become uncommon, such as polio and measles, will quickly reappear.

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

Fact: Vaccines are very safe. Most vaccine reactions are usually minor and temporary, such as a sore arm or mild fever. Very serious health events are extremely rare and are carefully monitored and investigated. A person is far more likely to be seriously injured by a vaccine-preventable disease than by a vaccine. For example, in the case of polio, the disease can cause paralysis, measles can cause encephalitis and blindness, and some vaccine-preventable diseases can even result in death. While any serious injury or death caused by vaccines is one too many, the benefits of vaccination greatly outweigh the risk, and many, many more injuries and deaths would occur without vaccines.

Myth: The combined vaccine against diphtheria, tetanus and pertussis (whooping cough) and the vaccine against poliomyelitis cause sudden infant death syndrome.

Fact: There is no causal link between the administering of the vaccines and sudden infant death; however, these vaccines are administered at a time when babies can suffer from sudden infant death syndrome (SIDS). In other words, the SIDS deaths are co-incidental to vaccination and would have occurred even if no vaccinations had been given. It is important to remember that these four diseases are life-threatening and babies who are not vaccinated against them are at serious risk of death or serious disability.

Myth: Vaccine-preventable diseases are almost eradicated in my country, so there is no reason to be vaccinated.

Fact: Although vaccine--preventable diseases have become uncommon in many countries, the infectious agents that cause them continue to circulate in some parts of the world. In Western Europe, for example, measles outbreaks have occurred in unvaccinated populations in Austria, Belgium, Denmark, France, Germany, Italy, Spain, Switzerland and the United Kingdom since 2005. In a highly inter-connected world, these agents can cross geographical borders and infect anyone who is not protected. Two key reasons to get vaccinated are to protect ourselves and to protect those around us. Successful vaccination programs, like successful societies, depend on the cooperation of every individual to ensure the good of all. We should not rely on people around us to stop the spread of disease; we, too, must do what we can.

Myth: Vaccine-preventable childhood illnesses are just an unfortunate fact of life.

Fact: Vaccine preventable diseases do not have to be 'facts of life'. Illnesses such as measles, mumps and rubella are serious and can lead to severe complications in both children and adults, including pneumonia, encephalitis, blindness, diarrhea, ear infections, congenital rubella syndrome (if a woman becomes infected with rubella in early pregnancy), and death. All these diseases and suffering can be prevented with vaccines. Failure to vaccinate against these diseases leaves children unnecessarily vulnerable.

Myth: 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: Scientific evidence shows that giving several vaccines at the same time has no adverse effect on a child's immune system. Children are exposed to several hundred foreign substances that trigger an immune response every day. The simple act of eating food introduces new antigens into the body, and numerous bacteria live in the mouth and nose. A child is exposed to far more antigens from a common cold or sore throat than they are from vaccines. Key advantages of having several vaccines at once is fewer clinic visits, which saves time and money, and children are more likely to complete the recommended vaccinations on schedule. Also, when it is possible to have a combined vaccination, e.g. for measles, mumps and rubella, that means fewer injections.

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

Fact: Influenza is much more than a nuisance. It is a serious disease that kills 300,000-500,000 people worldwide every year. Pregnant women, small children, elderly people with poor health and anyone with a chronic condition, like asthma or heart disease, are at higher risk for severe infection and death. Vaccinating pregnant women has the added benefit of protecting their newborns (there is currently no vaccine for babies under six months). Vaccination offers immunity to the three most prevalent strains circulating in any given season. It is the best way to reduce chances of severe flu and of spreading it to others. Avoiding the flu means avoiding extra medical care costs and lost income from missing days of work or school.

Myth: It is better to be immunized through disease than through vaccines.

Fact: Vaccines interact with the immune system to produce an immune response similar to that produced by the natural infection, but they do not cause the disease or put the immunized person at risk of its potential complications. In contrast, the price paid for getting immunity through natural infection might be mental retardation from Haemophilus influenzae type b (Hib), birth defects from rubella, liver cancer from hepatitis B virus, or death from measles.

Myth: Vaccines contain mercury which is dangerous.

Fact: Thiomersal is an organic, mercury-containing compound added to some vaccines as a preservative. It is the most widely-used preservative for vaccines that is provided in multi-dose vials. There is no evidence to suggest that the amount of thiomersal used in vaccines poses a health risk.

Myth: Vaccines cause autism.

Fact: The 1998 study which raised concerns about a possible link between the measles-mumps-rubella (MMR) vaccine and autism was later found to be seriously flawed, and the paper has been retracted by the journal that published it. Unfortunately, its publication set off a panic that led to dropping immunization rates, and subsequent outbreaks of these diseases. There is no evidence of a link between MMR vaccine and autism or autistic disorders.

Ask a Doctor, Be Informed, Check the Source!