

The Importance Of Immunizations

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One of the most important aspects of quality care and prevention in medicine is immunization, which is the act of making a person immune to infection. There are several types of viruses and bacteria, including strep throat, the common cold, hand foot and mouth disease, and the flu. Some of these viruses we do not have immunizations or treatments for and we recommend supportive care. However, through the study of disease and the human immune system, we can prevent many dangerous and devastating illnesses through tested, proven and safe vaccines. These include whooping cough, chicken pox, human papillomavirus, meningitis, polio and measles; the complications of which include deafness, cancer, respiratory failure, coma and death.

Understandably, parents have many questions about vaccines, their components, how they work and how long their effects last. Much of this information is accessible through the CDC website and parents are encouraged to have conversations about the immunizations that may be due at each of their child's well visit appointments. The CDC website lists the common, minimal components in many of the vaccines that include stabilizers, adjuvants and preservatives to help boost the effects of the vaccine as well as the shelf life or longevity. Vaccines go through rigorous testing that has to be FDA approved before they are distributed to be administered. The US also has a vaccine safety monitoring system that includes Vaccine safety Datalink (VSD), Clinical immunization safety assessment (CISA), and the vaccine adverse event reporting system (VEARS). These testing, approval and monitoring systems allow us to ensure that the vaccines are and continue to be safe.

Through science and epidemiology, scientists have recommended specific schedules for when to administer various vaccines. In fact the U.S. immunization schedule was created and approved by various health organizations, including the American Academy of Pediatrics and the Center for Disease Control and Prevention, to allow children to be vaccinated and build antibodies at critical times in their lives. Therefore, it is highly recommended that the US immunization schedule provided by the CDC is followed as recommended. After a vaccine is administered, the human body responds by producing disease-specific antibodies to the vaccine. In some cases, such as with DTaP, the administration of the vaccine needs to be repeated at certain intervals to boost the immunity and antibody production to that particular disease. In other cases, after the series of the vaccine has been completed, no further boosters are needed and the patient potentially has life-long immunity.

Vaccines are very effective and have been studied for decades. We have evidence of this as many serious diseases have been eradicated. This brings up another common question which is why we continue to vaccinate. We do have to remember that many of the diseases that are not as prevalent in the United States are very prevalent in other parts of the World. Our World is constantly moving and as we socialize and interact with others, there is always a potential for exposure. Evidence of this has been demonstrated over the recent years with measles outbreaks across the U.S. We must also consider that there are some vaccines that cannot be given to particular age groups or people who have certain underlying conditions. By vaccinating those who are age-appropriate and able, we protect the little ones in our community who have not had the chance to build up their immune systems as well as those who are unable to receive certain vaccines or who are immunosuppressed for various reasons.

As pediatricians, we see vaccines as a very important and essential, in the prevention of disease and complications of serious illnesses. By vaccinating our children, we are protecting our children as well as our community.

<https://www.cdc.gov/vaccines/>

[Why Immunize Your Child - HealthyChildren.org](#)

[An Important Immunization Message from the AAP - HealthyChildren.org](#)

[All About the Recommended Immunization Schedules - HealthyChildren.org](#)