



Kapa'a Pediatrics LLC

Common Misconceptions about Vaccinations

The recommended vaccination schedule is based off of YEARS of scientific study and data gathering on MILLIONS of children.

Misconception: The majority of people who get disease have been vaccinated.

Most people who get diseases that can be prevented from vaccinations are those who are NOT vaccinated. Most cases in the USA are breakouts that occur in small areas where people do not vaccinate for religious reasons. It is true that vaccinations are not 100% effective. So it is possible to still get a disease if you are vaccinated.

Misconception: Vaccines cause many harmful side effects, illnesses and even death.

After pain and redness at the injection site, and sometimes fever, side effects from vaccinations are rare. Because some vaccines can cause a high fever, seizures from fever can occur, less than 1 in 1000, but with full recovery. Anaphylaxis (severe allergic reaction) can occur in fewer than 1 in a MILLION and can be reversed with medication. Other problems, encephalitis (brain infection), are so rare that although it is listed as a side effect it is unknown whether this is due to the vaccine or not since it occurs in the general population at the same rate.

Misconception: You can "catch the flu" from the flu vaccine.

If you receive a flu shot, it is made from pieces of the flu virus, hence it is IMPOSSIBLE to "catch the flu" from this shot. The live flu viral nasal vaccine is a live virus and although rare you can get flu like symptoms from this nasal spray.

Misconception: Giving a child multiple vaccinations for different diseases at the same time increases the risk of harmful side effects and can overload the immune system.

Are we overwhelming the immune system by giving too many vaccines? No, the current 14 different vaccines are 14 different types of bacteria or viruses. EVERY DAY a child is exposed to thousands if not millions of different types of bacteria, viruses and fungi. A liter of ocean water has about 20,000 species of bacteria and a gram of soil can have about 1 MILLION different bacterial species. Every time your child eats, breathes or puts their hand in their mouth they are exposing themselves to hundreds, thousands, if not millions of bacteria, viruses and fungi. Each bacterium can contain hundreds of different antigens. For example children develop antibodies to 17 different proteins in one common bacterium *Moraxella catarrhalis* and a strep throat infection results in immune responses to 25-50



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different antigens. Many of the the vaccines only contain 1 or 2 antigens bacterial antigens. Haemophilus influenzae type b vaccine, for example, only has a single antigen and ALL children will be exposed to this bacteria at some point in their life. So the use of the Hib vaccine actually reduces the burden on the immune system.

Misconception: Vaccinations are not needed because we no longer have these diseases in the USA.

We DO have many of these diseases in the USA. The only reason we don't see them frequently is because our parents did such a good job at making sure we were all vaccinated.

Misconception: Chickenpox parties are a safe and a good idea.

It is true that most healthy children with chickenpox (varicella) have a mild disease course and have a full recovery. What most people do not know, however, is that many children get very sick from chicken pox and some even die from chickenpox. There are many children who do not have strong immune systems and getting chicken pox can be fatal.

Misconception: Doctors hide the truth about vaccinations because they make a lot of money off of vaccinations.

Vaccinations are very expensive. Sometimes insurance companies reimburse pediatricians less than the actual cost they bought the vaccine, thus they are actually losing money every time they give that vaccine. At best, the insurance companies pay a few dollars extra per dose of vaccine given. However, the cost of needle, syringe, disposing the hazardous waste, and time for ordering, storing, and counseling about vaccinations is much more than the reimbursements pediatricians receive.

*** Patient handouts created by Kapa'a Pediatrics are intended to give parents the most common and pertinent facts about a certain issue. If there is ever any concern that your child was given an incorrect diagnosis or is not following the usual expected course for an illness please call us to speak with a physician. (808) 634-8011***