

6 MISCONCEPTIONS AROUND VACCINES



Source: World Health Organization, CDC, & The American College of Allergy, Asthma and Immunology

1.) VACCINES ARE NOT SAFE.

- Side effects from vaccination have been relatively mild with local injection site pain and soreness, headache, or a low-grade fever. They are mild and are not statistically or significantly reasonable for choosing not to vaccinate; especially considering the efficacy and benefits of vaccines on life-threatening and preventable diseases. [1]
- Allergy concerns around vaccines are mostly associated with Allergic, or IgE-mediated reactions to vaccines and are caused by vaccine components rather than the immunizing agent itself. [2]
- Common misconceptions around vaccines causing Autism and Sudden Infant Death Syndrome (SIDS), etc. Have been well-studied and researched and have been found to be unfounded. Much of the confusion may be due to many child-hood vaccinations occurring at the same time these disorders/syndromes occur or manifest in children. But much of the opposition towards anti-vaccinations are anecdotal; while causation and correlation can exist at the same time, correlation does not imply causation. [1]

2.) VACCINES ARE NOT NEEDED BECAUSE BETTER HYGIENE AND SANITATION HAVE BEEN EFFECTIVE.

- Though changes in socioeconomics, public health initiatives, health education, and improvements in technology and medicine have improved sanitation and hygiene practices, they have merely been mitigation practices at best, and are not the SOLE practice for the prevention of preventable diseases.
- Preventable diseases have shown to ebb with periodic peaks and valleys throughout the years. Studies have shown, especially in developed nations when periodic/routine immunizations drop, an increase in preventable disease related deaths have led to epidemics of disease, directly related to vaccination fear or opposition. [1]

3.) THE MAJORITY OF PEOPLE WHO GET DISEASE HAVE BEEN VACCINATED.

- No vaccine is 100% effective, because in order to make vaccines safer than the disease, the bacteria or virus is killed or weakened (attenuated). For reasons related to the individual, not all vaccinated persons develop immunity. Most routine childhood vaccines are effective for 85% to 95% of recipients. [1]

4.) VACCINE-PREVENTABLE DISEASES HAVE BEEN VIRTUALLY ELIMINATED NO NEED TO BE VACCINATED.

- Vaccinations have allowed us to reduce most vaccine-preventable diseases to very low levels in many countries. However, preventable/communicable diseases are still prevalent and can reach epidemic levels quite easily. This is largely due to travel and the relative mobility people enjoy now. People can unknowingly bring these diseases into any country and community; where some are not fully protected by vaccinations. Spread of the disease can occur relatively quickly. [1]

5.) "HOT LOTS" OF VACCINE THAT HAVE BEEN ASSOCIATED WITH MORE ADVERSE EVENTS AND DEATHS THAN OTHERS.

- Not all vaccine lots are the same, they vary in size, from several hundred thousand doses to several million, and some are in distribution much longer than others. Some larger lots may be in distribution for a longer period which may be associated with more adverse events by chance. Surveillance systems report events, that are temporally associated with vaccine receipt. But reports should not be interpreted as causation. Therefore, when parents are reviewing published lists of "hot lots" (a misnomer term), this will not help parents identify the best or worst vaccines for their children. [1]

6.) MULTIPLE VACCINATIONS FOR DIFFERENT DISEASES AT THE SAME TIME INCREASES THE RISK OF HARMFUL SIDE EFFECTS AND CAN OVERLOAD THE IMMUNE SYSTEM.

- Children are exposed to antigens every second of every day! Children are exposed to bacteria from the foods they eat, to viruses like the common cold which can expose them to 4 to 10 different antigens, while one case of "Strep Throat" exposes kiddies to between 25 to 50 antigens. Studies have shown that the recommended vaccines are effective in combination as they are individually, and combinations have not shown greater risk in concert for adverse side effects. It must not go unsaid that antigens by virtue, are specific, and they act and bind specifically. [3]

Reference:

- 1.) WHO: https://www.who.int/vaccine_safety/initiative/detection/immunization_misconceptions/en/index6.html
- 2.) ACAAI: <https://acaai.org/news/patients-vaccine-allergy-may-be-safely-vaccinated-following-new-guidelines>
- 3.) CDC: <https://www.cdc.gov/vaccinesafety/caregivers/index.html>