

Vaccine Safety

Concern: I'm worried about the side effects of vaccines. You really don't know if vaccines cause any long-term side effects. I don't want to vaccinate my child.

General Responses:

- I'll worry if your child *doesn't* get vaccinated, because the diseases can be very dangerous and most (including Hib, pertussis, and measles) are still infecting children in the United States.
- Vaccines, like any medication, can cause a side effect. Whether it's a drug or a vaccine - there can be a negative effect.
- The most common side effects caused by vaccines are almost always mild (like redness where the shot is given or low-grade fever or fussiness) and generally go away in one or a few days.
- Serious side effects following vaccination such as severe allergic reaction are very rare and doctors and clinic staff are trained to deal with them
 - About 1 occurrence in 1 million doses of vaccine administered
- Keep in mind that while there are small risks to vaccines, nothing is risk free. Every year about 30,000 people die in car accidents and 100's of people die when they slip and fall in the bath or shower.
- Vaccines are actually very safe - despite what you may read in many anti-vaccine publications.
 - Before a vaccine is approved by the Food and Drug Administration (FDA) for use in the U.S., the vaccine goes through a rigorous process to ensure safety.
 - After a vaccine is licensed, it is monitored closely. The purpose is to watch for possible side effects.
 - Monitoring the vaccine after it is licensed helps ensure that the benefits continue to outweigh the risks for people who receive the vaccine.
- Even after a vaccine is licensed, the FDA regularly inspects vaccine manufacturing facilities to make sure they are following strict regulations.
 - This includes inspections in facilities located outside of the U.S.

Risk of Disease:

- Some vaccine preventable diseases, like whooping cough (pertussis) and chickenpox, remain common in the U.S. Without vaccines, your child is at risk for getting seriously ill and suffering pain, disability and even death from these diseases.
- Other diseases prevented by vaccines (like polio and diphtheria) are no longer common in the U.S. because of vaccines. However, if we stop vaccinating, even the few cases we do see could very quickly become tens to hundreds of thousands of cases.

Benefit of Vaccination:

- Vaccines can prevent infectious disease that once killed or harmed many infants, children and adults.

Vaccine Safety

- A child is far more likely to be seriously injured by a vaccine-preventable disease than by any vaccine.
 - In the U.S. in 1985-1992 complications from measles disease included:
 - Pneumonia in 6 out of 100 cases
 - Seizures in 6-7 out of 1,000 cases
 - Encephalitis in 1 out of 1,000 cases
 - Death in 2 out of 1,000 cases
 - MMR vaccine risk:
 - Fever in 5-15 out of 100 doses (most with fever are otherwise asymptomatic)
 - Rash in 5 out of 100 doses
 - Thrombocytopenia in less than 1 out of 30,000 doses (generally transient and benign; the risk for thrombocytopenia during rubella or measles infection is much greater than the risk after vaccination)
 - Diphtheria disease risk: Death in 1 out of 20 cases
 - Tetanus disease risk: Death in 2 out of 10 cases
 - Pertussis disease risk:
 - Pneumonia in 1 out of 8 cases
 - Encephalitis in 1 out of 20 cases
 - Death in 1 out of 1,500 cases
 - DTaP vaccine risk:
 - Continuous crying, then full recovery, 1 in 1,000 doses
 - Convulsions or shock, then full recovery, 1 in 14,000 doses
 - Acute encephalopathy 0 - 10.5 in 1,000,000 doses
- Note: Side effects are listed on each of the Vaccine Information Statements and can be reviewed with the parent/guardian as needed.

Resources:

Michigan Department of Community Health

Vaccine Information Statements (with MCIR language)

http://www.michigan.gov/mdch/0,4612,7-132-2942_4911_4914_6385-138197--,00.html

Centers for Disease Control

Understanding How Vaccines Work

<http://www.cdc.gov/vaccines/hcp/patient-ed/conversations/downloads/vacsafe-understand-bw-office.pdf>

Infant Immunization FAQs

http://www.cdc.gov/vaccines/events/niiw/ed-resources/downloads/f_provider-qa-bw.pdf

Vaccine Safety

Ensuring the Safety of Vaccines in the United States

<http://www.cdc.gov/vaccines/hcp/patient-ed/conversations/downloads/vacsafe-ensuring-bw-office.pdf>

Immunization Vaccine Safety

http://www.cdc.gov/vaccines/pubs/downloads/f_vacsafe.pdf

Children's Hospital of Philadelphia

Facts about Childhood Vaccines

<http://vec.chop.edu/export/download/pdfs/articles/vaccine-education-center/vaccines-fact.pdf>

Too Many Vaccines - what you should know

<http://vec.chop.edu/export/download/pdfs/articles/vaccine-education-center/too-many-vaccines.pdf>

Booklet: Vaccine Safety and Your Child: Separating Fact from Fiction

<http://vec.chop.edu/export/download/pdfs/articles/vaccine-education-center/vaccine-safety-eng.pdf>

Are Vaccines Safe? (Not a handout)

http://vec.chop.edu/service/vaccine-education-center/vaccine-safety/general-safety-concerns.html#Are_vaccines_safe

Every Child by Two

Booklet: Protect Your Child-Immunize on Time, Every Time

<http://www.ecbt.org/images/articles/eBookOfDiseases.pdf>