

NEW PARENT TOOLKIT



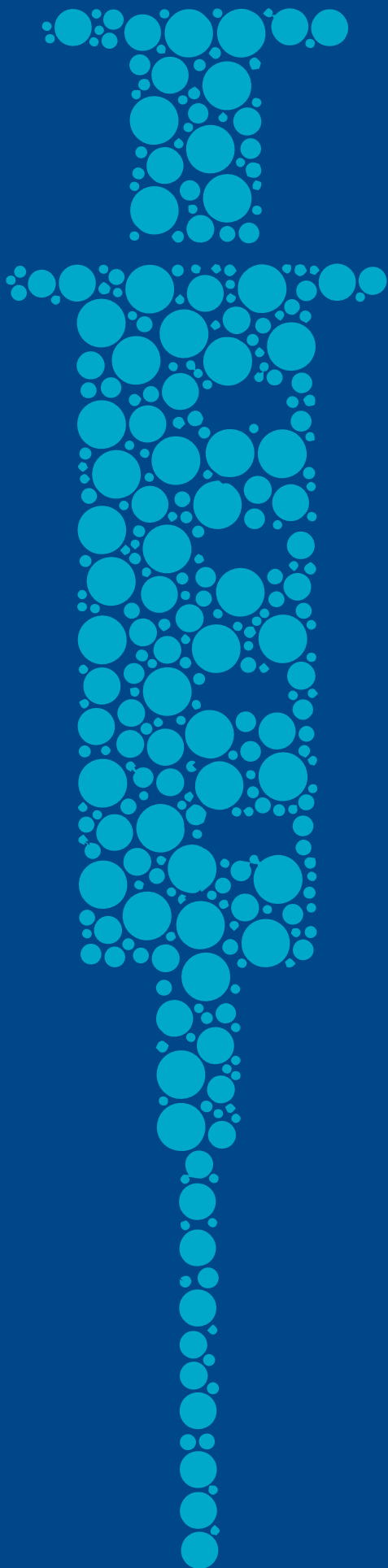


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Congratulations!



Getting ready to bring a new baby home means making your home safer and baby-friendly.

You've probably been buying car seats, finding the safest cribs, and making your lifestyle healthier. Now is also the time to learn about keeping your baby and your family free from vaccine preventable diseases.

Why are vaccines necessary?

You may have no personal experience with the diseases today's childhood vaccines prevent. It might even seem as though these diseases are gone and that we no longer need the vaccines. The fact is these diseases still exist, and vaccines are still necessary to keep our children and our communities protected. In 2019, 1,282 cases of measles occurred across 31 states, the vast majority in unvaccinated people. This was the largest surge of measles cases in the United States since 1992.

When people refuse vaccines, they put themselves at risk of contracting devastating diseases and spreading these diseases to other vulnerable people in their families and community, including children and the elderly. Recent outbreaks of *Haemophilus influenzae* type b (Hib), a dangerous infection that can cause meningitis and death in infants, have been linked to vaccine refusal, as have other outbreaks of vaccine preventable disease, such as measles and pertussis.



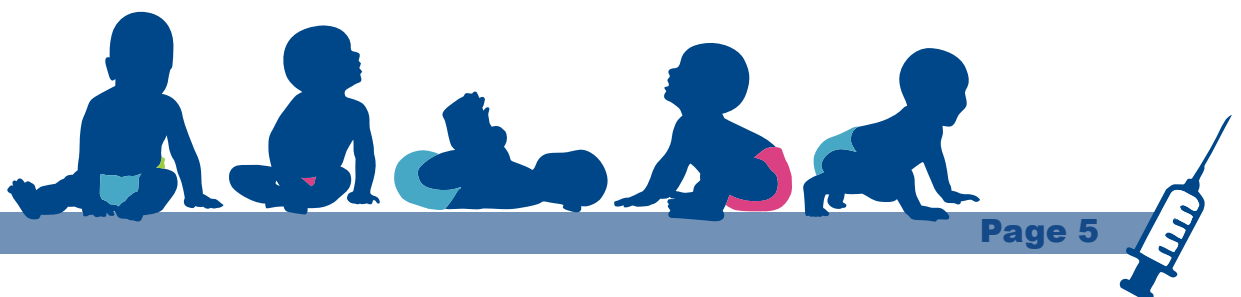
Still, some parents still feel that these diseases are relatively rare and that refusing vaccines is not a risky choice. Our unvaccinated children are at great risk, though, because the diseases vaccines prevent have few effective treatments, even in this day of great medical advances. Children who are unvaccinated are not protected against the suffering, complications, and longterm disability that can come from vaccine preventable diseases, including encephalitis, cancer, and death.

How do we know vaccines are safe for my baby?

Vaccines are some of the safest products you will give your baby. They are tested over the course of many years; they undergo large, extensive trials; and they are continually monitored for safety for as long as they are used. In the United States, vaccines must meet stringent FDA standards in order to be licensed and are reviewed thoroughly by members of the Advisory Committee on Immunization Practices before being added to the immunization schedule.

The Institute of Medicine, the health arm of the National Academies of Science, issued reports in 2011 and 2013 reviewing thousands of research articles and found that childhood vaccines and the childhood vaccination schedule are safe and do not cause longlasting side effects or chronic conditions. The vast majority of babies experience no side effects or only mild side effects, such as soreness or fever.

For detailed information on the benefits and possible side effects of vaccinations, visit our website at www.VoicesForVaccines.org/Vaccines



History: A short but spectacular history of vaccines

Vaccines are so commonplace today that we sometimes forget the awesomeness that is immunization. Fear not, we are going to give you the lowdown on the history of vaccines.

Most of us think about vaccines as a 20th Century science but it's been around for thousands of years. Did you know that variolation was recorded as early as the 11th Century in China. The Egyptians were using variolation to protect people by the 13th Century and West and North Africa started using variolation in the 17th Century.

More than 100 years of science

Immunization, as we know it, is more than 100 years old. Louis Pastuer, the grandfather of microbiology, also created the very first lab-produced vaccine - in 1879! It was a vaccine to prevent a disease called chicken cholera.

But it was Edward Jenner who really advanced how we thought about vaccines. Jenner realized that exposure to cowpox (a virus similar smallpox but not serious) could protect someone from getting smallpox. During Jenner's time smallpox killed 10-20% of the population.



GROSS
but **TRUE**

Variolation used a small pox scab from an infected person to help protect others from smallpox.

This was the earliest form of immunization.

Thankfully, immunization has evolved. Today's vaccines are much safer and more effective than variolation.

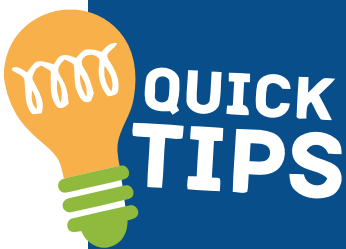




Successes that rocked our world!

Almost 150 years after Jenner's discovery, vaccines have changed the world as we know it including:

- **Eradicating smallpox from the face of the earth.**
Smallpox was killing people as early as 1100 BC and remained a frightening and deadly disease for more than 3 thousand years. In just the 100 years before it was eradicated, it is estimated that smallpox killed half a billion people. But vaccines rewrote that history and today smallpox is no longer a threat.
- **Decreasing the number of children who die before their 5th birthday.**
In 2015 Researchers looked at 149 national level health surveys that included 1 million children from 62 countries to see if vaccines reduced childhood death. What they found is one of the strongest cases for vaccines: when the children in a community are fully vaccinated, that community has a 24% decrease in deaths in children under 5 years old.
- **Preventing deadly diseases, EVEN cancer!**
We often talk about the advances that medicine has made in treating cancer but what about preventing it altogether? Did you know that there are vaccines that do just that? The HPV vaccine targets high-risk Human papillomavirus strains that are responsible for almost all cervical cancers and linked to some throat, anal, and other cancers. Hepatitis B vaccines help prevent infections that lead to liver cancer.



Some parents view HPV as a sexual disease and are reluctant to give their child the HPV vaccine at 11 years. Focus on the fact that the vaccine works best when given between 11 - 13 years.



Vaccine Overview: Development & Safety

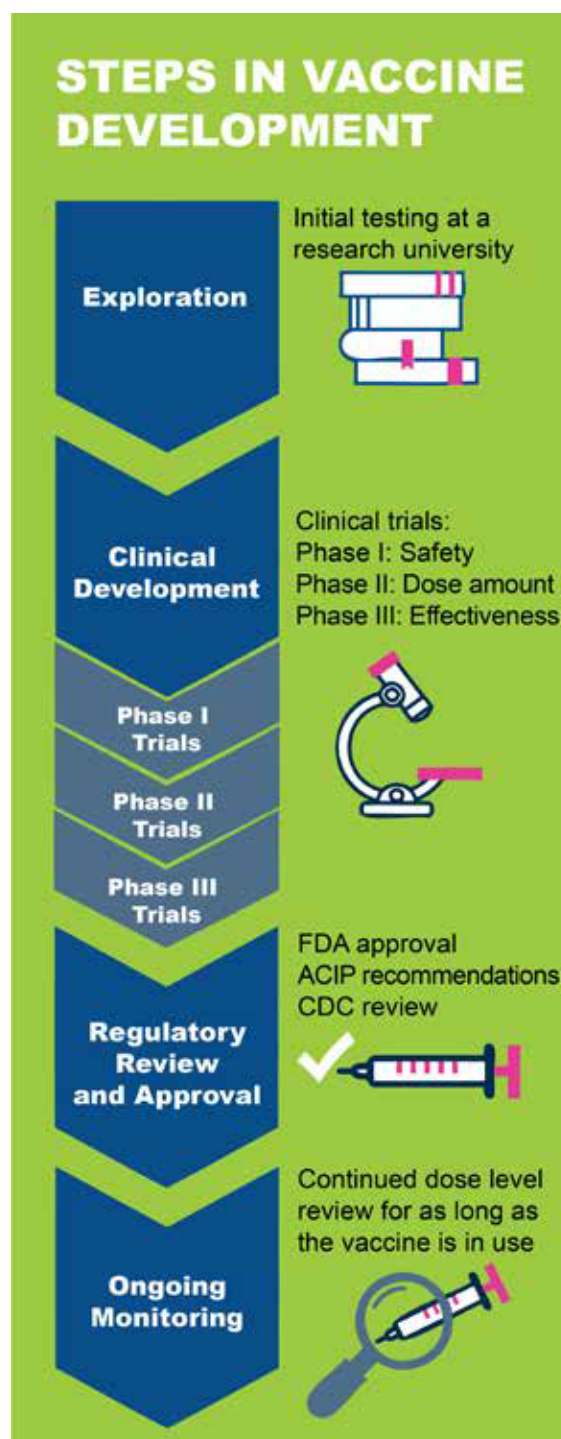
Many people have questions about how vaccines are developed. This more and more true as emergency vaccines come on the market. Here's what you need to know about vaccine development.

Vaccine Development

Vaccine development is a closely monitored and rigorous process. All vaccines, even accelerated vaccines, must adhere to all the safety and ethical protocols. Important things to know about vaccine development:

- Vaccines have been studied for more than 100 years.
- Vaccine development is NOT started from scratch - It builds on a strong foundation of what is already known to work and be safe
- Scientists understand short and long term side effects because:
- 99.99% of short-term side effects found in several weeks of vaccination
- Most long term side effects are found in ~45 days of vaccination

Vaccines are literally the most researched and monitored health interventions in medicine. You can be confident in their effectiveness in preventing dangerous diseases AND their safety.



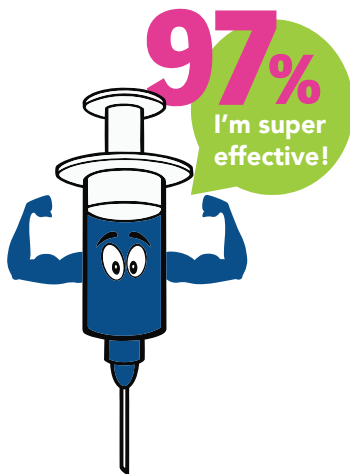
Vaccine Effectiveness

Vaccines have single handedly saved billions of lives. Need proof? Consider measles, one of the most contagious disease on earth.

- Measles is so contagious that if one person with measles is in a room with 10 unvaccinated people, 9 of them will get sick.
- Before the vaccine, in the US alone, there were between 3 and 4 million cases of measles each year
- During the US 2018-19 measles outbreak 23

Did you know...

Vaccines prevented at least 10 million deaths between 2010 and 2015 and save about 42,000 lives in the U.S. every year.



The good news?

The measles vaccine works! When children get both doses of the measles vaccine 97% of them will not get measles.

The bad news?

The U.S. actually eliminated measles in 2000 but because of vaccine hesitancy, cases have been increasing year by year. During the US 2018-19 measles outbreak, there were over 1,200 cases across 31 states. Most cases were in people who were not vaccinated.

Measles is not the only disease that can be brought under control by vaccines. It was a vaccine that finally brought the 2014-15 West African Ebola outbreak under control. For as frightening as Ebola was, just five years later COVID-19 made the world stand still. As of August 2021, 203 million people in the world have gotten COVID-19 – but vaccines are on the scene and as more people get vaccinated, fewer are dying from COVID.



Vaccine Safety

Vaccines are some of the most researched medical interventions on earth. We have been researching vaccines for more than 100 years. And billions of children have been safely protected from serious diseases in that 100 years.

By the time a vaccine is approved and at your doctor or pharmacy it has gone through a rigorous process to make sure it works and is safe. This process can take years and thousands of hours of scientific study. It includes:



Clinical Trial Data: There are usually thousands of people enrolled in clinical trials so there is a LOT of data focused on safety. For instance, Pfizer enrolled 43,661 people in its COVID-19 vaccine clinical trial.



FDA Review and Liscensure / Emergency Use Authorization:

If a vaccine is found to be safe and effective during the clinical development phase, it is reviewed by the Food and Drug Administration (FDA) for use in the general public. The FDA will only approve a vaccine if it is safe, effective, and the benefits outweigh any risks. Almost every country in the world has an equivalent to the United State's FDA, which means vaccine data are reviewed by dozens of regulatory bodies around the world for safety and effectiveness.



ACIP Review and Guidance: Once a vaccine is licensed and approved for use, the Advisory Committee on Immunization Practices (ACIP) reviews all the data and provides guidance on how a vaccine should be used.



Keeping babies safe: vaccines you need

What do I need to do to protect my baby?

You can begin protecting your baby from vaccine preventable diseases before he or she is even born. Be sure that you, your family, and anyone else who will come in contact with your baby are up-to-date with their vaccinations.

Many adults may be unaware that they need a pertussis booster (Tdap), a yearly flu shot, and a COVID-19 vaccine. Keeping those who surround your family disease-free creates a cocoon of protection for your baby during those crucial months before he or she is old enough to be vaccinated.

Pregnant women also need vaccines! Pregnant women should receive a pertussis vaccine (Tdap) between 27 and 36 weeks of pregnancy, during every pregnancy. This booster will keep mom healthy and will also help provide some immunity to her newborn baby, who will be particularly vulnerable to pertussis, a devastating and sometimes deadly disease on the rise nationwide. Pregnant women should be up to date on influenza and COVID-19 vaccines during their pregnancy. Flu and COVID-19 vaccines are safe for both pregnant women and their unborn babies at anytime during the pregnancy. And some of mom's antibodies transfer to the baby offering protection.

Once your baby is born, be sure to follow the immunization schedule recommended by the CDC and supported by the American Academy of Pediatrics and the American Academy of Family Physicians.



Source: CDC



Keeping babies safe: vaccines they need

Hepatitis B Vaccine

Your baby will receive this vaccine, which protects him or her from illness including cancer, before leaving the hospital. The hepatitis B virus can be spread through contact with blood, saliva, body tissues, or the fluids of an infected person. Many people who contract hepatitis B never discover the source of their infection. Infants are at special risk because if they become infected at birth, 90% of them will develop a lifelong hepatitis B infection and 25% of those will develop liver cancer or liver failure later in life. Hepatitis B infections can also occur through household contact, usually with relatives. Five thousand people die annually from complications of hepatitis B in the United State alone. Reactions to the vaccine, if any, tend to be mild, such as soreness at the injection site or slight fever.



Rotavirus Vaccine

The Rotavirus vaccine is given at 2, 4, and 6 months. Rotaviral gastroenteritis is an illness marked by vomiting, diarrhea, and fever. Once ill, infants can quickly become dehydrated. Rotavirus is spread from person to person, regardless of the hygienic condition of the environment. Before the vaccine was added to the childhood immunization schedule, up to 70,000 children were hospitalized annually in the U.S. due to rotavirus. This vaccine, which is given by mouth, is notable for its extremely low incidence of side effects which, if they occur, are very mild, and can include fever and diarrhea.



DTaP (Diphtheria, tetanus, and acellular pertussis) Vaccine

The DTaP vaccine is given at 2, 4, 6, and 12-18 months. It protects children from diphtheria, tetanus, and pertussis. All three diseases were significant causes of death before these vaccines were introduced. Pertussis, a particularly dangerous disease in babies, used to cause 8,000 deaths a year in the U.S., primarily in infants. While diphtheria and tetanus cases have been kept at bay through vaccination, pertussis outbreaks still occur in the U.S. and are on the rise. Side effects of the vaccine may include fever, fussiness, and soreness at the injection site.

Hib (Haemophilus influenzae) Vaccine

Hib vaccine is given at 2, 4, 6, and 12-15 months. Haemophilus influenzae type b is a bacterial infection often spread through coughing or from contact with an infected person's saliva. It can lead to severe infections of the brain, throat, and blood. Hib infection of the brain is an extremely serious illness that is often fatal in 5% of patients and causes brain damage in 10% to 30% of survivors. Hib vaccine can cause soreness at the injection site, but is not associated with serious side effects.



PCV (Pneumococcal conjugate vaccine)

The pneumococcal vaccine is given at 2, 4, 6, and 12-15 months. An infection caused by Streptococcus pneumoniae bacteria can lead to ear infections, pneumonia, blood infections, meningitis, and death. Prior to the use of this vaccine, pneumococcal disease was a serious problem in children under five years of age. Each year, it caused 5 million ear infections, 13,000 blood infections, 700 cases of meningitis, and 200 deaths in the U.S. Pneumococcal conjugate vaccine can cause soreness at the injection site and low-grade fever, but is not associated with serious side effects.



IPV (Inactivated poliovirus vaccine)

The polio vaccine is given at 2, 4, and 6-18 months. Polio virus can spread to the nervous system and cause temporary or permanent paralysis. While polio was eliminated from the U.S. in 1979, it is still endemic in Afghanistan, Pakistan, and Nigeria, and is only a plane ride away. The world is trying to eradicate polio for good, and vaccinating your child is a crucial way to help attain this goal. Polio vaccine may cause soreness at the injection site, but is not associated with serious side effects.



Learn more: additional resources

Website and Vaccine Fact Sheets

Voices for Vaccines website (VoicesForVaccines.org) has comprehensive sections on vaccines and vaccine science. We also have a glossary to help understand immunology terms and a lot of information on how to determine what information is credible and what is not.

You can also find:

- Podcasts
- On-demand webinars
- Debunking misinformation app
- And much, much more!

We have fact sheets for every vaccine your child will need. They have information about the vaccines and the diseases they prevent as well as helpful hints.

You can find everything at VoicesForVaccines.org/resources.

PREPARING FOR YOUR CHILD'S WELL BABY VISIT: DTaP VACCINE

BEFORE THE VISIT

What you need to know about diphtheria, tetanus, and pertussis

DTaP vaccine protects against three diseases that can cause:

- Diphtheria
- Tetanus
- Pertussis

DTaP vaccine protects against three diseases that can cause:

- Diphtheria
- Tetanus
- Pertussis

Fast facts about the DTaP vaccine

- DTaP vaccine is a 3-dose vaccine
- Booster doses are given at 12-15 months and 4-6 years
- Other vaccines are given at the same time as the DTaP vaccine

Other vaccines may be given at the same time as the DTaP vaccine.

Ask your health care provider what other vaccines your child will receive at the well baby visit so you can be prepared.

During the visit

Keep it sweet. Studies show something sweet can reduce pain. Ask your health care provider to give your baby a sweet solution of sucrose or glucose one to two minutes before the shot.

Brace it best. Breastfeeding calms and helps distract your baby. Plus the close contact is very soothing. So, if you can, consider breastfeeding your baby during vaccinations.

Spray Away. Ask for a cooling spray or pain-relieving ointment, which is applied on your child's arm or leg right before vaccination. Tell your provider you want this before the visit so they are ready for you.

Bring a Friend. Bring your child's favorite toy, blanket or book to help them focus on something positive during the vaccination visit.

Distraction Your Baby. Sing or read to your child to help them focus on you instead of the vaccination.

A little planning can make a big difference in helping your child have a stress-free vaccination visit.

Voices for vaccines
for parents, for parents

PREPARING FOR YOUR FAMILY'S VACCINE VISITS: INFLUENZA VACCINES

BEFORE THE VISIT

What you need to know about influenza

Influenza (more commonly known as the flu) is a highly contagious viral illness that is spread person-to-person through droplets and contact. It usually is a seasonal illness (October – May in the U.S.). One of the reasons the flu is so contagious is that people can pass it on before they even know they are sick.

On average, 140,000 to 360,000 people are hospitalized each year due to the flu. Between 12,000 – 73,000 people die from flu complications each year, depending on how severe flu season is.

The flu can be serious for anyone, but those most at risk for serious complications are:

- Children under 5 (particularly those under 2)
- Pregnant women
- People over 65 years of age
- People with certain chronic medical conditions (such as asthma, diabetes, or heart disease)

Types of influenza vaccines

Learn which influenza vaccine is right for your family members.

If your family member has:

- Enthusiasm and
- 2 years and older

talk to your healthcare provider about:

- live attenuated influenza vaccine (LAIV) or
- inactivated influenza vaccine (IIV)

For young children...

Keep it sweet. Studies show something sweet can reduce pain. Ask your health care provider to give your child a sweet solution of sucrose or glucose one to two minutes before the shot.

Brace it best. Breastfeeding calms and helps distract your baby. Plus the close contact is very soothing. So, if you can, consider breastfeeding your baby during vaccinations.

Spray Away. Ask for a cooling spray or pain-relieving ointment, which is applied on your child's arm or leg right before vaccination. Tell your provider you want this before the visit so they are ready for you.

Bring a Friend. Bring your child's favorite toy, blanket or book to help them focus on something positive during the vaccination visit.

Distraction Your Baby. Sing or read to your child to help them focus on you instead of the vaccination.

For teens and adults...

Stay sweet. Some people, particularly teenagers, can get dizzy after vaccination. It's a good idea to have your child stand in the wait for a few minutes after getting their vaccine just to make sure they are not dizzy or feeling faint.

A little planning can make a big difference in helping your child have a stress-free vaccination visit.

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PREPARING FOR YOUR CHILD'S WELL BABY VISIT: CHICKENPOX VACCINE

BEFORE THE VISIT

A little research before your child's well baby visit can go a long way to reducing your stress and concerns. Credible information helps ensure healthy choices and builds vaccine confidence.

What you need to know about chickenpox

Chickenpox is a very contagious disease. It causes a itchy rash that scabs over and usually lasts about a week. Chickenpox also causes:

- fever
- headaches
- loss of appetite

Rare but serious risks from chickenpox include:

- skin infections
- brain swelling
- pneumonia
- severe liver swelling
- bloodstream, bone, joint infections
- death (rare)

Fast facts about the chickenpox vaccine

- Chickenpox vaccine is a 2-dose vaccine
- 1st dose: 12-15 months
- 2nd dose: 4-6 years
- Other vaccines are given at the same time as the chickenpox vaccine

Other vaccines may be given at the same time as the chickenpox vaccine.

Ask your health care provider what other vaccines your child will receive at the well baby visit so you can be prepared.

During the visit

Keep it sweet. Studies show something sweet can reduce pain. Ask your health care provider to give your child a sweet solution of sucrose or glucose one to two minutes before the shot.

Brace it best. Breastfeeding calms and helps distract your baby. Plus the close contact is very soothing. So, if you can, consider breastfeeding your baby during vaccinations.

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Books and other sources

Websites:

- Immunization Action Coalition: www.vaccineinformation.org
- Immunize for Good: www.immunizeforgood.com
- Vaccine Education Center:
www.chop.edu/service/vaccineeducationcenter/home.html
- National Network for Immunization Information:
www.immunizationinfo.org
- Vaccinate Your Baby: www.vaccinateyourbaby.org
- Centers for Disease Control and Prevention: www.cdc.gov/vaccines
- American Academy of Pediatrics: www2.aap.org/immunization
- The History of Vaccines: www.historyofvaccines.org

Books:

- Autism's False Prophets: Bad Science, Risky Medicine, and the Search for a Cure by Paul A. Offit
- Bad Faith: When Religious Belief Undermines Modern Medicine by Paul A. Offit
- Bad Science: Quacks, Hacks, and Big Pharma Flacks by Ben Goldacre
- Bad Advice Or Why Celebrities, Politicians, and Activists Aren't Your Best Source of Health Information by Paul A. Offit
- Deadly Choices. How the Anti-Vaccine Movement Threatens Us All by Paul A. Offit
- Do Vaccines Cause That?! A Guide for Evaluating Vaccine Safety Concerns by Martin G Myers MD and Diego Pineda
- Do You Believe in Magic? The Sense and Nonsense of Alternative Medicine by Paul A. Offit
- Immunity by William E. Paul, MD
- On Immunity: An Inoculation by Eula Biss
- The Panic Virus: A True Story of Medicine, Science, and Fear by Seth Mnookin



- Panicology: Two Statisticians Explain What's Worth Worrying About (and What's Not) by Hugh Aldersey-Williams and Simon Briscoe
- Polio. An American Story by Ken Dalton
- Pox. An American History by Michael Willrich
- Tabloid Medicine: How the Internet is Being Used to Hijack Medical Science for Fear and Profit by Robert Goldberg
- Your Baby's Best Shot. Why Vaccines Are Safe and Save Lives
- by Stacy Mintzer Herlihy , E. Allison Hagood , et al.
- The Great Influenza: The Story of the Deadliest Pandemic in History by John M Barry
- Viruses, Plagues, and History: Past, Present and Future by Michael B. A. Oldstone, MD

