

IMMUNIZATION RESOURCES FOR PARENTS AND PARENTS-TO-BE

2020







Dear Parent or Parent-to-Be,

This booklet contains helpful information on vaccines (shots) for you and your family.

Vaccines save lives. They protect against serious diseases like measles, flu, whooping cough and chickenpox. Immunizing children against certain diseases is one important way to help them stay healthy.

Adults, especially pregnant women, need vaccines too. By getting yourself vaccinated while pregnant you are protecting both you and your baby from getting serious diseases like flu and whooping cough. Learn more in this booklet or by visiting Vaccinateyourfamily.org/pregnancy

Most private health insurance plans cover the cost of routine vaccines, but you may want to check with your insurance provider before going to the doctor. If your children do not have health insurance, are Medicaid-eligible, or are underinsured, they may be able to receive free vaccines at their doctor's office through the Vaccines for Children (VFC) program. For more information on the VFC Program and other state and federal insurance programs that help cover the cost of vaccinations, visit the Q&A page in this booklet and visit Vaccinateyourfamily.org/paying-for-vaccines

For more information and for answers to questions you may have about vaccines for your family, please visit Vaccinateyourfamily.org.



2020 Recommended Immunizations for Children from Birth Through 6 Years Old



NOTE:

If your child misses a shot, you don't need to start over. Just go back to your child's doctor for the next shot. Talk with your child's doctor if you have questions about vaccines.

FOOTNOTES:

- * Two doses given at least four weeks apart are recommended for children age 6 months through 8 years of age who are getting an influenza (flu) vaccine for the first time and for some other children in this age group.
- ⁵ Two doses of HepA vaccine are needed for lasting protection. The first dose of HepA vaccine should be given between 12 months and 23 months of age. The second dose should be given 6 months after the first dose. All children and adolescents over 24 months of age who have not been vaccinated should also receive 2 doses of HepA vaccine.

If your child has any medical conditions that put him at risk for infection or is traveling outside the United States, talk to your child's doctor about additional vaccines that he or she may need.

For more information, call toll-free **1-800-CDC-INFO** (1-800-232-4636) or visit www.cdc.gov/vaccines/parents



U.S. Department of Health and Human Services Centers for Disease Control and Prevention



American Academy of Pediatrics



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See back page for

more information on

vaccine-preventable

diseases and the

prevent them.

Vaccine-Preventable Diseases and the Vaccines that Prevent Them

Disease	Vaccine	Disease spread by	Disease symptoms	Disease complications
Chickenpox	Varicella vaccine protects against chickenpox.	Air, direct contact	Rash, tiredness, headache, fever	Infected blisters, bleeding disorders, encephalitis (brain swelling), pneumonia (infection in the lungs)
Diphtheria	DTaP* vaccine protects against diphtheria.	Air, direct contact	Sore throat, mild fever, weakness, swollen glands in neck	Swelling of the heart muscle, heart failure, coma, paralysis, death
Hib	Hib vaccine protects against <i>Haemophilus influenzae</i> type b.	Air, direct contact	May be no symptoms unless bacteria enter the blood	Meningitis (infection of the covering around the brain and spinal cord), intellectual disability, epiglottitis (life-threatening infection that can block the windpipe and lead to serious breathing problems), pneumonia (infection in the lungs), death
Hepatitis A	HepA vaccine protects against hepatitis A.	Direct contact, contaminated food or water	May be no symptoms, fever, stomach pain, loss of appetite, fatigue, vomiting, jaundice (yellowing of skin and eyes), dark urine	Liver failure, arthralgia (joint pain), kidney, pancreatic and blood disorders
Hepatitis B	HepB vaccine protects against hepatitis B.	Contact with blood or body fluids	May be no symptoms, fever, headache, weakness, vomiting, jaundice (yellowing of skin and eyes), joint pain	Chronic liver infection, liver failure, liver cancer
Influenza (Flu)	Flu vaccine protects against influenza.	Air, direct contact	Fever, muscle pain, sore throat, cough, extreme fatigue	Pneumonia (infection in the lungs)
Measles	MMR** vaccine protects against measles.	Air, direct contact	Rash, fever, cough, runny nose, pink eye	Encephalitis (brain swelling), pneumonia (infection in the lungs), death
Mumps	MMR**vaccine protects against mumps.	Air, direct contact	Swollen salivary glands (under the jaw), fever, headache, tiredness, muscle pain	Meningitis (infection of the covering around the brain and spinal cord), encephalitis (brain swelling), inflam- mation of testicles or ovaries, deafness
Pertussis	DTaP* vaccine protects against pertussis (whooping cough).	Air, direct contact	Severe cough, runny nose, apnea (a pause in breathing in infants)	Pneumonia (infection in the lungs), death
Polio	IPV vaccine protects against polio.	Air, direct contact, through the mouth	May be no symptoms, sore throat, fever, nausea, headache	Paralysis, death
Pneumococcal	PCV13 vaccine protects against pneumococcus.	Air, direct contact	May be no symptoms, pneumonia (infection in the lungs)	Bacteremia (blood infection), meningitis (infection of the covering around the brain and spinal cord), death
Rotavirus	RV vaccine protects against rotavirus.	Through the mouth	Diarrhea, fever, vomiting	Severe diarrhea, dehydration
Rubella	MMR** vaccine protects against rubella.	Air, direct contact	Sometimes rash, fever, swollen lymph nodes	Very serious in pregnant women—can lead to miscar- riage, stillbirth, premature delivery, birth defects
Tetanus	DTaP* vaccine protects against tetanus.	Exposure through cuts in skin	Stiffness in neck and abdominal muscles, difficulty swallowing, muscle spasms, fever	Broken bones, breathing difficulty, death

* DTaP combines protection against diphtheria, tetanus, and pertussis. ** MMR combines protection against measles, mumps, and rubella.

Immunizations and Developmental Milestones for Your Child from Birth Through 6 Years Old

Child's Name

Birth Date

		Birth	1 MONTH	2 MONTHS	4 MONTHS	6 MONTHS
Re	Hepatitis B	⊖НерВ	⊖HepB ¹			⊖НерВ
	Rotavirus			ORV	ORV	○RV ²
meno	Diphtheria, Tetanus, Pertussis			ОДТаР	ODTaP	ODTaP
ded	Haemophilus influenzae type b			OHib	OHib	OHib
mm	Pneumococcal			OPCV	ОРСУ	OPCV
Iniza	Inactivated Poliovirus			OIPV	OIPV	OIPV
tions	Influenza (Flu)					OInfluenza, first dose ³ Osecond dose
Milestones*	Milestones should be achieved by the age indicated. Talk to your child s doctor about age-appropriate milestones if your child was born prematurely.	 Recognizes caregiver's voice Turns head toward breast or bottle Communicates through body language, fussing or crying, alert and engaged Startles to loud sounds 	Starts to smile Raises head when on tummy Calms down when rocked, cradled or sung to Pays attention to faces	 Begins to smile at people Coos, makes gurgling sounds Begins to follow things with eyes Can hold head up 	Babbles with expression Likes to play with people Reaches for toy with one hand Brings hands to mouth Responds to affection Holds head steady, unsupported	 Knows familiar faces Responds to own name Brings things to mouth Rolls over in both directions Strings vowels together when babbling ("ah', "eh", "oh")
Growt	At each well child visit, enter date, length, weight, and percentile information to keep	WEIGHT / PERCENTILE	WEIGHT / PERCENTILE	WEIGHT / PERCENTILE	WEIGHT / PERCENTILE	WEIGHT / PERCENTILE
5	track of your child s progress.	LENGTH / PERCENTILE	LENGTH / PERCENTILE	LENGTH / PERCENTILE	LENGTH / PERCENTILE	LENGTH / PERCENTILE
		HEAD CIRCUMFERENCE	HEAD CIRCUMFERENCE	HEAD CIRCUMFERENCE	HEAD CIRCUMFERENCE	HEAD CIRCUMFERENCE

Shaded boxes indicate the vaccine can be given during shown age range.

VISIT DATE

VISIT DATE

VISIT DATE

VISIT DATE

VISIT DATE

¹ The second dose of HepB may be given either at the 1 month or 2 month visit.

² A third dose of rotavirus vaccine is only needed for RotaTeq.

³ Two doses given at least four weeks apart are recommended for children aged 6 months through 8 years of age who are getting a flu vaccine for the first time and for some other children in this age group.

* Milestones adapted from Caring for your baby and young child: Birth to age 5, Fifth Edition, edited by Steven Shelov and Tanya Remer Altmann © 1991, 1993, 1998, 2004, 2009 by the American Academy of Pediatrics and Bright Futures: Guidelines for health supervision of infants, children, and adolescents, Third Edition, edited by Joseph Hagan, Jr., Judith S. Shaw, and Paula M. Duncan, 2008, Elk Grove Village, IL: American Academy of Pediatrics. This is not an exhaustive list of milestones from 0-6 years. See more at www.cdc.gov/milestones

If your child has any medical conditions that put him at risk for infections or is traveling outside the United States, talk to your child's doctor about additional vaccines that he may need.

www.cdc.gov/milestones (Milestones)



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Immunizations and Developmental Milestones for Your Child from Rirth Through & Years Old

Child's Nome

Rirth Dote

		12 MONTHS	15 MONTHS	18 MONTHS	19 23 MONTHS	2-3 YEARS	4–6 Years
,	Hepatitis B	HepB (Final dose administ	ered between 6 and 18 mo	onths)			
Ì	Diphtheria, Tetanus, Pertussis		ODTaP				ODTaP
	Haemophilus influenzae type b	OHib					
	Pneumococcal	○PCV					
	Inactivated Poliovirus	IPV (Third dose administe	red between 6 and 18 mon	ths)			
	Influenza (Flu)	Second dose (if needed)				Age Age 2 3 Influenza , first dose ² second dose (if needed)	Age Age Age 4 5 6 Influenza , first
	Measles, Mumps, Rubella	OMMR					OMMR
	Varicella	○ Varicella					OVaricella
	Hepatitis A	O Hep A ³					
	Milestones should be achieved by the age indicated. Talk to your child s doctor about age-appropriate milestones if your child was born prematurely.	 Cries when mom or dad leaves Says "mama" and "dada" Copies gestures (for ex- ample, waves "bye bye") May stand alone Looks at right picture or thing when named 	 Imitates what you are doing Drinks from a cup Scribbles on his own Walks well Says a couple of words other than "mama" and "dada" 	 Points to show others something interesting Says several single words Points to one body part May walk up steps and run 	 Plays mainly beside other children Follows two-step commands Plays simple make- believe games Throws ball overhand 	 Can name most familiar things Shows affection for friends without prompting Turns book pages one at a time Kicks a ball 	Speaks very clearly Tells stories Can print some letters of numbers Hops; may be able to sl Enjoys playing with oth children
	At each well child visit, enter date, length, weight, and percentile information to keep track of your child s	WEIGHT / PERCENTILE	WEIGHT / PERCENTILE	WEIGHT / PERCENTILE	WEIGHT / PERCENTILE	WEIGHT	WEIGHT
pro	progress.						
	Shaded boxes indicate					UIVII	וואום
the vaccine can be given			VISIT DATE	VISIT DATE	VISIT DATE	VISIT DATE	VISIT DATE

3 Tv second dose should be o after the first dose. HepA vacc n may be given to any child 12 months and older to protect against HepA. Children and adolescents who did not receive the HepA vaccine and are at high-risk, should be vaccinated against HepA.

* Milestones adapted from AAP Bright Futures: Guidelines for Health Supervision of Infants, Children, and Adolescents Third Edition.

This is not an exhaustive list of milestones from 0-6 years. See more at www.cdc.gov/Milestones and download the Milestone Tracker App at <u>www.cdc.gov/MilestoneTracker</u>

If your child has any medical conditions that put him at risk for infections or is traveling outside the United States, talk to your child's doctor about additional vaccines that he may need.



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Centers for Disease

of Pediatrics AMERICAN ACADEMY OF FAMILY PHYSICIANS



Talk to your child's doctor or nurse about the vaccines recommended for their age.

		Tdap	Цру	Mening	jococcal		Hepatitis B	Hepatitis A	Polio	MMR Measles, mumps, rubella	Chickenpox Varicella
	Flu Influenza	Tetanus, diphtheria, pertussis	Human papillomavirus	MenACWY	MenB	Pneumococcal					
7-8 Years											
9-10 Years											
11-12 Years											
13-15 Years											
16-18 Years											
More information:	Everyone 6 months and older should get a flu vaccine every year.	All 11- through 12- year olds should get one shot of Tdap.	All 11- through 12- year olds should get a 2-shot series of HPV vaccine. A 3-shot series is needed for those with weakened immune systems and those who start the series at 15 years or older.	All 11- through 12- year olds should get one shot of meningococcal conjugate (MenACWY). A booster shot is recommended at age 16.	Teens 16–18 years old may be vaccinated with a serogroup B meningococcal (MenB) vaccine.						



These shaded boxes indicate when the vaccine is recommended for all children unless your doctor tells you that your child cannot safely receive the vaccine.



These shaded boxes indicate the vaccine is recommended for children with certain health or lifestyle conditions that put them at an increased risk for serious diseases. See vaccine-specific recommendations at www.cdc.gov/vaccines/hcp/acip-recs/.



This shaded box indicates children not at increased risk may get the vaccine if they wish after speaking to a provider.



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Vaccine-Preventable Diseases and the Vaccines that Prevent Them

Disease	Vaccine	Disease spread by	Disease symptoms	Disease complications
Chickenpox	Varicella vaccine protects against chickenpox.	Air, direct contact	Rash, tiredness, headache, fever	Infected blisters, bleeding disorders, encephalitis (brain swelling), pneumonia (infection in the lungs)
Diphtheria	Tdap* and Td** vaccines protect against diphtheria.	Air, direct contact	Sore throat, mild fever, weakness, swollen glands in neck	Swelling of the heart muscle, heart failure, coma, paralysis, death
Hepatitis A	HepA vaccine protects against hepatitis A.	Direct contact, contaminated food or water	May be no symptoms, fever, stomach pain, loss of appetite, fatigue, vomiting, jaundice (yellowing of skin and eyes), dark urine	Liver failure, arthralgia (joint pain), kidney, pancreatic and blood disorders
Hepatitis B	HepB vaccine protects against hepatitis B.	Contact with blood or body fluids	May be no symptoms, fever, headache, weakness, vomiting, jaundice (yellowing of skin and eyes), joint pain	Chronic liver infection, liver failure, liver cancer
Human Papillomavirus	HPV vaccine protects against human papillomavirus.	Direct skin contact	May be no symptoms, genital warts	Cervical, vaginal, vulvar, penile, anal, oropharyngeal cancers
Influenza (Flu)	Flu vaccine protects against influenza.	Air, direct contact	Fever, muscle pain, sore throat, cough, extreme fatigue	Pneumonia (infection in the lungs)
Measles	MMR*** vaccine protects against measles.	Air, direct contact	Rash, fever, cough, runny nose, pink eye	Encephalitis (brain swelling), pneumonia (infection in the lungs), death
Meningococcal Disease	MenACWY and MenB vaccines protect against meningococcal disease.	Air, direct contact	Sudden onset of fever, headache, and stiff neck, dark purple rash	Loss of limb, deafness, nervous system disorders, developmental disabilities, seizure disorder, stroke, death
Mumps	MMR*** vaccine protects against mumps.	Air, direct contact	Swollen salivary glands (under the jaw), fever, headache, tiredness, muscle pain	Meningitis (infection of the covering around the brain and spinal cord), encephalitis (brain swelling), inflammation of testicles or ovaries, deafness
Pertussis	Tdap* vaccine protects against pertussis.	Air, direct contact	Severe cough, runny nose, apnea (a pause in breathing in infants)	Pneumonia (infection in the lungs), death
Pneumococcal Disease	Pneumococcal vaccine protects against pneumococcal disease.	Air, direct contact	May be no symptoms, pneumonia (infection in the lungs)	Bacteremia (blood infection), meningitis (infection of the covering around the brain and spinal cord), death
Polio	Polio vaccine protects against polio.	Air, direct contact, through the mouth	May be no symptoms, sore throat, fever, nausea, headache	Paralysis, death
Rubella	MMR*** vaccine protects against rubella.	Air, direct contact	Sometimes rash, fever, swollen lymph nodes	Very serious in pregnant women—can lead to miscarriage, stillbirth, premature delivery, birth defects
Tetanus	Tdap* and Td ** vaccines protect against tetanus.	Exposure through cuts on skin	Stiffness in neck and abdominal muscles, difficulty swallowing, muscle spasms, fever	Broken bones, breathing difficulty, death

*Tdap combines protection against diphtheria, tetanus, and pertussis.

**Td combines protection against diphtheria and tetanus.

***MMR combines protection against measles, mumps, and rubella.

Did You Know Your Child Can Get Free Vaccines?

Vaccines for Children Can Help

The Vaccines for Children (VFC) program provides free vaccines to children who qualify. About half of American children less than 19 years old receive VFC vaccine.

Is my child eligible for the VFC Program?

Children are eligible if it is before their 19th birthday and they:

- Qualify for Medicaid
- Don't have insurance
- Are American Indian or Alaska Native

Children whose insurance doesn't cover some or all routinely recommended vaccines (underinsured) can still get vaccines through VFC if they go to a Federally Qualified Health Center or Rural Health Clinic.

Where can I go to get my child vaccinated?

- Ask if your child's doctor or nurse is a VFC provider. Nationally, there are thousands of health care providers enrolled in the VFC program.
- If your child does not have a doctor, ask if your local public health department provides vaccines.
- Visit a Federally Qualified Health Center (FQHC) or Rural Health Clinic (RHC).

How much will I have to pay?

- All routinely recommended vaccines are free through the VFC Program.
- Doctors can charge fees to give each shot. However, they cannot refuse to vaccinate your child if you are unable to pay these fees.
- The doctor can charge additional fees for the office visit or non-vaccine services such as an eye exam or blood test.

Where can I get more information?

- Ask your child's doctor's office if they participate in VFC.
- If you don't have a regular doctor's office:
 - See if your state has a searchable website for VFC providers.
 - Call your <u>state or local</u> <u>health department.</u>
 - Visit <u>findahealthcenter.hrsa.gov</u> to find a Federally Qualified Health Center.











Learn more at CDC.gov/features/vfcprogram

Top 4 Things Parents Need to Know about Measles

Measles is very contagious and can be serious. An unvaccinated child can get measles when traveling abroad or even in the U.S. Two doses of MMR vaccine provide the best protection against measles for your child.

You may be hearing a lot about measles lately. And all of this news on TV, social media, Internet, newspapers and magazines may leave you wondering what you as a parent really need to know about this disease. CDC has put together a list of the most important facts about measles for parents like you.



1. Measles can be serious.

Some people think of measles as just a little rash and fever that clears up in a few days, but **measles can cause serious** <u>health complications</u>, especially in children younger than 5 years of age. There is no way to tell in advance the severity of the symptoms your child will experience.

- About 1 in 5 people in the U.S. who get measles will be hospitalized
- 1 out of every 1,000 people with measles will develop brain swelling, which could lead to brain damage
- 1 to 3 out of 1,000 people with measles will die, even with the best care

Some of the more common measles symptoms include:

- high fever (may spike to more than 104° F),
- cough,
- runny nose (coryza),
- red, watery eyes (<u>conjunctivitis</u>), and
- rash (3-5 days after symptoms begin).

2. Measles is very contagious.

Measles spreads through the air when an infected person coughs or sneezes. It is so contagious that if one person has it, up to 9 out of 10 people around him or her will also become infected if they are not protected. Your child can get measles just by being in a room where a person with measles has been, even up to two hours after that person has left. An infected person **can spread measles to others even before knowing he/she has the disease**—from four days before developing the measles rash through four days afterward.





3. Your child can still get measles in United States.

Measles was declared eliminated from the U.S. in 2000 thanks to a highly effective vaccination program. Eliminated means that the disease is no longer constantly present in this country. However, **measles is still common in many parts of the world**. Each year around the world, an estimated 10 million people get measles, and about 110,000 of them die from it.

Even if your family does not travel internationally, you could come into contact with measles anywhere in your community. Every year, measles is **brought into the United States by unvaccinated travelers** (mostly Americans and sometimes foreign visitors) who get measles while they are in other countries. Anyone who is not protected against measles is at risk.



4. You have the power to protect your child against measles with a safe and effective vaccine.

The best protection against measles is measles-mumps-rubella (MMR) vaccine. MMR vaccine provides **long-lasting protection against all strains of measles**.

Your child needs two doses of MMR vaccine for best protection:

- The first dose at 12 through 15 months of age
- The second dose at 4 through 6 years of age

If your family is traveling overseas, the vaccine recommendations are a little different:

- If your baby is 6 through 11 months old, he or she should receive 1 dose of MMR vaccine before leaving.
- If your child is 12 months of age or older, he or she will need 2 doses of MMR vaccine (separated by at least 28 days) before departure.

Another vaccine, the measles-mumps-rubella-varicella (MMRV) vaccine, which protects against 4 diseases, is also available to children 12 months through 12 years of age.

Infant Immunizations FAQs

It's natural you have questions about your child's vaccines. Read answers to common questions to learn more about vaccine safety, the recommended schedule, how vaccines protect your child from 14 diseases by age two, and more. CDC regularly updates this document to ensure frequently asked questions from parents are answered with the most current information.

Q: Are vaccines safe?

A: Yes. Vaccines are very safe. The United States' long-standing vaccine safety system ensures that vaccines are as safe as possible. Currently, the United States has the safest vaccine supply in its history. Millions of children safely receive vaccines each year. The most common side effects are typically very mild, such as pain or swelling at the injection site.

Q: What are the side effects of the vaccines? How do I treat them?

A: Vaccines, like any medication, may cause some side effects. Most of these side effects are very minor, like soreness where the shot was given, fussiness, or a low-grade fever. These side effects typically only last a couple of days and are treatable. For example, you can apply a cool, wet washcloth on the sore area to ease discomfort.

Serious reactions are very rare. However, if your child experiences any reactions that concern you, call the doctor's office.

Q: What are the risks and benefits of vaccines?

A: Vaccines can prevent infectious diseases that once killed or harmed many infants, children, and adults. Without vaccines, your child is at risk for getting seriously ill and suffering pain, disability, and even death from diseases like measles and whooping cough. The main risks associated with getting vaccines are side effects, which are almost always mild (redness and swelling at the injection site) and go away within a few days. Serious side effects after vaccination, such as a severe allergic reaction, are very rare and doctors and clinic staff are trained to deal with them. The disease-prevention benefits of getting vaccines are much greater than the possible side effects for almost all children. The only exceptions to this are cases in which a child has a serious chronic medical condition like cancer or a disease that weakens the immune system, or has had a severe allergic reaction to a previous vaccine dose.

Q: Is there a link between vaccines and autism?

A: No. Scientific studies and reviews continue to show no relationship between vaccines and autism.

Some people have suggested that thimerosal (a compound that contains mercury) in vaccines given to infants and young children might be a cause of autism. Others have suggested that the MMR (measles- mumps-rubella) vaccine may be linked to autism. However, numerous scientists and researchers have studied and continue to study the MMR vaccine and thimerosal, and they reach the same conclusion: there is no link between MMR vaccine or thimerosal and autism.

Q: Can vaccines overload my baby's immune system?

A: Vaccines do not overload the immune system. Every day, a healthy baby's immune system successfully fights off thousands of germs. Antigens are parts of germs that cause the body's immune system to go to work to build antibodies, which fight off diseases.

The antigens in vaccines come from the germs themselves, but the germs are weakened or killed so they cannot cause serious illness. **Even if babies receive several vaccinations in one day, vaccines contain only a tiny fraction of the antigens they encounter every day in their environment.** Vaccines give your child the antibodies they need to fight off serious vaccine-preventable diseases.











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CDC recommends all children receive vaccines according to the recommended immunization schedule to protect them from 14 diseases by age two. Read below to get answers to 19 common questions about how vaccines benefit your child, the vaccine schedule, and more.

Q: Why are so many doses needed for each vaccine?

A: Getting every recommended dose of each vaccine provides your child with the best protection possible. Depending on the vaccine, your child will need more than one dose to build high enough immunity to prevent disease or to boost immunity that fades over time. Your child may also receive more than one dose to make sure they are protected if they did not get immunity from a first dose, or to protect them against germs that change over time, like flu. Every dose is important because each protects against infectious diseases that can be especially serious for infants and very young children.

Q: Why do vaccines start so early?

A: The recommended schedule protects infants and children by providing immunity early in life, before they come into contact with life-threatening diseases. Children receive immunization early because they are susceptible to diseases at a young age. The consequences of these diseases can be very serious, even life-threatening, for infants and young children.

Q: What do you think of delaying some vaccines or following a non-standard schedule?

A: Children do not receive any known benefits from following schedules that delay vaccines. Infants and young children who follow immunization schedules that spread out or leave out shots are at risk of developing diseases during the time you delay their shots. Some vaccinepreventable diseases remain common in the United States and children may be exposed to these diseases during the time they are not protected by vaccines, placing them at risk for a serious case of the disease that might cause hospitalization or death.

Infant Immunizations FAQs

Q: Haven't we gotten rid of most of these diseases in this country?

A: Some vaccine-preventable diseases, like pertussis (whooping cough) and chickenpox, remain common in the United States. On the other hand, other diseases vaccines prevent are no longer common in this country because of vaccines. However, if we stopped vaccinating, the few cases we have in the United States could very quickly become tens or hundreds of thousands of cases. Even though many serious vaccine-preventable diseases are uncommon in the United States, some are common in other parts of the world. Even if your family does not travel internationally, you could come into contact with international travelers anywhere in your community. Children who don't receive all vaccinations and are exposed to a disease can become seriously sick and spread it through a community.

Q: What are combination vaccines? Why are they used?

A: Combination vaccines protect your child against more than one disease with a single shot. They reduce the number of shots and office visits your child would need, which not only saves you time and money, but also is easier on your child.

Some common combination vaccines are Pediarix[®], which combines DTap, Hep B, and IPV (polio), and ProQuad[®], which combines MMR and varicella (chickenpox).

Q: Can't I just wait until my child goes to school to catch up on immunizations?

A: Before entering school, young children can be exposed to vaccinepreventable diseases from parents and other adults, brothers and sisters, on a plane, at child care, or even at the grocery store. Children under age 5 are especially susceptible to diseases because their immune systems have not built up the necessary defenses to fight infection. **Don't wait to protect your baby and risk getting these diseases when he or she needs protection now.**

Q: Why does my child need a chickenpox shot? Isn't it a mild disease?

A: Your child needs a chickenpox vaccine because chickenpox can actually be a serious disease. In many cases, children experience a mild case of chickenpox, but other children may have blisters that become infected. Others may develop pneumonia. There is no way to tell in advance how severe your child's symptoms will be.

Before vaccine was available, about 50 children died every year from chickenpox, and about 1 in 500 children who got chickenpox was hospitalized.

Q: My child is sick right now. Is it okay for her to still get shots?

A: Talk with your child's doctor, but children can usually get vaccinated even if they have a mild illness like a cold, earache, mild fever, or diarrhea. If the doctor says it is okay, your child can still get vaccinated..

Q: What are the ingredients in vaccines and what do they do?

A: Vaccines contain ingredients that cause the body to develop immunity. Vaccines also contain very small amounts of other ingredients. **All ingredients play necessary roles either in making the vaccine, or in ensuring that the final product is safe and effective.**

Q: Don't infants have natural immunity? Isn't natural immunity better than the kind from vaccines?

A: Babies may get some temporary immunity (protection) from mom during the last few weeks of pregnancy, but only for diseases to which

mom is immune. Breastfeeding may also protect your baby temporarily from minor infections, like colds. **These antibodies do not last long, leaving your baby vulnerable to disease.**

Natural immunity occurs when your child is exposed to a disease and becomes infected. It is true that natural immunity usually results in better immunity than vaccination, but the risks are much greater. A natural chickenpox infection may result in pneumonia, whereas the vaccine might only cause a sore arm for a couple of days.

Q: Can't I just wait to vaccinate my baby, since he isn't in child care, where he could be exposed to diseases?

A: No, even young children who are cared for at home can be exposed to vaccine preventable diseases, so it's important for them to get all their vaccines at the recommended ages. Children can catch these illnesses from any number of people or places, including from parents, brothers or sisters, visitors to their home, on playgrounds or even at the grocery store. Regardless of whether or not your baby is cared for outside the home, she comes in contact with people throughout the day, some of whom may be sick but not know it yet.

If someone has a vaccine preventable disease, they may not have symptoms or the symptoms may be mild, and they can end up spreading disease to babies or young children. Remember, many of these diseases can be especially dangerous to young children so it is safest to vaccinate your child at the recommended ages to protect her, whether or not she is in child care.

Q: Do I have to vaccinate my baby on schedule if I'm breastfeeding him?

A: Yes, even breastfed babies need to be protected with vaccines at the recommended ages. The immune system is not fully developed at birth, which puts newborns at greater risk for infections.

Breast milk provides important protection from some infections as your baby's immune system is developing. For example, babies who are breastfed have a lower risk of ear infections, respiratory tract infections, and diarrhea. However, breast milk does not protect children against all diseases. Even in breastfed infants, vaccines are the most effective way to prevent many diseases. Your baby needs the long-term protection that can only come from making sure he receives all his vaccines according to the CDC's recommended schedule.

Q: What's wrong with delaying some of my baby's vaccines if I'm planning to get them all eventually?

A: Young children have the highest risk of having a serious case of disease that could cause hospitalization or death. Delaying or spreading out vaccine doses leaves your child unprotected during the time when they need vaccine protection the most. For example, diseases such as Hib or pneumococcus almost always occur in the first 2 years of a baby's life. And some diseases, like Hepatitis B and whooping cough (pertussis), are more serious when babies get them at a younger age. Vaccinating your child according to the CDC's recommended immunization schedule means you can help protect him at a young age.

Q. I got the whooping cough and flu vaccines during my pregnancy. Why does my baby need these vaccines too?

A: The protection (antibodies) you passed to your baby before birth will give him some early protection against whooping cough and flu. However, these antibodies will only give him short-term protection. It is very important for your baby to get vaccines on time so he can start building his own protection against these serious diseases.

800-CDC-INFO (800-232-4636) • <u>www.cdc.gov/vaccines</u>



10 Things to Know About Childhood Vaccines

1. Why your child should be vaccinated

Children need vaccinations (shots) to protect them from dangerous childhood diseases. These diseases can have serious complications and even kill children.

2. Diseases that childhood vaccines prevent

Diphtheria	Mumps
Haemophilus influenzae type b	Pertussis (Whooping Cough)
(Hib disease is a major cause of	Pneumococcal
bacterial meningitis)	(Causes bacterial meningitis and
Hepatitis A	blood infections)
Hepatitis B	• Polio
Human Papillomavirus (HPV is a major	Rotavirus
cause of cervical and other cancers)	Rubella (German Measles)
 Influenza (Flu) 	 Tetanus (Lockjaw)
Measles	Varicella (Chickenpox)
Meningococcal	

Learn more about vaccines and the diseases they protect against, and the risks and benefits of vaccines on the Vaccine Information Statements (VIS) - available at www.cdc.gov/vaccines/hcp/vis.

3. Which vaccines your child needs and when each vaccine should be given

View the recommended immunization schedule to see which vaccines your child needs and when each dose should be given (<u>www.vaccinateyourfamily.org/babies-children</u>).



Adapted from CDC website at <u>cdc.gov/vaccines/vac-gen/10-shouldknow.htm</u> and VYF website at <u>vaccinateyourfamily.org/which-vaccines-does-my-family-need/babies-children</u>

4. Like any medicine, there may be minor side effects

Side effects can occur with any medicine, including vaccines. Depending on the vaccine, these can include slight fever, rash, or soreness where the shot was given. **Slight discomfort is normal and should not be a cause for alarm**. Your healthcare provider can give you additional information.

5. What to do if your child has a serious reaction

It is **very rare**, but some children may have more serious reactions to their shots. **The risk of serious complications from a vaccine-preventable disease is far greater than the risk of a serious reaction to a vaccine.** If you think your child is experiencing a severe reaction, call your doctor or get the child to a doctor right away. Write down what happened, and the date and time it happened. Ask your doctor, nurse or health department to file a Vaccine Adverse Event Report form or go to <u>vaers.hhs.gov</u> to file this form yourself electronically.

6. Why you should not wait to vaccinate

Children under 5 are especially vulnerable to diseases because their immune systems have not built up the necessary defenses to fight infections. By getting your child all his or her vaccines on time, you can protect your child from diseases and also protect other children (and adults) at school or daycare.

7. Track your child's vaccines with an immunization record

Keeping up-to-date immunization records (also known as shot records) for your family, especially your children, is important. You will need your children's official immunization records to register them for school, child care, athletic teams and summer camps, and for international travel. An immunization record helps you and your healthcare provider keep your child's shots on time. If you move or change doctors, having a record might prevent your child from needing to get vaccines he or she has already had. An immunization record should be started when your child receives his/her first vaccine and updated with each vaccination visit. Ask your healthcare provider if your child has his/her record in your local or state electronic immunization information system (IIS). You can also contact your state's IIS (cdc.gov/vaccines/programs/iis/contacts-locate-records.html#state) to find your child's immunization record.

8. Some children are eligible for free vaccinations

A federal program called <u>Vaccines for Children (VFC)</u> provides free vaccines to eligible children, including those without health insurance coverage, all those who are enrolled in Medicaid, American Indians and Alaskan Natives and those whose health insurance dues does not cover vaccines and go to Federally Qualified Health Clinics (FQHCs) or Rural Health Centers (RHCs).

9. Breastfed babies need vaccines too

Even breastfed babies need to be protected with vaccines at the recommended ages. While breast milk provides important protection from some infections like colds, ear infections and diarrhea, breast milk will not protect him or her against all diseases. Your baby needs the *long-term protection* that can only come from making sure he or she receives all his vaccines according to the <u>recommended immunization schedule</u>, *before* he is exposed to diseases.

10. More information is available

Visit Centers for Disease Control and Prevention (cdc.gov/vaccines) & Vaccinate Your Family (vaccinateyourfamily.org).

Adapted from CDC website at <u>cdc.gov/vaccines/vac-gen/10-shouldknow.htm</u> and VYF website at <u>vaccinateyourfamily.org/which-vaccines-does-my-family-need/babies-children</u>

Tips for a Less Stressful Shot Visit



Help children see vaccines as a good thing. Never threaten your child with shots, by saying "If you misbehave I will have the nurse give you a shot." Instead, remind children that vaccines can keep them healthy.

Ways to soothe your baby:

- Swaddling
- Skin-to-skin contact
- Offering a sweet beverage, like juice (when the child is older than 6 months)
- Breastfeeding

Your health care professional may cool or numb the injection site to reduce the pain associated with your child's shots. Making the choice to vaccinate your child is vital for their health and well-being. Even so, getting shots can still be stressful for you and your little one. Fortunately, there are simple ways you can support your child before, during, and after shots.

Before Getting Shots

Come prepared! Take these steps before your child gets a shot to help make the immunization visit less stressful on you both.

- Read any vaccine materials you received from your child's health care professional and write down any questions you may have.
- Find your child's personal immunization record and bring it to your appointment. An up-to-date record tells your doctor exactly what shots your child has already received.
- Pack a favorite toy or book, and a blanket that your child uses regularly to comfort your child.

For older children

- Be honest with your child. Explain that shots can pinch or sting, but that it won't hurt for long.
- Engage other family members, especially older siblings, to support your child.
- Avoid telling scary stories or making threats about shots.

At the Doctor's Office

If you have questions about immunizations, ask your child's doctor or nurse. Before you leave the appointment, ask your child's doctor for advice on using non-aspirin pain reliever and other steps you can take at home to comfort your child.

Try these ideas for making the shots easier on your child.

- Distract and comfort your child by cuddling, singing, or talking softly.
- Smile and make eye contact with your child. Let your child know that everything is ok.
- Comfort your child with a favorite toy or book. A blanket that smells familiar will help your child feel more comfortable.
- Hold your child firmly on your lap, whenever possible.

The Centers for Disease Control and Prevention (CDC), the American Academy of Family Physicians (AAFP), and the American Academy of Pediatrics (AAP) adapted this information from *Be There for Your Child during Shots*, California Department of Public Health Immunization Branch.

For older children

- Take deep breaths with your child to help "blow out" the pain.
- Point out interesting things in the room to help create distractions.
- Tell or read stories.
- Support your child if he or she cries. Never scold a child for not "being brave."

Once your child has received all of the shots, be especially supportive. Hold, cuddle, and, for infants, breastfeed or offer a bottle. A soothing voice, combined with praise and hugs will help reassure your child that everything is ok.

After the Shots

Sometimes children experience mild reactions from vaccines, such as pain at the injection site, a rash or a fever. These reactions are normal and will soon go away. The following tips will help you identify and minimize mild side effects.

- Review any information your doctor gives you about the shots, especially the Vaccine Information Statements or other sheets that outline which side effects might be expected.
- Use a cool, wet cloth to reduce redness, soreness, and swelling in the place where the shot was given.
- Reduce any fever with a cool sponge bath. If your doctor approves, give non-aspirin pain reliever.
- Give your child lots of liquid. It's normal for some children to eat less during the 24 hours after getting vaccines.
- Pay extra attention to your child for a few days. If you see something that concerns you, call your doctor.

Remember to schedule your next visit! Staying current with your child's immunizations provides the best protection against disease.

Take a moment to read the Vaccine Information Sheet your health care professional gives you during your visit. This sheet has helpful information and describes possible side effects your child may experience.







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Keeping Track of Your Children's Vaccines: Questions & Answers for Parents

What are Immunization Information Systems?

Immunization Information Systems (IIS), also known as immunization registries, are electronic systems that have information on the vaccines (shots) that were given to your child. Some IIS can remind you or your doctor of the next shot due to keep your child up-to-date with their immunizations.

What are the benefits of having my child's shot record saved in an IIS?

- Helps to make sure that your child doesn't miss any shots or get too many shots
- Reminds you by mail or telephone when your child need shots
- Allows you to quickly get a copy of your child's shot record from the doctor
- Makes sure your child has all of the shots needed to start daycare, school and/or camp, and for international travel.

What information is in an IIS?

The information stored in an IIS is different in every state, but most contain at least the following information:

- Patient's name (first, middle, and last)
- Patient's birth date
- Patient's gender (male or female)
- Patient's birth state/country
- Mother's name
- Types of shots given
- Dates the shots were given

Who do I contact to see if my child's shot record is in an IIS or if I want a copy of my child's shot record?

You must contact your doctor's office, or your local or state health department. Some states allow the public to directly access the IIS in order to print out shot records.

Does it cost any money to have my child's shot record in my state's IIS?

No, there is no cost to a parent/patient to participate in an IIS.

How can I find out if my child's doctor is participating in the IIS?

Just ask your doctor if they use the state or local IIS. You can also contact the IIS in your area to find out if your doctor participates. Visit the CDC website at <u>www.cdc.gov/vaccines/programs/iis/contacts-locate-records.html#state</u> to find contact information for your state's IIS.

THERE'S SO MUCH TO DO BEFORE THE BIG DAY...



Visit Vaccinateyourfamily.org to learn:

 How getting flu and whooping cough (Tdap) vaccinations while pregnant protect you and your baby. Let us help guide you on ways to keep your baby healthy from the start.

- Why it's important to follow the CDC's recommended schedule.
- Why your baby needs the Hepatitis B vaccine before leaving the hospital.
- How vaccines in the U.S. are continually monitored for safety.
- What to do if you can't afford to pay for vaccines.
- Where to find trusted resources on vaccines.
- And much, much more...



Vaccines are Part of a Healthy Pregnancy

Getting Vaccinated While Pregnant Protects Mom and Baby



Talk to your doctor or midwife about flu and whooping cough vaccines, and to find out what other vaccines you may need.

For more information about vaccines during pregnancy and the importance of timely immunizations for people of all ages, visit VaccinateYourFamily.org



Whooping Cough

Whooping cough, also known as pertussis, is a serious disease, especially in infants. Some babies with whooping cough have coughing fits and gasp for air, while others may stop breathing. About half of babies younger than 12 months who get whooping cough are hospitalized. The good news is that you can help protect your baby. By getting the whooping cough vaccine (also called Tdap) during pregnancy, you'll pass antibodies to your baby that will help protect them from this disease until they are old enough to start getting their own whooping cough vaccinations (DTaP). Prenatal care providers agree that the Tdap vaccine is safe for mom and baby, and is important for women to get during the 27th through 36th week (3rd trimester) of every pregnancy.

Influenza (Flu)

The flu can be a dangerous illness, especially for pregnant women and young children. Changes in your immune, heart and lung functions during pregnancy make you more likely to very sick from the flu. Pregnant women with the flu also have a greater chance for serious problems for their baby, including premature labor and delivery, and low birthweight. Fortunately, getting a flu shot is a simple thing you can do to help protect yourself and your baby. When you get a flu shot, your body makes antibodies that are passed to your baby to help protect them from the flu for up to 6 months after they are born. This is important because your baby is at high risk of serious flu complications, but can not get their own flu vaccine until 6 months of age. Sadly, every year, about 20,000 children under five are hospitalized and about 100 die due to complications from the flu. The flu vaccine is safe for both mom and baby, and can be received during any trimester. The CDC recommends getting the vaccine in September or October, if possible. Most importantly, you want to be protected before flu starts spreading in your community.

Surround Your Baby with Protection

For additional protection, make sure friends, family and caregivers who will be in contact with your baby are up-to-date on their vaccinations *at least two weeks* before meeting your newborn.



Credible Websites for Vaccine Information and Resources

Vaccinate Your Family (VYF) – <u>www.vaccinateyourfamily.org</u>

American Academy of Family Physicians' (AAFP) Family Doctor - familydoctor.org

American Academy of Pediatrics' (AAP) Healthy Children – www.healthychildren.org/english/safety-prevention/immunizations/Pages/default.aspx

American Cancer Society (HPV information) - www.cancer.org/healthy/hpv-vaccine

American College of Obstetricians and Gynecologists (ACOG) – <u>www.immunizationforwomen.org</u>

American College of Nurse-Midwives (ACNM) – www.ourmomentoftruth.com/your-health/importance-of-vaccines

Centers for Disease Control and Prevention (CDC) – <u>www.cdc.gov/vaccines/parents</u> & <u>www.cdc.gov/vaccines/pregnancy</u>

Department of Health and Human Services (HHS) – <u>www.vaccines.gov</u>

Families Fighting Flu (FFF) – <u>www.familiesfightingflu.org</u>

Immunization Action Coalition (IAC) –<u>www.vaccineinformation.org</u>

Institute for Vaccine Safety at Johns Hopkins Bloomberg School of Public Health – <u>www.vaccinesafety.edu</u>

March of Dimes – <u>www.marchofdimes.org/pregnancy/vaccinations-and-pregnancy.aspx</u>

National Foundation for Infectious Diseases (NFID) – <u>www.nfid.org</u>

National Meningitis Association (NMA) –<u>www.nmaus.org</u>

Meningitis B Action Project – <u>www.meningitisbactionproject.org</u>

Parents of Kids with Infectious Diseases (PKIDs) - www.pkids.org

Shot by Shot: Stories of Vaccine-Preventable Diseases – <u>www.shotbyshot.org</u>

Vaccine Education Center at The Children's Hospital of Philadelphia (CHOP) - vaccine.chop.edu

Voices for Vaccines (VFV) – <u>www.voicesforvaccines.org</u>