

THINK  
ABOUT  
THE  
LINK<sup>®</sup>

A GUIDE TO  
VACCINATIONS  
FOR  
PARENTS



*What are vaccines?*

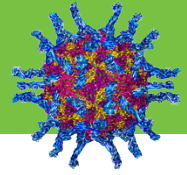
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*When should my child  
be vaccinated?*

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*Why does my child  
need the HPV vaccine?*

# HISTORY OF VACCINATIONS



Smallpox is a serious infectious disease that causes fever and a distinctive, progressive skin rash.



Cases of paralysis from polio in the U.S. in the early 1950s:

more than **15,000**

In the year 2017:

**0**

**600 years ago**

Variolation, intentionally exposing an individual to smallpox material, traces back to 16th-century China. This process resulted in a milder form of the disease.



**1796**

Edward Jenner developed a vaccine against smallpox. Almost 200 years later, in 1980, the World Health Organization declared that smallpox had been eradicated, or wiped out.



Childhood vaccines can prevent 14 potentially serious diseases or conditions throughout your child's lifetime.



**1955**

Jonas Salk's polio vaccine was proven safe and effective. Polio has now been eliminated in the U.S., and organizations are currently working to eradicate polio worldwide.



**1940s**

The routine immunization schedule included vaccines against four potentially serious diseases (smallpox, diphtheria, tetanus, and pertussis). Now the schedule includes vaccines to prevent a total of 14 conditions.



**1885**

Louis Pasteur developed a vaccine against rabies. The rabies vaccine series, which can be given to people who may have been exposed to the virus, has made rabies infection very rare in the United States.

In the U.S., vaccines go through three phases of clinical trials to make sure they are safe and effective before they are licensed.



**2006**

The HPV vaccine was licensed in the U.S. This vaccine series protects against most cervical cancers and at least five other types of cancer.



**Today**

Vaccine research continues as scientists work to discover ways to protect people from potentially life-threatening diseases such as HIV/AIDS and cancer.

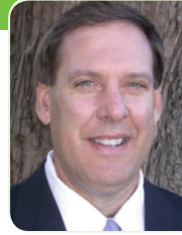


In the United States, more than **12,000**

women are diagnosed with cervical cancer each year (most of them from HPV).

## PEDIATRICIAN STAN L. BLOCK, M.D., ANSWERS QUESTIONS ABOUT THE

### HUMAN PAPILLOMAVIRUS (HPV) VACCINE



**Stan. L Block, MD,** is a pediatrician who has been treating and vaccinating children and teens for more than three decades. He is president of Kentucky Pediatric and Adult Research, Inc.

**Q:** What is the HPV vaccine?

**A**

The HPV9 vaccine is a thoroughly studied vaccine that prevents against nine HPV types that cause the most common HPV cancers and pre-cancers (cervical, vulvar, vaginal, penile, and anal). That means prevention of more than 30,000 cancers annually in the United States, according to the U.S. Centers for Disease Control and Prevention (CDC).

**Q:** What is a common misconception about the HPV vaccine?

**A**

Many parents believe the vaccine can actually cause their child to contract an HPV infection. Because there is no live HPV in the vaccine, your child cannot contract the virus from being vaccinated.

**Q:** Is the vaccine safe?

**A**

To date, more than 200 million doses of the HPV vaccine have been given worldwide. In 12 years, I have administered more than 12,000 doses without any notable side effects other than the short-lived mild to moderate headache, sore arms, or low-grade fever.

Several studies have shown that there is no link between HPV vaccination and health problems such as autoimmune diseases, neurological conditions, fertility issues, Guillain-Barré Syndrome (GBS), stroke, blood clots, appendicitis, or seizures.

**Q:** Why does my child need the HPV vaccine at this age?

**A**

We know that vaccinating our children—both boys and girls—starting at 11 or 12 years old will provide the best protection possible. The vaccine is most effective if it is administered before they are exposed to an HPV infection—a preventive measure similar to most other recommended childhood vaccines.

**Q:** Would you get the HPV vaccine for your own kids?

**A**

Absolutely! In my opinion, no vaccine for our kids is more important or prevents more devastating disease and death. Unfortunately, we avoid the discussion because of the sexual connotation. Because there is no screening for most cancers caused by HPV infection, vaccination is the only opportunity we have to prevent those devastating cancers. We must stop this epidemic!

**Q:** What do you say to parents who have fears and doubts about the vaccine's effectiveness and/or safety?














**A**

We have been searching for vaccines to prevent cancer for decades! An ounce of this prevention is worth over a thousand pounds of cure—radiation, chemotherapy, and surgeries. Each year, the HPV9 vaccination will prevent more than 30,000 future cancers in boys and girls. Historically, of those 30,000 cancer patients, one-third would die and the other two-thirds could develop major complications after radiation, chemotherapy, or surgery. Physicians have seen too much devastation during their careers from these specific cancers that can now be prevented with a simple, effective, and very safe vaccine.

# VACCINATIONS

## EXPLAINED

Prevention is a key part of keeping your child healthy. Parents know that staying up-to-date with vaccinations can prevent serious illness. Use this chart to keep track of what each vaccine protects against in both boys and girls.

	VACCINE	WHAT IT DOES
 Birth	HEPATITIS B	Protects against a viral infection of the liver that can cause <b>liver cancer</b> .
 2 mos	ROTAVIRUS	Protects children from a virus that can cause severe <b>watery diarrhea, vomiting, fever, and abdominal pain</b> .
 2 mos	DTAP	Helps children develop immunity to three deadly diseases caused by bacteria: <b>diphtheria, tetanus, and pertussis</b> .
 2 mos	HIB	Prevents serious infections caused by a type of bacteria called <i>Haemophilus influenzae</i> type B. Such infections include <b>meningitis</b> and <b>pneumonia</b> .
 2 mos	PCV	Protects against <b>pneumococcal disease</b> , which causes thousands of infections, such as meningitis, bloodstream infections, and ear infections.
 6 mos	INFLUENZA	Protects against the <b>flu</b> ; it is recommended yearly.
 12–15 mos	IPV	The inactivated polio vaccine can prevent <b>polio</b> .
 12–15 mos	HEPATITIS A	Protects against a contagious <b>liver disease</b> that results from infection with the hepatitis A virus.
 12–15 mos	MMR	Effective at preventing <b>measles, mumps, and rubella</b> .
 12–15 mos	VARICELLA	Protects against <b>chicken pox</b> .
 11–12 years	HPV	Protects against certain strains of the virus that can lead to <b>cervical cancer</b> and at least <b>five other types of cancer</b> .
 11–12 years	MENINGOCOCCAL	Protects against <b>meningitis</b> , an infection of the membranes around the brain and spinal cord.
 11–12 years	TDAP	A booster vaccine that offers continued protection against <b>tetanus, diphtheria, and pertussis</b> , and supports the earlier DTAP vaccination.

“per-tuhs-is,” commonly known as whooping cough

Pronounced “noo-muh-KOK-uh”

“var-uh-sel-uh,” commonly known as chicken pox

Please note that this chart is a general overview of vaccinations recommended by the CDC. Recommendations may vary for children in high-risk groups or children who need catch-up immunizations. Always talk to your pediatrician.