

# Improving HPV Immunization Rates: A Mobile Health Approach

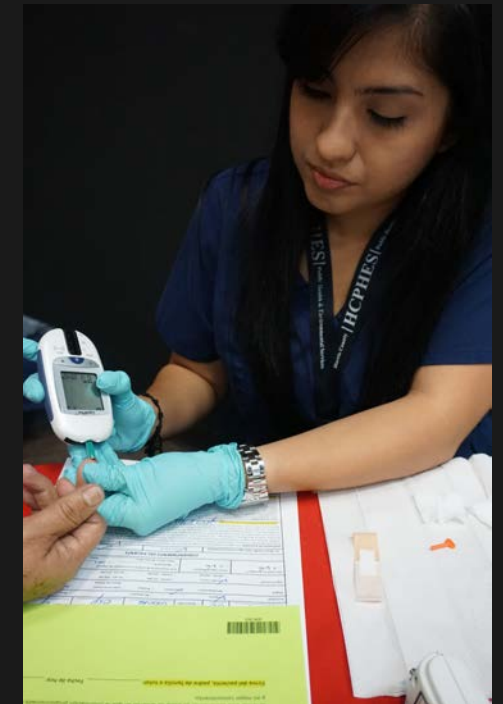
Think About the Link

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Harris County Public Health

# Expanded Mobile Health Clinic







# Adolescent HPV Initiative

Partnership between traditional safety net public health clinics, well-funded well staffed outreach programs and motivated community leaders within the target population



Harris County  
**Public Health**  
Building a Healthy Community



# Focus – School Based Events in Health Deserts



Antoine Clinic

Strong  
Immunization  
Program



Humble Clinic

High rates of HPV  
doses 1 and 2 in  
males



Southeast Clinic

Significant rate of  
drop off for dose 3



Baytown Clinic



# Sheldon ISD – CE King Middle School



- Located in the middle of a health desert
- Cooperative and engaged administration/school nurses
- Concerned about the low rate of required immunizations (Tdap and Meningococcal)
- Supportive of efforts to increase HPV immunization rates in the student population

# Adolescent HPV Initiative Approach:

- Package all three vaccinations
- Database integration and utilization: Sheldon ISD and HCPH Baytown Clinic
- Target to 6<sup>th</sup> and 7<sup>th</sup> graders with any missing vaccines
- Letter with CDC information and testimonials focusing on HPV-cancer link
- On-site Immunization Day – convenient and free
- Clinic follow up and Home visits

# Approach: Package all three vaccinations

Meningococcal Vaccination

**A**s a parent, you do everything you can to protect your children's health now and for the future. Meningococcal disease can become very serious, very quickly. Meningococcal vaccines are the best way to help protect teens from getting meningococcal disease.

**Meningococcal disease**  
Meningococcal disease refers to any illness that is caused by *Neisseria meningitidis* bacteria. The two most serious and common illnesses caused by these bacteria include infections of the brain and lining around the brain and spinal cord (meningitis) and bloodstream infections (bacteremia or septicemia).

Even if they get treatment, about 10 to 15 out of 100 people with meningococcal disease will die from it. About 11 to 19 out of every 100 survivors will have long-term disability, such as loss of limbs, deafness, nervous system problems, or brain damage.

The bacteria that cause meningococcal disease spread from person to person when people have close or lengthy contact with someone's saliva, like through kissing or coughing. Teens and young adults are at increased risk for meningococcal disease. Living in close quarters, like in the same household, dorm, or military barracks, can also increase the risk of getting some types of meningococcal disease. Meningococcal disease can become very serious, very quickly. Vaccination is the best way to protect teens from getting meningococcal disease.

**The vaccines that protect against it**  
Meningococcal disease is not very common in the United States, but can be devastating and often—**and unexpected!**—strike otherwise healthy people. Vaccination is the best way to help protect teens from getting meningococcal disease. There are two types of meningococcal vaccines, the quadrivalent meningococcal conjugate and the

**When does my child need the vaccine?**

Meningococcal vaccination is recommended for all preteens and teens. All 11- to 12-year olds should be vaccinated with a single dose of a quadrivalent meningococcal conjugate vaccine. Some protection decreases over time, a booster dose is recommended at age 16 to teens continue to have protection during the ages when the risk of meningococcal disease is highest (ages 16 through 22). Your child (10 through 22 year olds) may also be vaccinated with a serogroup B meningococcal vaccine (2 or 3 doses depending on brand), preferably at 16 through 19 years old. Talk with your teen's doctor or read about meningococcal vaccination to help protect your child's health. If your older teen has not received their quadrivalent meningococcal conjugate vaccine, you should talk to their doctor or nurse about getting it as soon as possible.

**DISEASES and the VACCINES THAT PREVENT THEM**  
Updated November 2011

**serogroup B meningococcal vaccine.** The quadrivalent meningococcal conjugate vaccine helps protect against 4 strains (serogroups A, C, W, and Y) of the bacteria that cause meningococcal disease. Serogroup B meningococcal vaccine helps protect against one strain (serogroup B) of the bacteria. There is not a meningococcal vaccine that offers protection against all common serogroups in one shot, however both vaccines can be given during the same visit, preferably in different arms.

**More about meningitis**

When someone has meningococcal meningitis, the protective membrane covering their brain and spinal cord, known as the meninges, become inflamed and swell. The symptoms of meningitis include sudden onset of fever, headache, and stiff neck. There are other additional symptoms, such as:

- Nausea
- Vomiting
- Photophobia (decreased sensitivity to light)
- Abnormal neck stiffness (nuchal rigidity)

The symptoms of meningococcal meningitis can appear quickly or over several days. Typically they develop within 3 to 7 days after exposure. If you think your child has any of these symptoms, call the doctor right away.



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Tdap Vaccine

**A**s a parent, you do everything you can to protect your children's health. The Tdap vaccine can help protect not only your child's health but also the health of those around them. The babies who are too young to be vaccinated.

**Tdap and whooping cough**  
The Tdap shot protects against three different tetanus, diphtheria, and pertussis or whooping cough.

Whooping cough is the most common of those diseases and spreads very easily through coughing and sneezing. It can cause a bad cough that makes someone gasp for air after coughing fits. This cough can last for many weeks, which can make preteens and teens miss school and other activities. Though not very common, whooping cough can also lead to complications like cracked ribs and pneumonia, even among healthy preteens and teens.

Whooping cough can be deadly for babies, especially those who are too young to have protection from their own vaccines. The majority of reported whooping cough deaths are in babies younger than 3 months old. Other babies get whooping cough from their older brothers or sisters, like preteens or teens, or other people in the family.

**Is Tdap vaccine safe?**

The Tdap shot has been studied very carefully and is safe. It is recommended by the Centers for Disease Control and Prevention, the American Academy of Family Physicians, the American Academy of Pediatrics, and the Society for Adolescent Health and Medicine.

The Tdap vaccine can cause mild side effects, like redness and soreness in the arm when the shot was given, headache, fever, or tiredness. Some preteens and teens might faint after getting the Tdap vaccine or any other shot. To help avoid fainting, preteens and teens should sit or lie down when they get a shot and then for about 15 minutes after getting the shot. Serious side effects from reactions to the Tdap shot are rare.

The Tdap vaccine can safely be given at the same time as the other recommended vaccines, including the HPV meningococcal, and influenza vaccines. Learn more about all of our recommended preteen vaccines at [www.cdc.gov/vaccines/teens](http://www.cdc.gov/vaccines/teens).

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**Tdap vaccination is recommended for preteens at ages 11-12.**

All preteens should get one Tdap shot when they are 11 or 12 years old. If your teen is 13 years old or up through 19 years old and hasn't gotten the vaccine yet, talk to their doctor about getting it for them right away. Babies and kids who get shots called DTaP to protect them from diphtheria, tetanus, and whooping cough. But as kids get older, the protection from the DTaP shot starts to wear off. This can put your preteen or teen at risk for serious illness. The Tdap vaccine is a booster shot that helps protect your preteen or teen from the same disease that DTaP shot protect kids from.

**Whooping cough vaccination work**  
Even though whooping cough shots don't provide lifelong protection, on-time vaccination can still help protect preteens from whooping cough. As a result of whooping cough vaccines, we no longer see 200,000 cases of whooping cough each year. Getting vaccinated is



HPV  
Also Known as Human Papilloma Virus

**A**s a parent, you do everything you can to protect your children's health for now and for the future. Today, there is a strong weapon to prevent several types of cancer in our kids: the HPV vaccine.

**HPV and Cancer**

HPV is short for Human Papillomavirus, a common virus. In the United States each year there are about 17,500 women and 9,300 men affected by HPV-related cancers. Many of these cancers could be prevented with vaccination. In both women and men, HPV can cause anal cancer and mouth/throat (oropharyngeal) cancer. It can also cause cancer of the cervix, vulva and vagina in women; and cancer of the penis in men.

For women, screening is available to detect most cases of cervical cancer with a Pap smear. Unfortunately, there is no routine screening for other HPV-related cancers for women or men, and these cancers can cause pain, suffering, or even death. That is why a vaccine that prevents most of these types of cancers is so important.

**More about HPV**

HPV is a virus passed from one person to another during skin-to-skin sexual contact, including vaginal, oral, and anal sex. HPV is most common in people in their late teens and early 20s. Almost all sexually active people will get HPV at some time in their lives, though most will never even know it.

Most of the time, the body naturally fights off HPV, before HPV causes any health problems. But in some cases, the body does not fight off HPV, and HPV can cause health problems, like cancer and genital warts. Genital warts are not a life-threatening disease, but they can cause emotional stress, and their treatment can be very uncomfortable. About 1 in 100 sexually active adults in the United States have genital warts at any given time.

**Why does my child need this now?**

HPV vaccines offer the best protection to girls and boys who receive all three vaccine doses and have time to develop an immune response before they begin sexual activity with another person. This is not to say that your preteen is ready to have sex. In fact, it's just the opposite—it's important to get your child protected before you or your child have to think about this issue. The immune response to the vaccine is better in preteens, and this could mean better protection for your child.

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**DISEASES and the VACCINES THAT PREVENT THEM**  
Updated July 2010

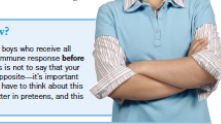
**HPV vaccination is recommended for preteen girls and boys at age 11 or 12 years.**

All preteens need HPV vaccination so they can be protected from HPV infections that cause cancer. Teens and young adults who didn't start or finish the HPV vaccine series also need HPV vaccination. Young women can get HPV vaccine until they are 27 years old and young men can get HPV vaccine until they are 22 years old. Young men who have sex with other men or who have weakened immune systems can also get HPV vaccine until they are 27. HPV vaccination is a series of shots given over several months. The best way to remember to get your child all of the shots they need is to make an appointment for the remaining shots before you leave the doctor's office or clinic.

**Is the HPV vaccine safe?**

Yes, HPV vaccination has been studied very carefully and continues to be monitored by CDC and the Food and Drug Administration (FDA). No serious safety concerns have been linked to HPV vaccination. These studies continue to show that HPV vaccines are safe.

The most common side effects reported after HPV vaccination are mild. They include pain and redness in the area of the arm where the shot was given, fever, dizziness, and nausea. Some preteens and teens may faint after getting a shot or any other medical procedure. Sitting or lying down for about 15 minutes after getting shots can help prevent injuries that could happen if your child were to fall while fainting.



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**If there were a vaccine against cancer, wouldn't you get it for your kids?**

Talk to the doctor about vaccinating your 11-12 year old sons and daughters against HPV.

[www.cdc.gov/vaccines/teens](http://www.cdc.gov/vaccines/teens)



**HPV vaccine is cancer prevention.**



**Jacquelyn's story: "I was healthy—and got cervical cancer."**

When I was in my late 20's and early 30's, in the years before my daughter was born, I had some abnormal Pap smears and had to have further testing. I was told I had the kind of HPV that can cause cancer and mild dysplasia.

For three more years, I had normal tests. But when I got my first Pap test after my son was born, they told me I needed a biopsy. The results came back as cancer, and my doctor sent me to an oncologist. Fortunately, the cancer was at an early stage. My lymph nodes were clear and I didn't need radiation. But I did need to have a total hysterectomy.

My husband and I have been together for 15 years, and we were planning to have more children. We are so grateful for our two wonderful children, but we were hoping for more—which is not going to happen now.

The bottom line is they caught the cancer early, but the complications continue to impact my life and my family. For the next few years, I have to get pelvic exams and Pap smears every few months, the doctors measure tumor markers, and I have to have regular xrays and ultrasounds, just in case. I have so many medical appointments that are taking time away from my family, my friends, and my job.

Worse, every time the phone rings, and I know it's my oncologist calling, I get my breath until I get the results. I'm hopeful I can live a full and healthy life, but cancer is always in the back of my mind.

In a short period of time, I went from being healthy and planning more children to all of a sudden having a radical hysterectomy and trying to make sure I don't have cancer again. It's kind of overwhelming. And I am one of the lucky ones!

Ultimately I need to make sure I'm healthy and there for my children. I want to be around to see their children grow up.

I will do everything to keep my son and daughter from going through this. I will get them both the HPV vaccine as soon as they turn 11. I tell everyone—my friends, my family—to get their children the HPV vaccine series to protect them from this kind of cancer.



**What about boys?**

HPV vaccine is for boys too! This vaccine can help prevent boys from getting infected with the types of HPV that can cause cancers of the mouth/throat, penis and anus. The vaccine can also help prevent genital warts. HPV vaccination of males is also likely to benefit females by reducing the spread of HPV viruses.

Learn more about HPV and HPV vaccine at [www.cdc.gov/hpv](http://www.cdc.gov/hpv)



# On-site Immunization Day



**Benefits to Families:**  
Convenient  
No cost

**Barriers:**  
Scheduling around  
academic classes  
Parent consent forms

# Adolescent HPV Initiative Outcomes

Demonstration Year 4 October 2014- September 2015

5 middle schools participating

30 adolescents who turned 13 during DY4 – without a completed HPV series

6 completed series by the 13<sup>th</sup> birthday

20% completion rate = Met goal of > 18.3% completion by 13<sup>th</sup> birthday

DY5 October 2015-March 2016 – 6 months

10 middle schools participating

70 adolescents who turned 13 during DY5 without a completed HPV series

To date: 50% completion rate by 13<sup>th</sup> birthday = exceeded goal of >20 % completion rate

# Adolescent HPV Initiative Success

- Establishing engaged community partners
- Immunizations given during school
- Packaging HPV with required vaccinations
- Avoiding the use of optional when discussing HPV
- Promoting HPV as the Cancer Prevention Vaccine



# Adolescent HPV Initiative Outcomes

