Texas School Nurses Organization
HPV Resource Sheet

- Gardasil® vaccine by Merck protects against four HPV types (6, 11, 16, 18). The **Food and Drug Administration** (FDA) licensed the quadrivalent vaccine. On June 29, 2006, the **Advisory Committee on Immunization Practices** (ACIP*) voted to recommend use of this vaccine in females, ages 9-26 years.

- This is a prophylactic vaccine, made from non-infectious HPV-like particles (VLP). The vaccine cannot cause HPV. Some HPVs, such as types 6 and 11, can cause genital warts. Most genital HPV infections are asymptomatic. However, lingering infections with a subset of about 19 "high-risk" HPV types can lead to the development of **cervical cancer** or other genital/anal cancers.

- The HPV vaccine is recommended for 11-12 year-old girls, but can be administered to girls as young as 9 years of age.

- The vaccine should be **administered before** onset of sexual activity. If a female is already infected with one of the HPV types in the vaccine, the vaccine will not prevent disease from that type. Females, who have not been infected with the four HPV types (6, 11, 16, 18), would receive the full benefit of vaccination. There is no test available, currently, to determine whether a female has had any or all of the four HPV types in the vaccine.

- The duration of vaccine protection is unclear. Current studies (with five-year follow-up) indicate that the vaccine is effective for at least five years.

- The vaccine should be delivered through a series of three intra-muscular injections over a six-month period. The second and third doses should be given 2 and 6 months after the first dose. Full benefits of the vaccine can only be achieved if the series is complete.

- Cervical cancer screening recommendations have not changed for females who receive the HPV vaccine. The vaccine will NOT provide protection against all types of HPV that cause cervical cancer, just the four HPV types (6, 11, 16, 18).

The vaccine will *not* prevent all types of HPV or genital warts—nor will it prevent other sexually transmitted infections (STIs) People, who are sexually active, with more than one partner, or have a partner that has had more than one partner are still at risk.

Resources

CDC – **www.cdc.gov/std/hpv**
Merck's Gardicil - **www.gardasil.com**
HPV Fact Sheet from FDA - **www.fda.gov/womens/getthefacts/hpv.html**
Glaxo's *Cervarix* is under development. It is not listed as a vaccine on the website.

HPV (HUMAN PAPILLOMAVIRUS) VACCINE

WHAT YOU NEED TO KNOW

1 What is HPV?

Genital human papillomavirus (HPV) is the most common sexually transmitted virus in the United States.

There are about 40 types of HPV. About 20 million people in the U.S. are infected, and about 6.2 million more get infected each year. HPV is spread through sexual contact.

Most HPV infections don't cause any symptoms, and go away on their own. But HPV is important mainly because it can cause **cervical cancer** in women. Every year in the U.S. about 10,000 women get cervical cancer and 3,700 die from it. It is the 2nd leading cause of cancer deaths among women around the world.

HPV is also associated with several less common types of cancer in both men and women. It can also cause genital warts and warts in the upper respiratory tract.

More than 50% of sexually active men and women are infected with HPV at sometime in their lives.

There is no treatment for HPV infection, but the conditions it causes can be treated.

2 HPV Vaccine - Why get vaccinated?

HPV vaccine is an inactivated (not live) vaccine which protects against 4 major types of HPV.

These include 2 types that cause about 70% of cervical cancer and 2 types that cause about 90% of genital warts. ***HPV vaccine can prevent most genital warts and most cases of cervical cancer.***

Protection from HPV vaccine is expected to be long-lasting. But vaccinated women still need cervical cancer screening because the vaccine does not protect against all HPV types that cause cervical cancer.

3 Who should get HPV vaccine and when?

Routine Vaccination

- HPV vaccine is routinely recommended for girls **11-12 years of age**. Doctors may give it to girls as young as 9 years.

  Why is HPV vaccine given to girls at this age? It is important for girls to get HPV vaccine **before** their first sexual contact – because they have not been exposed to HPV. For these girls, the vaccine can prevent almost 100% of disease caused by the 4 types of HPV targeted by the vaccine.

  However, if a girl or woman is already infected with a type of HPV, the vaccine will not prevent disease from that type.

Catch-Up Vaccination

- The vaccine is also recommended for girls and women **13-26 years of age** who did not receive it when they were younger.

HPV vaccine is given as a 3-dose series:

1st Dose:	Now
2nd Dose:	2 months after Dose 1
3rd Dose:	6 months after Dose 1

Additional (booster) doses are not recommended.

HPV vaccine may be given at the same time as other vaccines.

4 Some girls or women should not get HPV vaccine or should wait

- Anyone who has ever had a life-threatening **allergic reaction** to **yeast**, to **any other component of HPV vaccine**, or to a **previous dose of HPV vaccine** should not get the vaccine. Tell your doctor if the person getting the vaccine has any severe allergies.

- **Pregnant women** should not get the vaccine. The vaccine appears to be safe for both the mother and the unborn baby, but it is still being studied. Receiving HPV vaccine when pregnant is **not** a reason to consider terminating the pregnancy. Women who are breast feeding may safely get the vaccine.

> Any woman who learns that she was pregnant when she got HPV vaccine is encouraged to call the **HPV vaccine in pregnancy registry** at 800-986-8999.
>
> Information from this registry will help us learn how pregnant women respond to the vaccine.

- People who are mildly ill when the shot is scheduled can still get HPV vaccine. People with **moderate or severe illnesses** should wait until they recover.

5 What are the risks from HPV vaccine?

HPV vaccine does not appear to cause any serious side effects.

However, a vaccine, like any medicine, could possibly cause serious problems, such as severe allergic reactions. The risk of **any** vaccine causing serious harm, or death, is extremely small.

Several **mild problems** may occur with HPV vaccine:

- Pain at the injection site (about 8 people in 10)
- Redness or swelling at the injection site (about 1 person in 4)
- Mild fever (100°F) (about 1 person in 10)
- Itching at the injection site (about 1 person in 30)
- Moderate fever (102°F) (about 1 person in 65)

These symptoms do not last long and go away on their own.

Life-threatening allergic reactions from vaccines are very rare. If they do occur, it would be within a few minutes to a few hours after the vaccination.

Like all vaccines, HPV vaccine will continue to be monitored for unusual or severe problems.

6 What if there is a severe reaction?

What should I look for?

- Any unusual condition, such as a high fever or behavior changes. Signs of a serious allergic reaction can include difficulty breathing, hoarseness or wheezing, hives, paleness, weakness, a fast heart beat or dizziness.

What should I do?

- **Call** a doctor, or get the person to a doctor right away.
- **Tell** your doctor what happened, the date and time it happened, and when the vaccination was given.
- **Ask** your doctor, nurse, or health department to report the reaction by filing a Vaccine Adverse Event Reporting System (VAERS) form.

  Or you can file this report through the VAERS website at www.vaers.hhs.gov, or by calling 1-800-822-7967.

  VAERS does not provide medical advice.

7 How can I learn more?

- Ask your doctor or nurse. They can show you the vaccine package insert or suggest other sources of information.
- Call your local or state health department.
- Contact the Centers for Disease Control and Prevention (CDC):
  - Call **1-800-232-4636 (1-800-CDC-INFO)**
  - Visit CDC's website at **www.cdc.gov/std/hpv** and **www.cdc.gov/nip.**

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