## Information on Meningococcal Meningitis, Influenza, Cervical Cancer, Cervical Dysplasia, Human Papillomavirus and Vaccines available for Prevention

Senate Bill 260, previously referred to as "Garrett's Law," requires each school system to provide parents and guardians with information about meningococcal meningitis and influenza diseases and their vaccines. The state also requires information about human papillomavirus (HPV) and the HPV vaccine be provided to parents and guardians. That information is provided below:

## **Meningococcal Disease**

What is meningococcal disease & what causes it? - Meningococcal disease is a serious, potentially fatal illness caused by bacteria. There are three types of invasive meningococcal disease: Meningitis - an infection of the fluid surrounding the brain and spinal cord; Bacteremia - an infection of the blood stream; and Pneumonia - an infection of the lungs

**How is the disease spread?** - Meningococcal disease is contagious. The disease is spread through air droplets and direct contact with infected persons. It can be spread through coughing, sneezing, kissing, or shared items like a drinking glass, utensils or cigarettes.

**What are the symptoms?** - Symptoms can progress rapidly and may resemble the flu. They can include fever, headache, stiff neck, nausea, vomiting, confusion, sleepiness and sensitivity to light. Some people also develop a rash mainly on their arms and legs.

**Can meningococcal disease be prevented?** - Yes. Although meningococcal disease is serious and potentially life threatening, up to 83 percent of the cases in adolescents and young adults are potentially vaccine preventable. The meningococcal vaccine has been demonstrated to be safe, and offers protection against four of the five most common types of meningococcal infection.

**What do health officials recommend?** - Health officials recommend routine vaccination of children 11-12 years old, previously unvaccinated adolescents at high school entry, and college freshmen living in dormitories with the newly licensed meningococcal conjugate vaccine (MCV4).

**Does the meningococcal vaccine prevent all forms of meningococcal disease?** - There are currently two meningococcal vaccines available in the United States – 1) Meningococcal polysaccharide vaccine (MPSV4) - available since the 1970s and 2) Meningococcal conjugate vaccine (MCV4) - licensed in 2005. Both vaccines protect against four of the five most common types of meningococcal infection, including two of the three types most common in the United States. Neither vaccine prevents meningitis caused by other bacteria such as "strep" or Hib bacteria.

**Is the vaccine effective?** - Yes. Both vaccines work well, and protect about 90 percent of those who receive it. MCV4 is expected to give better, longer-lasting protection. MCV4 should also be better at preventing the disease from spreading from person to person.

## Influenza "the flu"

**What is influenza?** - Influenza (commonly called "the flu") is caused by the influenza virus, which infects the respiratory tract (nose, throat, lungs). It can cause mild to severe illness, and at times can lead to death. In the United States, it is estimated that 10 percent to 20 percent of people get the flu each year: an average of 200,000 people are hospitalized for flu-related complications and 36,000 Americans die each year from complications of the flu. Five hundred out of 100,000 children with high-risk conditions (such as heart disease or asthma) and 100 out of 100,000 otherwise healthy children aged 0 to 4 years who are infected with the flu will be hospitalized for complications each season.

What are the symptoms of flu? - Symptoms of flu include fever (usually high), headache, tiredness (can be extreme), dry cough, sore throat, runny or stuffy nose, and muscle aches. Other symptoms, such as nausea, vomiting, and diarrhea, are much more common among children than adults.

**Is there a flu vaccine?** – Yes. The flu vaccine prevents the flu. Flu immunization is encouraged because the flu can lead to other problems including pneumonia, inflammation of the heart, and inflammation of the lungs. Healthy children younger than five years of age are more likely than adults to be hospitalized for complications from the flu. The vaccine protects between 45 percent and 90 percent of healthy children from getting the flu. Studies have shown that the older and healthier children are when they get a flu shot, the more likely they will be protected. Flu vaccination has also been shown to decrease middle ear infections among young children by about 30 percent.

## HPV

**What is HPV?** - HPV (human papillomavirus) is a common virus that is spread from one person to another by skin-to-skin contact in the genital area. HPV can be spread even if there is no intercourse. There are about 40 types of HPV that can infect men and women. Some types of HPV can cause cervical dysplasia and/or cervical cancer in women. Other types of HPV can cause genital warts. Many sexually active people (at least 50%) get HPV at some time in their lives, although most never know it because HPV usually has no symptoms and goes away on its own. However, while a person is infected with HPV, they can spread the virus to other sex partners. HPV is most common in young women and men who are in their late teens and early 20s.

**How do you get HPV?** - HPV can infect any person who is sexually active. HPV can be spread by vaginal, anal, and oral sex. Both males and females can get it – and pass it on to their sex partners – without even realizing it.

What are the signs and symptoms of HPV infection? - Some people will develop visible growths or bumps in the genital area (genital warts). The virus lives in the body and usually causes no symptoms. Many people who have HPV do not know they are infected.

**How can my child be protected from getting HPV?** - The only sure protection from HPV is lifelong abstinence or a monogamous relationship with an uninfected partner. However, a new vaccine can now protect females (ages 9 to 26) from four major types of HPV. These include

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

**Who should get the HPV vaccine?** - Routine vaccination is recommended for all 11 and 12 year old girls. The vaccine is also recommended for girls and women 13-26 years of age who did not receive it when they were younger. The vaccination can also be started for girls as early as age 9.

For more information about meningococcal meningitis, influenza diseases or HPV, please call 1-800-232-4636 (1-800-CDC-INFO) or go online to www.immunizenc.com or www.cdc.gov or contact your family physician.