

From the University of Mississippi Medical Center Division of Public Affairs

HPV IMMUNIZATION GIVEN TO PRETEENS PROVIDES BEST CANCER PROTECTION

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JACKSON, Miss. – Your preteen boy enters sixth grade this fall, and football – not the cute girl in English class – is his big focus.

Even so, their parents should get them vaccinated against a sexually transmitted disease that can cause cancer in adulthood, experts at the University of Mississippi Medical Center say. And although girls were the initial focus of the vaccine for human papillomavirus, or HPV, it's just as important that boys are protected.

"Girls are getting their HPV from someone. They're usually getting it from the boys," said Dr. Rana El Feghaly, an infectious diseases specialist and assistant professor in the Division of Pediatric Infectious Diseases at UMMC.

"If you can prevent it in boys, then you can prevent it from being transmitted to girls."

The HPV infection, the most common STD in the nation, is spread through genital skin-to-skin contact and sexual intercourse. And because the vaccine provides best immunity when given early – before sexual activity begins – the Atlanta-based Centers for Disease Control recommends children as young as 9 receive the immunization, given in three doses over a six-month period. The CDC recommends it for all children ages 11-12, boys through age 21, and girls through age 26.

The statistics in Mississippi are alarming. Just 12 percent of girls ages 13-17 complete the vaccine, the lowest rate in the nation, the CDC reports. The rate is 50 percent or higher in some other states.

Mississippi has a high rate of HPV infection, with an incidence of 8-10 new HPV-related cervical cancer cases per 100,000 population.

The idea that preteens should be vaccinated against an STD hasn't gone over well with some parents, who believe it will promote promiscuity or make it appear their child is having sex. Many pediatricians, gynecologists and infectious medicine specialists, however, say getting the vaccine is smart because it addresses preventable diseases.

That includes genital warts, for either sex; cervical, vulvar, vaginal and anal cancers in women; and anal, penile and oropharyngeal cancers in men.

"It is critical for Mississippi physicians to understand and embrace the concept that the vaccine is useful in children who are not yet sexually active because of its effects years into the future, when the children grow into young adults who usually will become sexually active," said Dr. Gailen Marshall, professor and division chief of allergy and immunology in the UMMC School of Medicine.

Said El Feghaly: "As much as we want our kids to delay their sexual intercourse, we know that in the United States, about 50 percent of teenagers will have intercourse before the age of 18."

Most HPV cases are acquired during the teens and early college years, El Feghaly said. Most people don't develop symptoms, although some will develop genital warts, which aren't cancerous. "The trick is, most people will never know they have it, and you don't know until later if it will cause cancer," she said.

CDC studies to determine if children who get the vaccine are sexually active before those who don't found no difference in the two groups. "We want to have your body ready to respond to the infection and to get rid of it before you ever get exposed to it," El Feghaly said.

"This is the same principle as giving a flu vaccine before flu season starts," Marshall said. "Once flu season arrives and the patient gets sick with the flu, the vaccine becomes much less useful."

Jackson resident Janice Patrick said her 15-year-old daughter is getting immunized against HPV because it can protect her against several cancers in the future.

"Most parents seem to be accepting of the vaccine," said Patrick, a nurse at the Blair E. Batson Hospital for Children at UMMC. "Some are worried about the side effects. I'm not concerned that it will cause my daughter to want to have sex. I feel like if children are going to do that, they're going to do it, no matter what."

There are two vaccines available. Gardasil is approved for females ages 9-26 to help prevent against four HPV types, which cause cancer of the cervix, vagina and vulva, plus genital warts and anal cancer. It's also approved for males ages 9-26 to help prevent genital warts and anal cancer. Cervarix only prevents against two type of HPV, which is why it's approved for females ages 10-25, but not for males. It does not prevent genital warts.

"There's a concern about the increase in oropharyngeal cancer caused by HPV as well. Men who have sex with men are especially vulnerable," which is why it's important for boys to get the vaccine, El Feghaly said. "It could surpass cervical cancer in the next few years."

Side effects of the vaccine are mild and include dizziness, fainting, soreness at the vaccine site and headaches. "That's why people receiving vaccines should be observed for 15 minutes afterward," she said.

Marshall, director of the Division of Clinical Immunology and Allergy and chief of the Laboratory of Behavioral Immunology Research, says lives can be saved with the vaccine. "There is an absolute need for Mississippi physicians to increase the use of the HPV vaccine in both boys and girls because of its proven effectiveness in decreasing the risk for primary HPV infection," he said.

"We just got the first dose, with the second and third still to go," Patrick said of her teen. "The cancers you can get from HPV are not always found very regularly, and when you do find it, sometimes it's too late."

It's sad, UMMC pediatrician Dr. Will Sorey said, that anyone would decline to protect their child against a disease that affects one in five Mississippians. "This is like seatbelts," said Sorey, professor of pediatrics. "It's just something you must do to protect yourself."

Fast facts:

There are about 14 million new cases of HPV infections in the United States each year, with an estimated 74 percent in those ages 15-24, the CDC says. Overall, about 80 million people in the United States have a new or existing HPV infection.

For the years 2006-10, the most recent information available, Mississippi had between 8.04 and 9.54 cases of HPV-caused cervical cancer per 100,000 population. The state also has one of the nation's highest rates of HPV-caused vaginal, penile, anal, vulvar and oropharyngeal cancer.

There's no legal requirement for the HPV vaccine in Mississippi, but at least 25 other states have enacted legislation to require it, fund it, or educate the public or students about it.

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