HPV Vaccinations: YES or NO?

More than 20 million men and women nationwide are currently infected with the human papillomavirus (HPV)—and another 6.2 million get it each year.

This potentially deadly infection can lead to cervical cancer in females—a disease that strikes 10,000 American women each year and accounts for the deaths of 3,700 others.

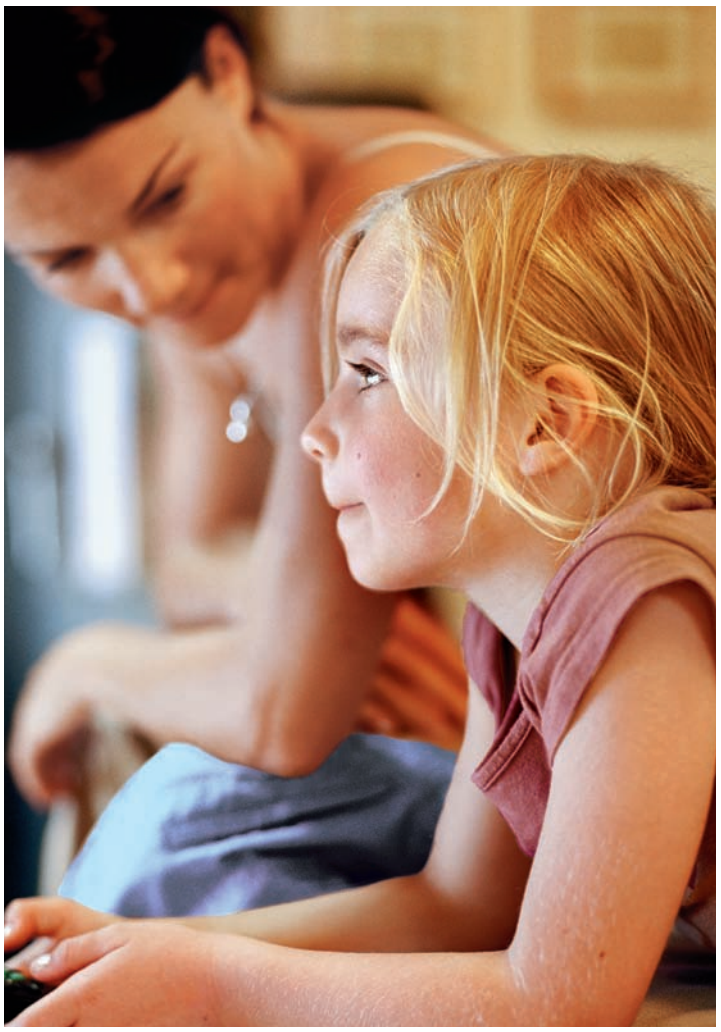
But now the first vaccine ever developed for preventing cancer has the potential to eliminate this sexually transmitted disease in women. Called Gardasil, it was approved by the U.S. Food and Drug Administration in 2006. The vaccine is recommended for girls ages 11 to 12 when they receive routine immunizations, but can be given to those as young as 9. It's administered in three doses over a period of six months. The vaccine is also recommended for females 13 to 26 years of age.

A new vaccine protects against the four viruses responsible for a majority of cervical cancers.

"Studies show that Gardasil provides nearly 100 percent protection against HPV 6, 11, 16 and 18—the four viruses responsible for a majority of cervical cancers and genital warts," says **Dr. Wendy Brewster**, an epidemiologist and surgical oncologist at University of California, Irvine Medical Center. Types 16 and 18 cause 70 percent of cervical cancer cases. Types 6 and 11 are responsible for 90 percent of genital warts, which don't cause cervical cancer, but are highly contagious. Although immunization will not protect against any of the four HPV strains women already have, it can guard against the others.

"Ideally, girls and women will get the vaccine before becoming sexually active," says Brewster. In today's world, this may be earlier than many parents are willing to admit. Government surveys have found that about 7 percent of young people have had sexual intercourse before age 13, while almost 25 percent have done so by age 15. Brewster advocates abstinence for young people until they're physically and emotionally mature. But as a physician, she's aware that many young people—even those whose families believe they would never have sex so early in life—are exposed to HPV.

Cervical cancer. "The virus can be spread through intercourse, anal or oral sex, and genital skin-to-skin contact," says Brewster. "Research shows that HPV infections typically occur soon after a young person becomes sexually active." In a study of female college students in the United States, 43 percent became infected with HPV within three years of beginning sexual activity.



Cervical cancer, however, takes several years to develop. It begins when HPV hijacks a few cervical cells. Trouble develops when the virus invades normal cells located in the deepest layer of skin, which are constantly dividing to replenish the layer above it. This may cause a chronic infection that can persist for years without symptoms, potentially developing into abnormal tissue. These changes still aren't cancer, and can continue over time before they become malignant. "It can take years for the initial infection to develop into cancer," says Brewster. Annual Pap tests can catch this problem early.

A new frontier. What should parents tell their daughters when it's time for the HPV vaccine? "It depends on a child's maturity level," says Brewster. "If an 11-year-old is already showing signs of puberty, it may be the right time to discuss sexuality with her, including diseases such as HPV. But if the child is less mature, parents may want to treat the HPV vaccination like all others, explaining in general terms that it's to prevent a certain type of cancer."

The HPV vaccine is currently being studied for use in older women, men and boys. "It's the first time a vaccine has been specifically developed for cancer prevention," says Brewster. "The HPV vaccine represents an exciting, new frontier in medicine." For referral to a UC Irvine Medical Center pediatrician, call 1-877-UCI-DOCS.