



Vermont Legislative Research Shop

HPV Vaccine

Human Papillomavirus (HPV) is the most prevalent sexually transmitted disease in the United States. The US Centers for Disease Control and Prevention (CDC) estimates that at least 50% of sexually active women and men in the US are infected with HPV at some point in their lives.

Political Arguments

There has been significant political tension over the enactment of a mandatory HPV vaccination. The Vermont Legislature has passed several bills related to HPV vaccination, but they have not been signed into law. The Governor has expressed concerns about the cost of the vaccine and the potential for increased government spending. The Legislature has argued that the vaccine is a cost-effective way to reduce the incidence of HPV-related diseases and that the state has a responsibility to protect the health of its citizens.

group composed of female state legislators). Without vaccination, these groups argue, women would continue to be infected with HPV on an

New Mexico

New Mexico's Governor Richardson vetoed a bill on April 3, 2007, which passed through the legislature, requiring sixth grade girls to receive the vaccine (Baker 2007).

Iowa

Iowa Governor Chet Culver signed a bill into law in March 2008 requiring insurance companies to cover the cost of vaccines to treat HPV. According to a Des Moines OB-GYN, the new law will make it easier for women to fight off HPV. If a woman has a health insurance policy that includes vaccines, HPV must be covered. No option exists to exclude the vaccine (Radio Iowa News 2008).

Cost Benefit Analysis

There are approximately 3,200 incoming 6th grade females in Vermont public schools for the 2007-2008 school year, as estimated by the Vermont Department of Education. At a cost of \$360/person, the cost to vaccinate this population is \$1,152,000. Although the specific data could not be found for Vermont, the State of Virginia totaled the cost of cervical cancer treatment at \$10,493/person (Ticer 2001). Therefore, if the vaccine prevented 109 cases of cervical cancer in Vermont, the cost of the vaccine to the state would equal that of treatment. However, in Vermont there are about 30 cases of cervical cancer a year, not all caused by HPV and not all preventable by a vaccine, thus the vaccine is unlikely to lead to savings in medical costs.

Sanders and Taira (2003), in a paper produced for the Center for Primary Care and Outcomes Research at Stanford, completed a cost-effectiveness analysis that compares requiring all 12-year-old girls in the United States to be vaccinated with a HPV vaccine that has 75% efficacy (comparable to Gardasil) as opposed to current programs of prevention and treatment. The analysis concluded that mandating the vaccine in the United States will increase the average lifespan of Americans by 2.8 days/person with an average cost of \$248/person (Sanders and Taira 2003).

New Breakthroughs

A study is under way to test whether males should receive a HPV vaccine, as a way to protect females from the virus. The logic behind such research rests on the fact that males can spread the sexually transmitted virus, even if they cannot contract it themselves. This potential vaccine may also protect both sexes from throat cancer, which can be caused by HPV. Researchers have stated that test results for males are still two to three years away.

Researchers say they have created a synthetic vaccine for HPV, which can be used as a nasal spray. So far, the vaccine has only been tested on mice, but researchers are optimistic, as they believe the synthetic vaccine will be cheaper than the current vaccine called, Gardasil, and protect from a range of these cancer-causing strains. The ability to administer the drug through a

nasal spray also takes away significant costs of having to take three separate shots, which can also be quite painful.

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