

# Sex and Vaccination

by

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## Part I—A Texas Tempest

Texas Republican governor Rick Perry initiated a whirlwind of controversy on February 2, 2007, when he issued an executive order mandating that all girls entering into the state's public school system be vaccinated against the human papillomavirus (HPV) prior to entering the sixth grade. This virus is strongly implicated as the causative agent of cervical uterine cancer. "The HPV vaccine provides us with an incredible opportunity to effectively target and prevent cervical cancer," said Perry. "Requiring young girls to get vaccinated before they come into contact with HPV is responsible health and fiscal policy that has the potential to significantly reduce cases of cervical cancer and mitigate future medical costs" (Office of the Governor, 2007). Governor Perry believed it was his obligation to safeguard the public health and safety, while many parents in this deeply conservative state were outraged by what they perceived as a governmental intrusion into a private family matter.

The human papillomavirus (HPV) is the collective name for a group of over 100 viruses, 30 of which are sexually transmitted. HPV is spread during sexual activity by skin-to-skin contact and not by the exchange of bodily fluids. HPV is responsible for genital warts. Most HPV infections occur without any symptoms and go away without any treatment. But a strong link has recently been established between HPV and cervical cancer. The American Cancer Society (ACS) estimates that in 2007 over 11,000 women in the United States will be diagnosed with cervical cancer and more than 3,600 will die from this malignancy (ACS, 2006). Hispanic women develop cervical cancer twice as often as Caucasians, and African American women about 50% more often than non-Hispanic white women (ACS, 2006). The Centers for Disease Control and Prevention (CDC) estimates at least 50% of sexually active men and women will contract HPV during their lifetime (ACS, 2006). In the United States each year, 6.2 million people are newly infected with HPV, and as many as half of them are aged 15–24 years (CDC, 2004).

The pharmaceutical giant Merck recently developed a vaccine for HPV. The new vaccine, called Gardasil®, was approved by the Food and Drug Administration on June 8, 2006, for girls and women aged 9 to 26. It protects against two HPV strains believed responsible for about 70% of cervical cancer cases, and two other strains that cause 90% of genital wart cases. The vaccine is given by intramuscular injection in three doses over a six-month period and costs about \$360 for the full series (CDC, 2006). The HPV vaccine is recommended for 11–12-year-old girls, but can be given to girls as young as nine. There is no U.S. federal law requiring HPV immunization. State laws regulate immunizations for school and childcare facilities (CDC, 2006). In October 2007, the British government announced all girls 12 years of age and older would be vaccinated free of charge (U.K. Department of Health, 2007). Similar programs are planned for several Canadian provinces (O'Brien, 2007).

## Questions

1. If you were a state representative, would you favor mandating the vaccination against sexually transmitted diseases (STDs) like the HPV if vaccines were available? Should the prevention and treatment of STDs factor into the safeguarding of public health?
2. Why might some parents object to having their daughters vaccinated against HPV?
3. Would you consider getting the vaccine yourself or recommending it to a family member? Why or why not? What are the questions that you would like to have answered before you decide?

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## Part II— The Governor’s Case

In the public debate that followed, a number of important arguments in favor of the vaccination order were made. Most statements below are derived from the CDC (2006).

- Though the recommended age for girls to be vaccinated may seem young, it is due to the fact that it is best for girls to be vaccinated before becoming sexually active.
- Children in the public school system are required to be vaccinated for other diseases such as diphtheria, polio, tetanus, and hepatitis. Head-lice checks are still common. The HPV vaccination requirement is no different.
- HPV is the most common sexually transmitted disease in the United States.
  - \* Studies have found the vaccine to be nearly 100% effective in preventing diseases caused by the four HPV types covered by the vaccine.
- The FDA has approved the HPV vaccine as safe and effective. This vaccine has been tested in over 11,000 females (ages 9–26 years) around the world. These studies have shown no significant adverse effects.
- At least 50% of sexually active people will get HPV at some time in their lives. Every year in the United States, 6.2 million people get HPV. HPV is most common in young women and men who are in their late teens and early 20s. Approximately 20 million people are currently infected with HPV.
- The American Cancer Society estimates that in the United States each year over 9,700 women will be diagnosed with cervical cancer and 3,700 women will die from cervical cancer.
- The use of prophylactics during intercourse does not guarantee that HPV will not be transmitted. Condoms do not cover the entire genital area. They leave parts of the sensitive anatomy uncovered, and contact between these areas can transmit HPV (National HPV & Cervical Cancer Prevention Resource Center, 2008).
- HPV can be contracted from one partner, remain dormant with no evident indications of infection, and then later be unknowingly transmitted to another sexual partner, including a spouse. This can lead to accusations of infidelity and destroy relationships and marriages (National HPV & Cervical Cancer Prevention Resource Center, 2008).

### Questions

1. With the information provided, do you agree with Governor Perry? Do you think he should be commended for his initiative and concern for the public welfare or is he overstepping his bounds?
2. How would you respond to parents with moral reservations about having their young daughters vaccinated against STDs like HPV?

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## Part III—Arguments Against the HPV Mandatory Vaccination Policy

Once the executive order became public, the Texas legislators were besieged by phone calls, letters, emails, and personal confrontations from the public that were widely reported in the press. Many argued against the order on the basis of personal freedom, religious objection, and quoting “the well-known fact” that occasionally vaccinations were known to kill some people. Additional arguments included the following:

- HPV is a sexually transmitted disease; it can only be spread by intimate contact. In this regard, it is unlike other diseases for which children in the public school system are required to be vaccinated against (Irvine, 2007).
- Gardasil® would give young people a false sense of security and undermine abstinence-only education and the push to use prophylactics during intercourse. It also serves to challenge parental autonomy (Irvine, 2007).
- Some members of the medical establishment have expressed concern with the lobbying efforts from Merck. The company that spent millions developing the vaccine would stand to reap a fortune if it were mandated for every girl in the U.S. public school system (Irvine, 2007).
- The vaccine is not cheap. The series of three shots costs \$360. This prompts the concern that only the affluent could afford it. Also, if the vaccination were publicly funded, some taxpayers may object on moral grounds (Irvine, 2007).
- More research is needed to determine the long-term effects of the HPV vaccine (Irvine, 2007).
- Governor Perry is not an unbiased politician acting in the best interests of his constituents. Merck’s lobbyist in Austin, Texas, Mike Toomey, was chief of staff for Governor Perry from 2002 to 2004, as well as for a Republican predecessor, William P. Clements. Merck also contributed to Perry’s election campaign (AP, 2007).
- A recent medical study is evidence for prudence. Just 2.2% of women were carrying one of the two HPV strains most likely to lead to cervical cancer, about half the rate found in earlier surveys. And just 3.4% of the women studied were infected with one of the four HPV strains that the new vaccine protects against (*USA Today*, 2007).
- The vaccine was approved only very recently. It could have adverse effects that will not manifest themselves until millions have been inoculated and until many years have passed. Researchers don’t even know how long the vaccine offers protection (*USA Today*, 2007).

### Questions

1. With the information provided, do you think Governor Perry did the right thing by mandating that all girls in the Texas public school system receive the HPV vaccination? Or is it too early to be mandating Gardasil®? Should it be offered to students but not required? How long should tests be conducted before the vaccine is deemed safe?
2. The series of shots costs \$360. Should the cost of the immunization be borne by the state or by the individuals receiving the shots?
3. Do you think Governor Perry’s decision stemmed solely from his concern for the health of his constituents or did politics play a factor?
4. Is it ethical for the company that creates a vaccine to lobby for its mandatory use in the public schools?

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## Part IV—Now What?

Several weeks after Governor Perry issued an executive order mandating that all girls in the state of Texas receive the Gardasil<sup>®</sup> vaccine against HPV, the Texas legislature overrode the executive order and barred the mandatory vaccination of girls until at least 2011. Politicians in over 20 states, including New Mexico and New York, are considering legislation that would require young girls to receive the vaccine. All include a provision that will allow parents to opt out of having their daughters receive the vaccine if they have religious reservations (Frosch, 2007). Also, Merck, the pharmaceutical company that developed the HPV vaccine, has halted its lobbying campaign for mandatory immunization after protests from health experts, physicians, and parents (Rubin, 2007).

### Questions

1. If legislation in the above mentioned states passes, how many parents do you think will opt out of the immunization program? What percentage will consent to the inoculation? Will most go along without objections?
2. Was Merck right to abandon its lobbying or was it simply exercising its democratic right to advance its own interests? If you owned substantial stock in Merck, would your opinion on the matter of lobbying change?

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