Vaccination Policies and the Impact on Cancer Patients

Vaccinations are an essential part of care for people with cancer and their families. The American Cancer Society Cancer Action Network (ACS CAN) advocates for science-based policies that improve access to vaccines that prevent and treat cancer as well as protect people living with cancer.

Vaccines, also called **immunizations or vaccinations**, are used to help a person's immune system recognize and fight off harmful germs, and more recently to fight cancer. Vaccines are often made up of a weakened or killed (inactivated) part of the germ, or messenger RNA (mRNA), which is a type of genetic material found in cells. When the vaccine enters the body, it helps the immune system learn how to fight off the germ or cancer, without causing the disease.

When **people are vaccinated**, they **protect themselves and their community**. When enough people in the community are vaccinated against a disease, it is **harder for the disease to spread**. Community immunity protects everyone. Community immunity is especially important for protecting people with cancer, who may have weakened immune systems, and people like babies or the elderly who may not have a strong immune response to vaccines.

Vaccines help Cancer Patients by:

Preventing infection from viruses that cause cancer

Treating certain cancers

Protecting people living with cancer

Prevention: Preventing Viruses that Cause Cancer

Vaccines can prevent some cancers that are caused by viruses, such as the human papillomavirus virus (HPV), which causes almost all cervical cancers and the hepatitis B virus (HBV) which increases the risk of liver cancer.

HPV Vaccination Is Cancer Prevention

90% of cervical cancers can be prevented through HPV vaccination.

HPV Vaccine: The HPV vaccine can prevent six types of cancer – anal, cervical, penile, throat, vaginal and vulva cancer. **HPV infections and cervical precancers have dropped since 2006, when HPV vaccines were first used in the United States.**

Among **vaccinated women,** the percentage of cervical precancers caused by the HPV types most often linked to **cervical cancer has dropped by 40 percent.**[i] HPV immunization has also been shown to **lower the risk of developing head and neck cancer among men and boys**.[ii] Over a decade of research and safety monitoring have shown that the HPV vaccine is both safe and effective. However, despite the vaccine's ability to prevent most HPV-related cancers, vaccination rates remain low (65% of girls and 61% of boys ages 13 to 17).[iii]

Cancer Vaccine Treatments Can Improve the Lives of Cancer Patients

Therapeutic cancer vaccines can be used to treat existing cancers by triggering the immune system to attack tumor cells.

Treatment: Advances in Cancer Treatment

There has been great progress in vaccines that treat cancer, including vaccines used to treat advanced prostate cancer and advanced melanoma skin cancer. Other types of cancer vaccines have shown promise in clinical trials against a variety of cancer types.

Cancer treatment vaccines are different from the vaccines that work against viruses. Cancer treatment vaccines trigger the immune system to mount an attack against cancer cells in the body. Instead of preventing disease, they are meant to treat a disease that already exists.

Community Immunity Supports Cancer Patients Where They Live, Learn and Work

Strong community immunity can protect cancer patients from viruses, allowing them to go to health care appointments and do other public activities safely.

HBV Vaccine: People who have chronic (long-term) infections with the hepatitis B virus (HBV) are at higher risk for liver cancer. The HBV vaccine helps prevent HBV infection and may lower some people's risk of getting liver cancer. The HBV vaccine is recommended for infants and unvaccinated children, and 91% of adolescents were vaccinated in 2023.[iv]

Vaccine Approval, Recommendation and Monitoring

Approval

In the U.S., the Food and Drug Administration is charged with approving vaccines after reviewing clinical trial data for evidence that a vaccine is safe and effective.

Recommendation

The Advisory Committee on Immunization Practices (ACIP) makes recommendations for vaccine use in the U.S. ACIP only recommends vaccines approved by the FDA.

Monitoring

After vaccines are approved and recommended for the public, CDC and FDA monitor any adverse events to ensure a vaccine's continued safety.

Protection: Protecting People with Cancer

Community immunity plays an important role in **reducing risks to cancer patients** and their families. Cancer patients often have a weakened immune system, and some patients may be unable to be vaccinated, or a vaccine may be less effective. This can be particularly true for patients with blood cancers (such as leukemia or lymphoma) as well as patients getting chemotherapy, long courses of corticosteroids, certain types of immunotherapies, or a stem cell or bone marrow transplant.

ACS CAN Supports Vaccine Policies that Protect Cancer Patients

ACS CAN supports fact-based vaccine policies that fight cancer through increased access and uptake of vaccines that **prevent** viruses that lead to cancer, **treat** cancer by boosting the immune system, and **protect** cancer patients and their families by maximizing community immunity.

- **ACS CAN supports evidence-based efforts that ensure the widest possible HPV vaccination rates,** consistent with ACS's HPV Vaccination Guidelines, to prevent cervical and other HPV-related cancers in the United States.

- **ACS CAN supports school requirements based on the current Advisory Committee on Immunization Practices (ACIP)'s recommended vaccinations for boys and girls** that limit exemptions and include administrative procedures to ensure a medical exemption is necessary. School vaccination requirements with broad reach, limited exemptions and strong enforcement may help promote higher vaccination rates and lower rates of vaccine-preventable diseases.[v] Allowing exemptions other than medical exemptions has been shown to negatively impact vaccination rates. In states that permit philosophical or personal belief exemptions, there has been an increase in the use of those exemptions.[vi]

- **ACS CAN supports policies that expand the ability of pharmacists to administer vaccines** to both children and adults.

- **ACS CAN opposes policies that restrict the authority of local communities to pass important public health and safety laws** at the local level that are stronger than state law.

- **ACS CAN opposes legislation that restricts the ability of employers and organizations to establish vaccine policies** and other safeguards that protect individuals with cancer.

- **ACS CAN supports access to vaccines licensed, approved, or authorized by the U.S. Food and Drug Administration** or available through an approved FDA investigational new drug application, and opposes restrictions on access to these vaccines.

i. Centers for Disease Control and Prevention, Human Papillomavirus, Impact of the HPV Vaccine, updated July 9, 2024, accessed April 23, 2025.
ii. J Clin Oncol 42, 2024 (suppl 16; abstr 10507)
iii. American Cancer Society, Cancer Facts & Figures 2025. Atlanta: American Cancer Society; 2025.
iv. American Cancer Society, Cancer Facts & Figures 2025. Atlanta: American Cancer Society; 2025.
v. Centers for Disease Control and Prevention, State Vaccination Requirements, updated August 6, 2024, accessed April 24, 2025.
vi. Thompson, Joseph W. et al. Impact of Addition of Philosophical Exemptions on Childhood Immunization Rates. American Journal of Preventive Medicine, Volume 32, Issue 3, 194 - 201