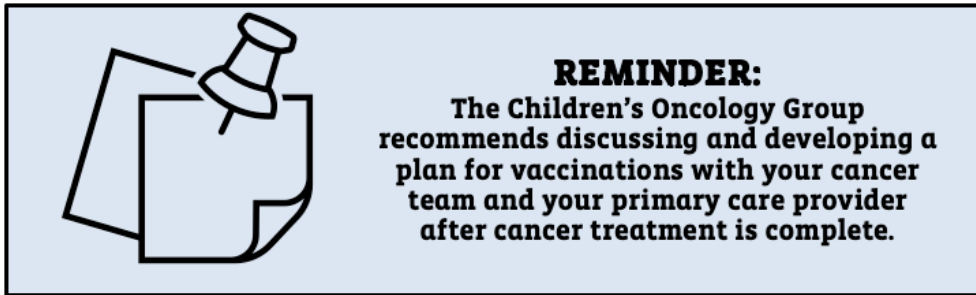


Vaccines after Treatment for Cancer Survivors Treated with Hematopoietic Cell Transplant (HCT)

Vaccines are an important tool to protect against infections and prevent infection-related deaths. Vaccines help the immune system recognize and fight serious infections. Most vaccines are given during childhood and provide protection against infection into adulthood. After cancer treatment, survivors may need to catch up on recommended childhood vaccines that were missed during treatment or get booster vaccines to protect against vaccine-preventable infections.



Who should be revaccinated?

- All individuals who received either an allogeneic HCT (transplant from a donor) or an autologous HCT (transplant with your own cells) should repeat the vaccination series for most vaccines.
- An individualized plan for you or your child should be discussed with your transplant team.

Why should individuals who received a hematopoietic transplant be revaccinated?

- Infection is one of the most common causes of illness and death following a transplant.
- Revaccination after a hematopoietic transplant can protect from infection and infection-related death.

How do vaccines work?

- Vaccines protect you from infection by creating an immune response which makes antibodies and memory cells, your body's tools to effectively fight off viruses and bacteria. These antibodies and cells remain in the body for many years and protect against infections into adulthood.

What are the risks of revaccination?

- Vaccines and revaccination are considered very safe.
- Common side effects include swelling and/or discomfort at the vaccination site and low-grade fever.
- Serious reactions are rare. If you have concerns about vaccine safety, more information can be found at the Centers for Disease Control website: <https://www.cdc.gov/vaccines/schedules/index.html>

Where should my child go to receive vaccines?

- Your transplant team will provide you and your primary care provider a list of the recommended vaccinations.
- Vaccines can be given by your transplant team or your primary care provider.

When should my child get vaccines after treatment?

- The timing of vaccination should be given to you by your transplant team. Certain treatments such as steroids, IVIG, and immune suppression drugs or conditions such as graft vs. host disease may affect your vaccine schedule.
- Most vaccines are delayed for 6 months following the date of transplant. Some vaccines called live vaccines are delayed even longer (up to two years after transplant) and should only be started after confirming with the primary transplant team.

Are there any vaccines that protect against cancer?

- Yes!
 - The Hepatitis B virus vaccine protects against liver cancer caused by the Hepatitis B virus.
 - The human papilloma virus (HPV) vaccine protects against a virus known to cause many different types of cancer (head and neck cancers, cervical cancer, vaginal cancer, anal cancer, penile cancer, and vulvar cancer).
 - Survivors of childhood cancer are at increased risk of HPV-related cancers and should receive a three-dose series of the vaccination, regardless of the age at which the first vaccine was given.

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Additional health information for childhood cancer survivors is available at
www.survivorshipguidelines.org

Note: Throughout this *Health Links* series, the term “childhood cancer” is used to designate pediatric cancers that may occur during childhood, adolescence, or young adulthood. Health Links are designed to provide health information for survivors of pediatric cancer, regardless of whether the cancer occurred during childhood, adolescence, or young adulthood.

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