

# Clinician Fact Sheet

Influenza Immunization for Adult and Pediatric Patients  
Undergoing Cancer Treatment

Accompanies: Clinical Practice Guideline SUPP-002



The assessment, prevention, rehabilitation, and management strategies outlined in this summary and accompanying guideline apply to adult and pediatric cancer patients. Refer to the full clinical practice guideline and evidence tables for a detailed description of the clinical questions, recommendations, guideline development methodology, and references.

## General Principles

Annual administration of the **inactivated** influenza vaccine is recommended for most adult and pediatric patients 6 months of age and older with cancer.

Live influenza immunizations **are contraindicated** for all adult and pediatric cancer patients. Patients with a severely weakened immune system (hospitalized and in protective isolation) should avoid contact with those who received the live nasal spray influenza immunization for a period of at least 2 weeks following administration.

Patients are responsible for making their own influenza immunization appointments at their local public health unit, influenza immunization clinic, pharmacy, or family physician's office.

## Influenza Vaccines Included in the 2024/25 Provincially Funded Program

Product	Quadrivalent Inactivated Influenza Vaccine			High-Dose Quadrivalent Inactivated Vaccine
Influenza Vaccine Name	Fluzone® Quadrivalent	FluLaval® Tetra	Fluceivax® Quad	Fluzone® High-Dose Quadrivalent
Dose	0.5 mL			0.7 mL
Indications for use of provincially funded vaccine	Individuals six months of age and older who are living, working, going to school, or visiting Alberta.			Individuals aged 65 years and older who are living, working, or visiting Alberta.  Adults 18 years of age and older who are: <ul style="list-style-type: none"> <li>• Hematopoietic stem cell transplant (HSCT) recipients;</li> <li>• Chimeric antigen receptor T-cell (CAR T) therapy recipients; or</li> <li>• Solid organ transplant (SOT) candidates or recipients.</li> </ul>

## Timing of Inactivated Influenza Immunization

The **inactivated** influenza vaccine should *ideally* be administered at least 14 days before initiating immunosuppressive therapy.

Adult and pediatric patients treated with immune checkpoint inhibitor therapies (e.g., PD-1, PDL-1, CTLA-4) can receive the inactivated influenza vaccine at any time during therapy.

Adult and pediatric patients who are treated with B-cell or T-cell depleting antibodies (e.g., rituximab, blinatumomab), should be informed that influenza immunization is unlikely to provide effective protection and should be encouraged to ensure their household contacts are all immunized.

## Schedule

Age group	Vaccination Status	Dosing Schedule
Children 6 months through 8 years of age	Previously received the seasonal influenza vaccine	1 dose
	Never received the seasonal influenza vaccine	2 doses with a minimum interval of 4 weeks between doses
Persons 9 years of age and older	Not applicable	1 dose

### Hematopoietic Stem Cell Transplant (HSCT)

**Adult HSCT Recipients:** the high-dose quadrivalent inactivated influenza vaccine should ideally be administered 6 months post-transplant but can be given as early as 3 months post-transplant at the discretion of the transplant healthcare team during the influenza season.

**Pediatric HSCT Recipients:** the quadrivalent inactivated influenza vaccine should be administered 6 months post-transplant.

Influenza immunization recommendations are the same for autologous and allogeneic transplants.

Adult and pediatric HSCT recipients who are treated with B-cell or T-cell depleting targeted therapies (e.g., rituximab, blinatumomab) should have the inactivated influenza vaccination postponed until at least 6 months after the last dose of medication.

For HSCT recipients on post-transplant maintenance therapy, inactivated influenza immunization should be postponed until at least 6 months after the last dose of chemotherapy. Maintenance therapies (e.g., lenalinomide) are not a contraindication to influenza immunization.

### CAR T-cell Therapy

**HSCT recipients** who have started their post-HSCT vaccine series and then had the series interrupted by CAR T-cell therapy should restart their vaccine series. Immunization will be directed by the transplant centre through patient specific letters.

Patients treated with CAR T-cell therapy **without a prior history of HSCT** who received influenza vaccine pre-CAR T-cell therapy are eligible to receive another dose of inactivated influenza vaccine at least 3 months for adults and at least 6 months for children post-CAR T-cell therapy. If a clearance letter has been received to proceed with inactivated vaccines, consultation with the healthcare team is not required.

### Administration of Inactivated Influenza Vaccine with Other Vaccines

With the exception of the Respiratory Syncytial Virus (RSV) vaccine, the inactivated influenza vaccine **may be co-administered** with, or at any time before or after other vaccines to individuals 6 months of age and older. RSV vaccine should be given with a two-week spacing before or after influenza and/or COVID-19 vaccines. For AHS employees, direction for co-administration of influenza and other vaccines can be found on the internal website at *Home → Teams → Communicable Disease Control → Immunization Program Standards Manual → Biological Product Information*.