

Guide to Wound Tetanus Prophylaxis in Emergency Departments (ED)

Central Zone

Patient management is summarized in *Table 1* on page 2; important supplementary information follows below:

Vaccine Abbreviations:

- **dTap** (same as Tdap): Reduced diphtheria, regular tetanus toxoid and reduced acellular pertussis antigens used to generate active immunity.
- **TIG** (tetanus immune globulin): A blood product containing antibodies providing temporary passive immunity against tetanus until active immunity can be generated with tetanus toxoid-containing vaccines such as dTap.

Tetanus Risk: 10,337 cases reported to World Health Organization in 2015. Average of three (3) cases per year in Canada with six (6) deaths since 2000.

Determining Immunization History with Tetanus Toxoid-Containing Vaccine:

Consult Net Care (doses given before electronic records were kept and in different zones, provinces, or countries may not appear). Tetanus vaccine was introduced in Alberta in 1947.

- Adults born in Canada after 1947 are generally assumed to have received three (3) or more doses unless they have deliberately avoided immunization.
- In Alberta, dTap provision to *some* adults began in 2012.

Providing TIG:

TIG does not require release by the Medical Officer of Health or designate. For questions concerning indications or availability of TIG, phone:

8:30 am to 4:00 pm weekdays	1-855-444-2324	Provincial Communicable Disease Control (CDC) Immunization Team
all other days and times	1-403-356-6430	Central Zone Medical Officer of Health (MOH) On-Call

TIG Locations:

Acute Care Hospital*	Refrigerator Location
Red Deer (1 dose in both Lean Track and Minor Treatment), Camrose, Vermilion, Wainwright	Emergency Department
Rocky Mountain House and Provost	Laboratory
Drayton Valley, Drumheller, Olds, Stettler, Vegreville, Wetaskiwin	Laboratory Blood Bank

* Acute Care sites without stocked TIG may enquire about availability at a community health centre (see *Providing TIG* above).

Administration of Tetanus Toxoid-Containing Vaccines and TIG:

Both products are given intramuscularly at separate sites.

TIG Product Replacement:

- Connect Care sites, follow the Central Zone Connect Care product replacement instructions that are included in the TIG kit.

Table 1: TIG and Tetanus Toxoid-Containing Vaccine¹ Decision

A. Tetanus-Prone Wound e.g., crush, puncture, avulsion, burn, soil/feces/saliva contamination, necrosis, sepsis.

Patient Age	Immunization History with Tetanus Toxoid-Containing Vaccine	TIG Decision	Tetanus Toxoid-Containing Vaccine Decision
18 years and older	Uncertain or less than 3 doses	Yes, give in ED	Give dose of dTap in emergency department (ED). Advise contact with local Public /First Nations Health on next business-day if additional dose(s) required to complete three (3) dose tetanus toxoid vaccine primary series.
	3 or more doses	No ⁴	If 5 years or more since last dose, ⁴ give dTap in ED.
7 to 17 years.	Uncertain or less than 3 doses	Yes, give in ED	Give dTap in ED. Advise contact with local Public /First Nations Health on next business-day. ²
	3 or more doses	No ⁴	If 5 years or more since the last dose, ⁴ give dTap in ED. Advise contact with local Public /First Nations Health on next business-day. ²
6 months to 6 years.	Uncertain or less than 3 doses	Yes, give in ED	Advise contact with local Public /First Nations Health on next business-day. ²
	3 or more doses	No ⁴	If 5 years or more since the last dose, ⁴ give dTap in ED. Advise contact with local Public /First Nations Health on next business day. ²
less than 6 months.	0, 1 or 2 doses	5, 4	If infant is not up-to-date for age, ^{3,4} advise contact with local Public / First Nations Health on next business day. ²

B. Clean, Minor Wound

Patient Age	Immunization History with Tetanus Toxoid-Containing Vaccine	TIG Decision	Tetanus Toxoid-Containing Vaccine Decision
18 years and older	Uncertain, or less than 3 doses	No	Give dTap in ED. Advise contact with local Public /First Nations Health on next business-day if additional dose(s) required to complete 3 dose tetanus toxoid vaccine primary series.
	3 or more doses	No	If 10 years or more since last dose, give dTap in ED.
7 to 17 years.	Uncertain or less than 3 doses	No	Give dTap in ED. Advise contact with local Public / First Nations Health on next business-day. ²
	3 or more doses	No	If 10 years or more years since last dose, give dTap in ED. Advise contact with local Public /First Nations Health on next business-day. ²
less than 7 years.	Not up-to-date for age ³	No	Advise contact with local Public /First Nations Health on the next business-day. ²

¹Effective January 1, 2021 dTap replaced Td in all routine adult immunizations.

²Public /First Nations Health Centre will review the need for additional tetanus toxoid and other vaccines.

³The routine tetanus toxoid vaccine schedule is 6 doses, given at 2, 4, 6, 18 mo.; 4-6 yrs.; and 14-16 yrs. The 5th dose is not required if the 4th dose was given after the 4th birthday.

⁴For those known to have an immune compromising condition, especially a with humoral immune deficiency (e.g. HIV, agammaglobulinemia, or hypogammaglobulinemia): **TIG**, as well as tetanus toxoid-containing vaccine (regardless of the number of doses previously received or time since a previous dose), should both be given.

⁵Use mother’s history of immunization at the time of delivery. If mother received less than 3 doses or an unknown number of doses of tetanus toxoid-containing vaccines, give TIG in emergency department.

Note: Acute care sites without stocked TIG may enquire about availability at a community health centre (see reverse *Providing TIG*).