To: North Zone Emergency Departments Staff and Physicians

Dear Colleague:

Re: FORM CHANGE - *Wound Management—Tetanus Prevention* Immunization Algorithm

Background:
We are taking this opportunity to update the North Zone *Wound Management—Tetanus Prevention* form. The new directive and form (attached) reflect changes to the Alberta Wound Management guidelines and clarify post-exposure tetanus prophylaxis in certain circumstances.

Changes to form:
- Under Tetanus-prone – was the most recent dose within the past 5 years?
  
  **No** – Administer dTap  Addition: Less than 7 years of age – consult MOH re: vaccine
  
  **Yes** – No vaccine indicated  Addition: If significant humoral immune deficiency state consult MOH re: vaccine

- Additional variations within the definition of a tetanus-prone wound:
  - Abscesses, cellulitis, chronic ulcers & other wounds in patients w/diabetes mellitus or illicit injection drug users
  - Wounds sustained more than 6 hours before surgical treatment of wound/burn
  - Wounds resulting from missiles (gunshots)

- In vaccine administration section ☐ dTap (Boostrix® or Adacel®) – Addition of Adacel®

Actions Required:
Please discard all previous versions of the form: *Wound Management—Tetanus Prevention* in your facility and replace with the updated version (attached).

As directed in the algorithm, please notify Public Health by phone if TIG is indicated (any age) or if a tetanus-containing vaccine is required for a child under 7 years. With the exception of Grande Prairie Emergency Department, TIG is only available through Public Health. Unimmunized or incompletely immunized children under 7 years require age-appropriate tetanus-containing vaccine available only through local Public Health Centers.

If you have any questions about tetanus prophylaxis, please contact CDC Intake during business hours (M – F: 0830 – 1630) at 1-855-513-7530 or PHOC after hours at 1-800-732-8981.

**Note:** We request that non-urgent notifications or consultations during the night (2300-0700) be reported the next morning. Public Health can follow-up with your patients next day.

Thank you for your continued role in communicable disease prevention.

Sincerely,
North Zone Medical Officers of Health

This letter has been posted on [http://www.albertahealthservices.ca/medstaff/Page7082.aspx](http://www.albertahealthservices.ca/medstaff/Page7082.aspx)
**What** Tetanus disease is characterized by muscle spasms usually beginning in the jaw (lockjaw). As the disease progresses, the generalized rigidity and convulsive spasms of the skeletal muscles can cause serious complications and death unless treatment is provided.

Pertussis (whooping cough) is a highly communicable bacterial respiratory illness.

**Who** People with tetanus-prone wounds who have not had a complete series of tetanus-containing vaccine are at risk of developing tetanus disease.

Unimmunized/underimmunized infants and adolescents & adults who have not received a pertussis booster are at risk of infection. One pertussis booster is recommended for all adults regardless of previous immunization history.

**When** The need for immediate administration of tetanus-containing vaccine, with or without tetanus immune globulin (TIG) depends on both the nature of the wound and the immunization history.

**Where** During wound assessment in the Emergency Department, individuals who are identified as previously unimmunized or incompletely immunized may qualify for TIG and tetanus/pertussis containing vaccine.

**Why** The tetanus case fatality rate in the unimmunized varies from 10% to over 80% and is highest in infants and the elderly.

One to three deaths related to pertussis occur each year in Canada, mainly in infants.

**How** Tetanus vaccine is only available as a combination vaccine. Pertussis cases are rising in Alberta, therefore by using the combination vaccine dTap (diphtheria, tetanus, acellular pertussis) in the Emergency Department setting we are also providing simultaneous protection against diphtheria and pertussis (whooping cough) disease.
North Zone
Wound Management - Tetanus Prevention
HOSPITAL OUT-PATIENT/ EMERGENCY

- Follow wound management algorithm below, CIRCLE the final decision point, complete and fax the form.
- If this is an Animal Bite/Exposure, complete additional form “Animal to Human Exposure Incident Form”.
- If this is a Blood and/or Body Fluid Exposure, complete the “Red Kit”.

Type of Wound

Clean, minor

Has client ever had childhood immunization or 3 or more doses of Tetanus? Check EMR.

- Yes
- No/Uncertain

Tetanus-prone

Has client ever had childhood immunization or 3 or more doses of Tetanus? Check EMR.

- Yes
- No/Uncertain

Has client ever had childhood immunization or 3 or more doses of Tetanus? Check EMR.

- Yes
- No/Uncertain

Was the most recent dose within the past 5 years?

- Yes
- No

No vaccine indicated, unless significant humoral immune deficiency - consult MOH re: vaccine & TIG

Consult MOH re: TIG; AND
• 7 yrs of age or older - administer dTap
• Less than 7 years of age - consult MOH re: vaccine

Administer dTap

Consult MOH re: vaccine & TIG if
• Less than 7 years of age AND/OR
• Significant humoral immune deficiency

Consult MOH re: vaccine

Consult MOH re: TIG

Consult MOH re: vaccine & TIG

Consult MOH

Administer dTap

No vaccine indicated

Tetanus-prone = a wound other than a clean minor wound, including any of the following:

- a significant degree of devitalized tissue
- Avulsion
- Abscesses, cellulitis, chronic ulcers & other wounds in patients w/diabetes mellitus or illicit injection drug users
- Contaminated with soil, dirt, manure, feces/saliva
- Crush injury
- Wounds sustained more than 6 hours before surgical treatment of wound/burn
- Clinical evidence of sepsis or necrosis
- Puncture-type wound
- Wounds resulting from missiles (gunshots)
- Animal bite/scratch
- Frostbite, burn

To Consult Medical Officer of Health/designate:

- Monday to Friday 0830 – 1630 (excluding holidays): call NZ CDC Intake 1-855-513-7530
- Evenings, weekends, holidays: call Public Health On Call (PHOC) 1-800-732-8981
- Nights 2300 - 0700, please report next morning to PHOC or CDC Intake

Fax completed form to NZ CDC Intake: 1-855-532-4373