**TITLE:** Tetanus Protocol  
**NUMBER:** CC 80-070

**Section:** Parenteral/Line Care  
**Source:** CDHA Emergency Departments

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**Distribution:** CDHA – Emergency Departments  
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**THIS IS A MEDICAL DIRECTIVE FOR REGISTERED NURSES THAT REQUIRES ASSESSMENT OF COMPETENCY PRIOR TO PERFORMING**

**POLICY**

1. The Tetanus Protocol is a **Medical Directive** that allows the Registered Nurse (RN) in the emergency department to administer Tetanus/Diphtheria (Td) to the adult (greater than 16 years old) patient prior to the physician examining the patient.

2. The RN performs this Medical Directive, administering Td only upon:
   1. Completing the appropriate assessment of the patient
   2. Being deemed competent in the Post-Entry Level Competency of Administering Tetanus Toxoid (Refer to site-based immunization policies pending completion and distribution of CDHA policy.)
   2.3. Being deemed competent in the Post-Entry Level Competency of Epinephrine, Subcutaneous administration in the treatment of anaphylaxis post immunization and Learning Module MM 20-005

3. An emergency room physician is to be available by phone immediately and available in the department within 15 minutes.

4. **The RN who performs the assessment is responsible and accountable for the administration of the Td.**

5. Emergency department RNs are to consult the emergency department physician **prior to immunizing** when the patient reports any of the following:
   5.1. Allergy to tetanus toxoid or thimerosal
5.2. Pregnancy or breastfeeding

5.3. A previous Arthus-like response (a severe local inflammatory reaction which occurs at the site of injection.)

Note: patients who report an Arthus-like response to tetanus immunization should only receive an emergency tetanus immunization every ten years as the cause of the Arthus-like reaction is felt to be the interaction between the injected antigen and the high levels of preexisting tetanus antibodies from prior boosters.

5.4. Immunization history is unknown

5.5. Immunization history is uncertain

5.6. Incomplete immunization (see primary immunization, Appendix A)

5.7. No previous immunization

5.8. Refusal to have immunization

5.9. Immunocompromised state

GUIDING PRINCIPLES

1. Tetanus is an acute illness caused by an exotoxin of the tetanus bacillus or *Clostridium tetani*. This organism grows anaerobically at the site of injury. The tetanus bacillus can be present in soil, street dust, human and animal excrement, and on other surfaces.

2. The Tetanus Protocol serves to:
   2.1. decrease patient waiting times and expedite patient flow throughout the ED
   2.2. promote active immunization against tetanus

PROCEDURE

1. Evaluate all wounds including corneal abrasions, lacerations, compound fractures, puncture wounds, abrasions, crush injuries, burns and frostbite to determine if tetanus immunization is required.

2. Determine the date of the last tetanus booster and record date in assigned area of the patient’s health record.

3. Note on the assigned area of the patient’s health record if unable to determine date of the last tetanus immunization.

4. Assess all appropriate patients (See Appendix A Recommended Tetanus Prophylaxis, and Appendix B Primary Immunization) to determine adequate prophylaxis against tetanus."

5. As appropriate (pending assessment of the patient) administer 0.5cc Diphtheria and Tetanus Toxoid Adsorbed (may be abbreviated as Td) IM in the deltoid (preferred site) or the vastus lateralis (alternate site).
6. Observe the patient for **15 minutes** for signs and symptoms of anaphylaxis/allergic reaction evidenced by generalized urticaria, tachycardia, hypotension, and neurological symptoms. **Should any of these symptoms occur, notify the Emergency Room Physician (ERP) immediately.**

7. Advise the patient of possible adverse reactions such as:

   7.1. Nodule, pain, tenderness, heat, induration, erythema, or localized edema at the injection site
   7.2. Systemic effects including low-grade fever; chills, malaise, generalized aches and pains, headaches and flushing

8. Provide the patient with a written record of the immunization received in the emergency department (immunization cards are available).

9. If the patient is less than 16 years of age, complete a reciprocal reporting form and forward to Public Health.

10. If primary immunization is initiated in persons older than 6 years of age (after consulting with a physician and an order has been received), advise the patient or appropriate caregiver to contact their primary health care provider to arrange follow-up immunization as per immunization schedule. ([ Appendix A](#)).

11. Document interventions and education provided appropriately.

**RELATED CAPITAL HEALTH DOCUMENTS**

**Policies**

Epinephrine, Subcutaneous administration in the treatment of anaphylaxis post immunization and Learning Module MM 20-005

Site-based policies addressing Administration of Tetanus Toxoid

**Appendixes**

A - [Recommended Tetanus Prophylaxis](#)
B - [Primary Immunization](#)

**REFERENCES**

Canadian immunization guide
7th Edition 2006


**HISTORICAL DATES**

New
Appendix A

Recommended Tetanus Prophylaxis

<table>
<thead>
<tr>
<th>Immunization Status</th>
<th>Non-Tetanus Prone Wound</th>
<th>Tetanus Prone Wound **</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient has received primary immunization*; last injection within 10 years</td>
<td>No immunization required</td>
<td>If last dose was longer than 5 years: 0.5cc IM Diphtheria and Tetanus toxoid adsorbed</td>
</tr>
<tr>
<td>Patient is partially immunized (has received 2 or more primary* injections with the last injection more than 10 years ago)</td>
<td>Consult physician</td>
<td>Consult physician</td>
</tr>
<tr>
<td>Patient not adequately immunized (none or unsure of # previous injections) ***</td>
<td>Consult physician</td>
<td>Consult physician</td>
</tr>
<tr>
<td>Immunization history unknown ***</td>
<td>Consult physician</td>
<td>Consult physician</td>
</tr>
</tbody>
</table>

- *See Appendix B for definition of primary immunization
- ** See Appendix B for definition of tetanus prone wound
- *** Contact primary care physician for follow-up immunization
Definition of Tetanus Prone Wounds:

- Wounds more than six hours old
- Any wound or burn at any interval that shows one or more of the following
  - A significant degree of devitalized tissue
  - A puncture type wound
  - Contact with soil or manure likely to harbour tetanus organisms
  - Clinical evidence of sepsis
  - Deeper than 1 cm
  - Is stellate (star-shaped)
  - Is ischemic
  - Is abscessing
  - Avulsions
  - Crush injuries
- The disease can also occur in
  - Burn victims
  - Patients receiving IM injections
  - Patients with frostbite
  - Patients with dental infections
  - Patients with penetrating eye injuries
- Risk factors include:
  - Diabetes
  - Peripheral Vascular Disease
  - Presence of chronic wounds
  - IV drug abuse
  - Recent surgery
  - Dental surgery or infection

Primary Tetanus Immunization In Infants and Young Children:

In infants and small children, Tetanus immunization is given in combination with Diphtheria, acellular Pertussis and inactivated polio virus vaccine (DTaP-IVP) at the following ages:

1. 2 months of age
2. 4 months of age
3. 6 months of age
4. 18 months of age
5. 4 to 6 years of age

1 through 5 are considered the primary or initial immunization series
Tetanus Boosters Following Primary Immunization:
1. a booster of diphtheria, tetanus, acellular pertussis vaccine – adult/adolescent formulation (Tdap) is given at 14-16 years of age
2. a booster of Tetanus and Diphtheria (Td) every 10 years. One dose should be given as Tdap if not previously given in adulthood.

Tetanus Immunization Schedule in Persons Older than 7 Years of Age up to 17 Years of Age Not Immunized in Early Infancy
1. First visit: Tdap
2. 2 months later: Tdap
3. 6-12 months later: Tdap
4. 10 years later: Tdap

Tetanus Immunization Schedule for Adults (>18 Years of Age) Not Immunized in Childhood
1. First visit: Tdap
2. 2 months later: Td
3. 6-12 months later: Td
4. 10 years later: Td