Appendix B: Provincial Case Definitions for Diseases of Public Health Significance

Disease: Trichinosis

Effective: February 2019
Trichinosis

1.0 Provincial Reporting
Confirmed and probable cases of disease

2.0 Type of Surveillance
Case-by-case

3.0 Case Classification

3.1 Confirmed Case
Laboratory confirmation of infection with or without clinically compatible signs and symptoms:
- Demonstration of *Trichinella* spp. in a muscle biopsy
  OR
- Positive serology

3.2 Probable Case
Clinically compatible signs and symptoms in a person with an epidemiologic link to a laboratory-confirmed case or to a confirmed food source (e.g., meat known to contain *Trichinella* larvae).

4.0 Laboratory Evidence

4.1 Laboratory Confirmation
Any of the following will constitute a confirmed case of trichinosis:
- Demonstration of *Trichinella* larvae in tissue obtained by muscle biopsy
  OR
- Positive serologic test for *Trichinella*

4.2 Approved/Validated Tests
- Parasitological tests (i.e., smear from infected meat)
- Microscopic examination of muscle biopsy pressed between 2 glass plates for *Trichinella* larvae
- Microscopic examination of enzyme digested biopsy material for *Trichinella* larvae
- Serological tests (i.e., enzyme immunoassay [EIA])
4.3 Indications and Limitations

- Presence of larvae in biopsies indicates definitive evidence of infection but
  microscopy is time consuming, especially in a mild infection, and a negative
  result is not conclusive.
- Only serum samples are suitable for serology.
- Skeletal muscle biopsy taken more than 10 days after infection (most often
  positive after the fourth or fifth week of infection) frequently provides conclusive
  evidence of infection. Serum antibody titres rarely become positive before the
  second week of illness; testing paired acute and convalescent serum specimens
  usually is diagnostic.

5.0 Clinical Evidence

The disease has variable clinical manifestations and may be asymptomatic in some
cases. Common signs and symptoms among symptomatic persons include eosinophilia,
fever, myalgia, and periorbital edema.

6.0 ICD 10 Code(s)

B75 Trichinellosis

7.0 Sources

Acha P, Szyfres B. Zoonoses and Communicable Diseases Common to Man and

Centers for Disease Control and Prevention. National Notifiable Disease Surveillance
System: Trichinellosis / Trichinosis (Trichinella spp.) - 2014 Case Definition [Internet].
Atlanta, GA: U.S. Department of Health & Human Services; 2014 [cited February 21,
2018]. Available from: https://wwwn.cdc.gov/nndss/conditions/trichinellosis/case-
definition/2014/

Committee on Infectious Diseases, American Academy of Pediatrics. Section 3:
Summaries of Infectious Diseases: Trichinellosis. In: Kimberlin DW, Brady MT, Jackson

D.C: American Public Health Association; 2015.
# 8.0 Document History

Table 1: History of Revisions

<table>
<thead>
<tr>
<th>Revision Date</th>
<th>Document Section</th>
<th>Description of Revisions</th>
</tr>
</thead>
<tbody>
<tr>
<td>December 2014</td>
<td>General</td>
<td>New template.</td>
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<tr>
<td></td>
<td></td>
<td>Title of Section 8.0 changed from “References” to “Sources”.</td>
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<tr>
<td></td>
<td></td>
<td>Section 9.0 Document History added.</td>
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<tr>
<td>December 2014</td>
<td>3.1 Confirmed Case</td>
<td>Addition of “or without” in first sentence.</td>
</tr>
<tr>
<td>December 2014</td>
<td>4.2 Approved/Validated Tests</td>
<td>In fourth (last) bullet, removal of “(i.e. complement fixation [CF])” and addition of “(i.e. enzyme immunoassay [EIA])”.</td>
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<tr>
<td>December 2014</td>
<td>4.3 Indications and Limitations</td>
<td>In first bullet, removal of “…especially in a low infection…” and addition of “…especially in a mild infection…”</td>
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<td>Addition of third (last) bullet: “Skeletal muscle biopsy takes more than 10 days...”</td>
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<tr>
<td>December 2014</td>
<td>5.0 Clinical Evidence</td>
<td>Removal of prior first sentence “A disease caused by ingestion of Trichinella larvae”.</td>
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<td></td>
<td>Addition of the following at the end of current first sentence: “…and may be asymptomatic in some cases.”</td>
</tr>
<tr>
<td>December 2014</td>
<td>8.0 Sources</td>
<td>Updated.</td>
</tr>
<tr>
<td>February 2019</td>
<td>General</td>
<td>Minor revisions were made to support the regulation change to Diseases of Public Health Significance.</td>
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