

# Appendix B: Provincial Case Definitions for Reportable Diseases

Disease: Diphtheria

# Diphtheria

## 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

Clinically compatible signs and symptoms in a person with an upper respiratory tract infection or infection at another site PLUS at least one of the following:

- Isolation of *Corynebacterium diphtheriae* with confirmation of toxin from an appropriate clinical specimen (e.g., nasopharyngeal, nasal or cutaneous sites, exudate of membrane)
- OR**
- Histopathologic diagnosis of diphtheria
- OR**
- Epidemiological link to a laboratory-confirmed case (i.e., contact within 2 weeks prior to onset of symptoms)

### 3.2 Probable Case

Clinically compatible signs and symptoms in the absence of laboratory confirmation or in the absence of an epidemiological link to a laboratory-confirmed case

## 4.0 Laboratory Evidence

### 4.1 Laboratory Confirmation

The following will constitute a confirmed case Diphtheria:

- Isolation of *C. diphtheriae* with confirmation of toxin from an appropriate clinical specimen
- Histopathologic diagnosis of diphtheria

### 4.2 Approved/Validated Tests

- Standard culture for *C. diphtheriae*
- Elek test for toxin detection
- Consult with laboratory prior to testing to discuss specimen collection and testing issues

### 4.3 Indications and Limitations

- All positive smears require follow-up testing for confirmation.
- Direct-stained smears and fluorescent antibody-stained smears may be unreliable
- Further strain characterization is indicated for epidemiological, public health and control purposes
- NAT positives for diphtheria toxin must be confirmed with the Elek test

## 5.0 Clinical Evidence

Clinical illness is characterized as an upper respiratory tract infection (nasopharyngitis, laryngitis, or tonsillitis) with or without an adherent nasal, tonsillar, pharyngeal and/or laryngeal membrane, plus at least one of the following:

- Gradually increasing stridor
- Cardiac (myocarditis) and/or neurologic involvement (motor and/or sensory palsies) 1 to 6 weeks after onset
- Death, with no known cause

## 6.0 ICD Code(s)

### 6.1 ICD-10 Code(s)

A36 Diphtheria

### 6.2 ICD-9/ICD-9CM Code(s)

032 Diphtheria

## 7.0 Comments

Mode of transmission is through contact with a case or carrier; more rarely, contact with articles soiled with discharges from lesions of infected people. Raw milk has served as a vehicle.

## 8.0 References

- Ministry of Health and Long-Term Care, Public Health Division. iPHIS manual. Toronto, ON: Queen's Printer for Ontario; 2005.
- Nationally Notifiable Diseases Case Definitions with Canadian Public Health Laboratory Network (CPHLN) and Epidemiologic Group Draft Edits. March 2007. Based on case definitions as written in the: Health Canada. Case definitions for diseases under national surveillance. Can Commun Dis Rep. 2000; 26 Suppl 3:i-iv 1-122. Available from <http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/00pdf/cdr26s3e.pdf>.

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