

# Appendix B: Provincial Case Definitions for Reportable Diseases

Disease: Group A Streptococcal Disease, invasive (iGAS)

Revised January, 2011

## Group A Streptococcal Disease, invasive (iGAS)

### 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

- Isolation of Group A *Streptococcus* (*Streptococcus pyogenes*) from a normally sterile site (e.g., blood, cerebrospinal fluid, joint, pleural, pericardial fluid) with or without clinical evidence of severity  
**OR**
- Isolation of Group A *Streptococcus* from a non-sterile site (e.g., skin, sputum) with clinical evidence of severity

#### 3.2 Probable Case

Clinical evidence of severity in a person with an epidemiologic link to a laboratory-confirmed case of Group A Streptococcal disease.

### 4.0 Laboratory Evidence

#### 4.1 Laboratory Confirmation

Any of the following will constitute a confirmed case of invasive Group A Streptococcal (iGAS) Disease:

- Positive Group A *Streptococcus* culture from a normally sterile site (e.g., blood, cerebrospinal fluid, joint, pleural, pericardial fluid)
- Positive Group A *Streptococcus* culture from a non-sterile site (presumptive – pending clinical evidence of severity)

#### 4.2 Approved/Validated Tests

- Standard culture with serogrouping for Group A *Streptococcus*.

#### 4.3 Indications and Limitations

- Isolates should be forwarded to the National Reference Centre for further characterization

### 5.0 Clinical Evidence

Clinical evidence of invasive disease may be manifested as several conditions. The following are considered clinical evidence of severity:

- Streptococcal toxic- shock syndrome (STSS) which is characterised by hypotension (systolic B.P.  $\leq$  90mm Hg in adults or  $<$  5th percentile for age for children) and at least two (2) of the following signs:
  - renal impairment (creatinine  $>$  177  $\mu$ mol/L for adults);
  - coagulopathy (platelet count  $\leq$ 100,000  $\text{mm}^3$  or disseminated intravascular coagulation);

- liver function abnormality (SGOT, SGPT or total bilirubin  $\geq 2x$  upper limit of normal for age);
- adult respiratory distress syndrome (ARDS);
- generalized erythematous macular rash that may desquamate

**OR**

- Soft-tissue necrosis, including necrotizing fasciitis or myositis or gangrene

**OR**

- Meningitis

**OR**

- Pneumonia

**OR**

- Death

**OR**

- A combination of any of these conditions

## 6.0 ICD Code(s)

### 6.1 ICD-10 Code(s)

A40.0 Septicaemia due to group A streptococcus

A49.1 Streptococcal infection, unspecified

B95.0 Group A Streptococcus as the cause of diseases classified elsewhere, e.g.:

A48.3 Toxic shock syndrome

O85 Puerperal sepsis

M72.6 Necrotizing fasciitis

M00 Pyogenic arthritis

G00.2 Streptococcal meningitis

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

038.0 Septicaemia due to group A streptococcus

041.01 Group A Streptococcal infection of unspecified site and in conditions classified elsewhere, e.g.:

040.82 Toxic shock syndrome

670 Major puerperal infection

728.86 Necrotizing fasciitis

711.0 Pyogenic arthritis

320.2 Streptococcal meningitis

## 7.0 Comments

N/A

## 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>.

