

## Case Definition

### Confirmed Case

Laboratory confirmation of infection with or without clinical evidence<sup>1</sup> of invasive disease:

Isolation of group A Streptococcus (*Streptococcus pyogenes*) from a normally sterile site (blood, cerebrospinal fluid, pleural fluid, pericardial fluid, peritoneal fluid, deep tissue specimen taken during surgery [e.g. muscle collected during debridement for necrotizing fasciitis], bone or joint fluid excluding the middle ear and superficial wound aspirates [e.g. skin and soft tissue abscesses])

### Probable Case

Clinical evidence<sup>1</sup> of invasive disease in the absence of another identified etiology and with non-confirmatory laboratory evidence of infection:

- Isolation of group A streptococcus from a non-sterile site (e.g. bronchoalveolar lavage<sup>2</sup>)  
**OR**
- Positive group A streptococcus antigen detection

## Clinical Evidence

Clinical evidence of invasive disease may be manifested as one or more of several conditions:

- Soft tissue necrosis, including necrotizing fasciitis, myositis or gangrene.
- Meningitis.
- Streptococcal toxic shock syndrome, which is characterized by hypotension (systolic blood pressure  $\leq 90$  mm Hg in an adult and  $< 5$  percentile for age for children) and at least two of the following signs:
  - Renal impairment (creatinine level  $\geq 177$   $\mu\text{mol/L}$  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).
  - Acute respiratory distress syndrome.
  - Generalized erythematous macular rash that may desquamate.

## Reporting Requirements

Report confirmed and probable cases to DHW Surveillance via Panorama.

Select appropriate initial staging option in the “staging” field in Panorama

- Update the staging field if/when new information becomes available.

## Additional Forms

None.

<sup>1</sup> See Clinical Evidence section.

<sup>2</sup> Pneumonia with isolation of group A streptococcus (GAS) from a sterile site or from a bronchoalveolar lavage (BAL) when no other cause has been identified, should be regarded as a form of invasive disease for the purposes of public health management; however, as BAL does not provide a sterile site specimen, the latter would not meet the confirmed case definition.