

Case Definition

Confirmed case

Laboratory confirmation of infection with or without clinical evidence 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 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 lavage¹)

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 ≤ 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 ≥ 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 Team via Panorama.

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

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

Additional Forms

None.

¹ 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.

Data Entry

Complete data entry in Panorama.