### Staphylococcal toxic shock syndrome

#### Clinical findings
- Fever: temperature 38.9°C or greater
- Rash: diffuse macular erythroderma
- Desquamation: 1-2 week after onset, particularly on palms, soles, fingers and toes
- Hypotension: systolic pressure 90 mm Hg or less for adults; lower than fifth percentile for age for children younger than 16 years; orthostatic drop in diastolic pressure of 15 mmHg or greater from lying to sitting: orthostatic syncope or orthostatic dizziness
- Multisystem organ involvement: 2 or more of following:
  - Gastrointestinal: vomiting or diarrhoea at onset of illness
  - Muscular: severe myalgia or creatinine phosphokinase concentration greater than twice the upper limit of normal
  - Mucous membrane: vaginal, oropharyngeal or conjunctival hyperaemia
  - Renal: Serum urea nitrogen or serum creatinine concentration greater than twice the upper limit of normal
  - Hepatic: total bilirubin, aspartate transaminase, or alanine transaminase concentration greater than twice the upper limit of normal
  - Haematological: platelet count 100,000/mm$^3$ or less
  - Central nervous system: disorientation or alterations in consciousness without focal neurologic signs when fever and hypotension are absent

#### Laboratory Criteria
- Negative results on the following tests, if obtained:
  - Blood, throat, or cerebrospinal fluid cultures; blood culture may be positive for *Staphylococcus aureus*
  - Serologic tests for Rocky Mountain spotted fever, leptospirosis, or measles

#### Case Classification
- Confirmed: a case that meets the laboratory criteria and all 5 of the clinical findings, including desquamation, unless the patient dies before desquamation occurs
- Probable: a case that meets the laboratory criteria and in which 4 of 5 clinical findings are present

### Streptococcal toxic shock syndrome

**Isolation of group A streptococcus** (*Streptococcus pyogenes*)
- From a normally sterile site (e.g. blood, cerebrospinal fluid, peritoneal fluid, or tissue biopsy specimen)
- From a non-sterile site (e.g. throat, sputum, vagina, open surgical wound, or superficial skin lesion)

**Clinical signs**
- Hypotension: systolic pressure 90 mmHg or less in adult or lower than the fifth percentile for age in children AND
- Two or more of the following signs:
- Renal impairment: creatinine concentration 177 µmol/L (2 mg/dL) or greater for adults and at least 2 times the upper limit of normal for age
- Coagulopathy: platelet count 100,000/mm³ or less or disseminated intravascular coagulation
- Hepatic involvement: elevated alanine transaminases, aspartate transaminase, or total bilirubin concentration at least 2 times the upper limit of normal for age
- Adult respiratory distress syndrome
- A generalized erythematous macular rash that may desquamate
- Soft tissue necrosis, including necrotizing fasciitis or myositis, or gangrene

**Case Classification**
- Definite: isolation of *S. pyogenes* from a sterile site, meets 2 or more clinical criteria and is hypotensive
- Probable: isolation of *S. pyogenes* from a non-sterile site, meets 2 or more clinical criteria and is hypotensive, if no other cause for the illness is identified