

Meningococcal Meningitis and Septicaemia

Level of consciousness:

- Alert/able to speak during early stages of shock.
- As shock advances:
 - **babies:** limp, floppy, drowsy, fitting
 - **older children and adults:** difficulty walking / standing, drowsiness, confusion, convulsions.

6. Management

- Open airway.

Oxygen:

- **Children:** administer high levels of supplemental oxygen (O₂).
- **Adults:** administer high levels of oxygen via a non re-breathing mask, ensuring oxygen saturations (SpO₂) of >95%.
- Consider assisted ventilation (rate: 12–20 breaths/min.) if:
 - SpO₂ is <90% on high concentration O₂
 - respiratory rate is <10 or >30
 - expansion is inadequate.
- Correct **A** and **B** problems at scene then **DO NOT DELAY TRANSFER** to nearest receiving hospital.
- When meningococcal septicaemia is suspected (e.g. a non-blanching rash is seen), administer **benzylpenicillin EN-ROUTE** to further care (**refer to Figure 3.5 and to benzylpenicillin guideline**). NB Meningococcal septicaemia can progress rapidly – the sooner antibiotics are administered the better.

Fluid therapy:

Hypovolaemia occurs in meningococcal septicaemia and requires fluid resuscitation (**refer to intravascular fluid therapy guidelines**).

- **DO NOT** delay at scene for fluid replacement; cannulate and give fluid **EN-ROUTE TO HOSPITAL** wherever possible.
- Measure blood glucose level and treat if necessary.
- Provide hospital alert message (include child's age if paediatric) en-route, repeat ABC assessments and manage as necessary.

7. Risk of Infection to Ambulance Personnel

- Meningococcal bacteria are very fragile and do not survive outside the nose and throat.
- Ambulance personnel directly exposed to large respiratory particles, droplets or secretions from patients with meningococcal disease should be offered preventative antibiotics. Such exposure is unlikely to occur unless working in very close proximity to the patient e.g. inhaling droplets coughed or sneezed by the patient, or when undertaking airway management.
- If a case of meningococcal disease is confirmed, Public Health will provide antibiotics for exposed contacts who may otherwise be at increased risk of infection.

Methodology

For details of the methodology used in the development of this guideline refer to the guideline webpage.

KEY POINTS

Meningococcal Meningitis and Septicaemia

- Meningococcal disease is the leading cause of death from infection in children and young adults. It can kill a healthy person of any age within hours of their first symptoms.
- Two clinical categories are described – meningitis and septicaemia - although they often overlap.
- Non-specific symptoms, such as pyrexia or a 'flu-like' illness may be the only clinical features at first presentation.
- Look for a rash; a non-blanching rash suggests meningococcal septicaemia (but is not universally present).
- Whenever meningococcal disease is suspected (irrespective of the presence or absence of a rash) undertake a **TIME CRITICAL** transfer.
- Administer benzylpenicillin if septicaemia is suspected. The illness progresses rapidly and early antibiotics improve outcomes.