

**Bacterial Meningitis**

**Clinical Features:**

Fever, headache, neck stiffness, photophobia, rash. May be less specific in children  
Notifiable to CCDC on basis of clinical diagnosis of meningitis.

**Investigations:**

FBC ; U&E ; blood glucose ; clotting screen ; blood culture ; CSF cell count & differential, glucose, protein, meningococcal PCR, culture/sensitivities ; clotted blood for meningococcal serology ; 2x EDTA blood samples for meningococcal PCR ; throat swab for culture of meningococci & sensitivities.

*\*stabilise patient and exclude raised intracranial pressure before lumbar puncture..*

**Corticosteroids** - In adults consider Dexamethasone 0.15mg/kg 6 hourly for 4 days, with the first or just before the first dose of antibiotics. Refer to paediatrician for advice on the use of steroids in children.

**Consider Travel History** -Isolates of *Streptococcus pneumoniae* with reduced susceptibility to beta-lactams occur. Prevalent in e.g. Spain, Greece, Hungary, South Africa. Rate in UK c. 5%. Consider adding Vancomycin to the regimen following discussion with a microbiologist.

<i>Comments</i>	<i>First Line Agents</i>	<i>Penicillin Allergy</i>	<i>History of Multi-resistant organisms</i>	<i>Treatment Duration</i>
<b>0 - 4 weeks</b>	Benzylpenicillin <b>and</b> Gentamicin as per BNFC	Contract microbiology for advice	N.B. Use Amoxicillin <b>and</b> Gentamicin if listeria likely.	If organism Unknown – 7 days
<b>4 - 12 weeks</b>	Ceftriaxone as per BNFC	<b>Mild Allergy (Rash)</b> Ceftriaxone as per BNFC <b>Severe Allergy (Anaphylaxis):</b> Chloramphenicol as per BNFC	NB: <b>ADD</b> Amoxicillin if listeria likely.	When organism known: <i>Neisseria meningitides</i> – 7 days <i>Streptococcus pneumoniae</i> - 10-14 days <i>Haemophilus influenzae</i> – 10 days <i>Listeria monocytogenes</i> - 2 to 3 weeks <i>Group B streptococcus</i> -10 to 14 days <i>Gram negative enteric bacilli</i> – 3 weeks
<b>3 months - 16 yrs</b>	Ceftriaxone as per BNFC	<b>Mild Allergy (Rash)</b> Ceftriaxone as per BNFC <b>Severe Allergy (Anaphylaxis):</b> Chloramphenicol as per BNFC		
<b>Adults:</b>	Ceftriaxone 2g IV 12 hourly <b>If ≥ 50yrs: ADD</b> Amoxicillin 2g IV4 hourly	<b>Mild Allergy (Rash)</b> <b>&lt;50 years:</b> Ceftriaxone 2g IV 12 hourly <b>&gt;50 years:</b> Meropenem 2g IV 8 hourly  <b>Severe Allergy (Anaphylaxis):</b> Chloramphenicol 1g IV 6 hourly		

	<i>Comments</i>	<i>First Line Agents</i>	<i>Penicillin Allergy</i>	<i>History of Multi-resistant organisms</i>	<i>Treatment Duration</i>
<b>Meningio-encephalitis</b>		<b>Adults:</b> As above PLUS Aciclovir 10mg/kg IV 8 hourly	<b>Adults:</b> As above PLUS Aciclovir 10mg/kg IV 8 hourly		
<b>Chemoprophylaxis of meningitis for close contacts and index case</b>	<p>Chemoprophylaxis should be offered to <i>close contacts of cases</i>, irrespective of vaccination status, that require public health action.</p> <p>Chemoprophylaxis should be given as soon as possible (ideally within 24 hours) after the diagnosis of the index case.</p> <p><b>The index case</b> should receive chemoprophylaxis when able to take oral medication and before discharge from hospital, unless the disease has already been treated with ceftriaxone.</p>	<p><b>Ciprofloxacin is recommended for use in all age groups and in pregnancy. (unlicensed use)</b></p> <p><b>Adults and children over 12 years:</b> 500 mg stat</p> <p><b>Children aged 5–12 years:</b> 250 mg stat</p> <p><b>Children under 5yrs:</b> 30mg/kg up to maximum of 125 mg stat.</p> <p><b>In cases of known ciprofloxacin hypersensitivity use Rifampicin.</b></p> <p><b>Adults and children over 12 years:</b> 600 mg BD for 2 days</p> <p><b>Children aged 1–12 years:</b> 10 mg/kg BD for 2 days</p> <p><b>Infants (under 12 months of age):</b> 5 mg/kg BD for 2 days</p>	As First line		<p>Ciprofloxacin single dose</p> <p>Rifampicin dose twice daily for 2 days</p>

**References:**[https://www.gov.uk/government/uploads/system/uploads/attachment\\_data/file/322008/Guidance\\_for\\_management\\_of\\_meningococcal\\_disease\\_pdf.pdf](https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/322008/Guidance_for_management_of_meningococcal_disease_pdf.pdf)