

Vaccination

If the infection is confirmed as group C (or rarely A, W135 or Y in the UK) then vaccination should be arranged for the same contacts who received antibiotic prophylaxis, as shown below.

| Group | Recommended Vaccine |
|--------|---|
| A | "Plain" A/C Vaccine |
| B | None |
| C | Men C Conjugate |
| W135/Y | Quadrivalent vaccine (from SKB on a named patient basis - Tel 01707 325111 (please speak to CCDC first) |

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North Cumbria District Control of Infection Committee:

Control of Invasive Meningococcal Disease: KEY POINTS FOR MEDICAL STAFF

Please also refer to the main Guidelines on the Control of Meningococcal Infection (available on www.ncumbria.demon.co.uk/phm/index.html). A Factsheet and Leaflet for contacts are also available on the same site.

Early management

Pre-admission parenteral penicillin halves the mortality in meningococcal septicaemia.

Penicillin doses:

| Age | Dose (im or iv) |
|----------------------------------|-----------------|
| Adults and children over 9 years | 1,200mg |
| Children aged 1 to 9 years | 600mg |
| Children under 1 year | 300mg |

If allergic (ie clear history of anaphylactic shock with penicillin), use parenteral chloramphenicol. The doses are 1.2g (adults) and 25mg/kg (children under 12 years)

Case definitions

Confirmed Case: Clinical diagnosis of meningitis and/or septicaemia confirmed microbiologically as caused by *Neisseria meningitidis*.

Probable Case: Clinical diagnosis of meningococcal meningitis and/or septicaemia, without microbiological confirmation, in which the CCDC or deputy, in consultation with the clinician managing the case, considers that meningococcal disease is the most likely diagnosis.

Possible Case: As per 'Probable Case', but the CCDC or deputy, in consultation with the clinician managing the case, considers that diagnoses other than meningococcal disease are at least as likely.

Confirmed and Probable Cases require contact tracing and chemoprophylaxis; **Possible Cases** do not require public health action unless the level of suspicion increases

At-risk Contacts

What is the level of risk? Low - for a confirmed case, the risk of a second, linked case, in the immediate close contacts is about 4 cases per 1,000 persons exposed if no chemoprophylaxis is given. The highest risk is in the first 7 days. The risk of 'linked' cases outside the close contact network is substantially lower, even than this following a single sporadic case of meningococcal disease.

Who is at risk? An at-risk contact can be defined as: "Any person who, since 7 days prior to the onset of illness in the case, has lived and slept in the same household and/or had mouth-to-mouth kissing contact with a confirmed case or a probable case of meningococcal disease".

- In certain circumstances, there may be others who might be considered as 'at risk contacts' having had equivalent contact to the above. The CCDC can advise.
- It is important that only true 'at-risk contacts' are identified and given chemoprophylaxis, otherwise large numbers of persons may demand unnecessary medication.

The following categories of contact do not generally require prophylaxis:

- Health care staff, other than those who have given mouth-to-mouth resuscitation;
- School, nursery or playgroup contacts;
- Community contacts, other than those described above;
- Students on the same course not in the above category;
- Students in the same hall of residence not in the above category;
- Teaching staff
- Staff at a hall of residence not in the above category.

Antibiotic Prophylaxis

What drug should be used? Unless contraindicated (e.g. jaundice or known hypersensitivity), rifampicin is the drug of choice for meningococcal chemoprophylaxis. Suggested doses are as follows.

| Age | Dose (based on average weights for age) |
|------------------------------------|---|
| Adult & children over 12 years old | 600mg bd. 2 days (i.e. 2 x 300mg tablets) |
| Children aged 6-12 years | 300mg bd. 2 days (i.e. 1 x 300mg tablet) |
| Children aged 1-5 years | 150mg bd. 2 days (i.e. 7.5 ml of 20mg/ml syrup) |
| Children aged 3-11 months | 40mg bd. 2 days (i.e. 2.0 ml of 20mg/ml syrup) |
| Children aged 0-2 months | 20mg bd. 2 days (i.e. 1.0 ml of 20mg/ml syrup) |

Warnings should include that: - The drug may cause urine and other body fluids to turn orange red; Soft contact lenses should not be worn until urine returns to normal colour; Those on the contraceptive pill should be advised to take additional precautions following the Family Planning Association's advice for a 'missed pill' as outlined in the British National Formulary.

Alternatives to rifampicin for adults:

Ciprofloxacin (single oral dose 500mg - the patient should be informed that this drug is not licensed for use in chemoprophylaxis)

Ceftriaxone (250mg reconstituted with 2ml 1% lignocaine hydrochloride before single intramuscular injection).

Pregnant women who are 'at-risk contacts' should be carefully considered with regard to risks and benefits. No drug can be regarded as absolutely safe in pregnancy. However, rifampicin and ceftriaxone are recommended in the USA as safe for certain uses in pregnancy and no resulting harmful effects to the foetus have been documented. Options for pregnant women who are 'risk contacts' of meningococcal disease therefore include:

- No prophylaxis, but the patient should be watchful for the signs and symptoms of meningococcal disease
- Chemoprophylaxis with rifampicin or ceftriaxone
- Examination of a throat swab from the pregnant 'risk contact'.