

# Invasive Meningococcal Disease

## Information for clinicians: clearance antibiotics

### Who needs clearance antibiotics?

Clearance antibiotics eliminate meningococci from any carrier within the network of contacts close to each case, reducing the risk of further transmission of infection. They are not a treatment for meningococcal disease.

The risk of meningococcal disease in close contacts, while higher than the general population, is still very low. The risk is highest in the first seven days after a case becomes ill and falls rapidly during the following weeks.

**Clearance antibiotics should only be given to the following people (see below) who have had contact with the case within seven days before to the onset of the case's illness. They should be started as soon as possible after diagnosis of the case.**

Close contacts	Contacts requiring clearance antibiotics
<b>Household contacts</b>	People living in the same house and include recent visitors who stayed overnight, in the seven days preceding the onset of the case's illness.
<b>Dormitory contacts</b>	Household-like contacts in boarding schools, military barracks, school camps and hostels in the seven days preceding the onset of the case's illness. Please contact the Department for further specification of dormitory contacts before administering clearance antibiotics.
<b>Intimate contacts</b>	Intimate kissing or sexual partners in the seven days before the onset of case's illness.
<b>Childcare/kindergarten/pre-schools</b>	Children and staff in the same room as the case who, as a guide, have had at least four hours/day on average or 20 hours in total of contact, in the seven days before the onset of case's illness.
<b>Medical, nursing or paramedical staff</b>	Staff directly exposed to a case's nasopharyngeal secretions; for example, the person who has intubated the case without wearing a facemask or performed mouth-to-mouth resuscitation on the case. Other medical staff and hospital contacts do not need clearance antibiotics.

Regardless of whether they have been given clearance antibiotics, tell contacts of cases about the symptoms of meningococcal disease so they know when to seek urgent medical attention.

### **Which contacts do not need clearance antibiotics?**

- Non-intimate kissing contacts, even if on the mouth.
- Work, school, playgroup or occasional childcare contacts who do not meet the contact definition.
- People who have shared cigarettes, bongs, food, drink (including sharing drink bottles), lip balm.
- People who have shared the same plane, train, bus or car for a period less than eight hours.
- Healthcare contacts (including patients on the same ward) who do not meet the contact definition.

### **Meningococcal carriage and disease**

Carriage of meningococci (all strains included) is relatively common at 10 per cent. People who do not develop the disease in the seven days after colonisation may become asymptomatic carriers. Meningococci are likely to have been acquired from an asymptomatic person (carrier) who either lives in the same household or is a sexual partner of the sick person. Children tend to acquire their disease from adults (in their household) whereas teenagers and adults are more likely to acquire their disease from close friends.

Most strains of meningococci do not cause disease, but instead provide protection. Other protective bacteria such as lactamias (Neisseria lactamica) also colonise the nasopharynx. By giving chemoprophylaxis when it is not needed these bacteria, which are protective, are also eradicated. People can carry meningococci with no ill effects sometimes for many months. Carriage induces immunity. There is no evidence carriers will suddenly become cases after weeks or months of carriage.

Clearance antibiotics should only be given to those people at risk of either being the source of disease in the case or of having acquired the invading organism from the case. This is to prevent further transmission.

Penicillin will not reliably eradicate nasopharyngeal carriage. Cases treated with benzylpenicillin alone and did not receive at least one adequate parental dose of a third generation cephalosporin, or ciprofloxacin, will require clearance antibiotics before discharge.

### **Dosing**

The Australian Therapeutic Guidelines- Antibiotic (prevention of infection: medical) ([www.tg.org.au](http://www.tg.org.au)) recommend the following regimes for Neisseria meningitidis clearance:

**Ciprofloxacin** 500mg (child younger than five years: 30 mg/kg up to 125 mg; child 5 to 12 years: 250 mg) orally, as a single dose

**OR**

**Ceftriaxone** 250 mg (child one month or older: 125 mg) IM, as a single dose (preferred option for pregnant women). Note: IM injection of ceftriaxone is painful; reconstitute with lignocaine 1%

**OR**

**Rifampicin** 600 mg (neonate < one month: 5 mg/kg; child >one month; 10 mg/kg up to 600 mg) orally, 12-hourly for 2 days.

Note: Rifampicin interacts significantly with many drugs (eg with the oral contraceptive pill) and is contraindicated in pregnancy and severe liver disease.

### **Further information**

Call the Public Health Hotline – Tasmania on 1800 671 738 to speak to a clinical nurse consultant.

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