Meningitis and Septicaemia







What are meningitis and septicaemia?

There are many different causes of meningitis but the two most common organisms are viruses and bacteria.

- Viral meningitis is usually a mild disease but it can make people very unwell.
 Many thousands of cases occur each year, mostly affecting babies and children. Although most people will make a full recovery some are left with serious and debilitating after-effects.
- Bacterial meningitis can be life-threatening and needs urgent medical attention.
 Most people who suffer from bacterial meningitis recover but many can be left
 with a variety of after-effects. Meningococcal disease is a serious bacterial
 infection which causes meningitis and septicaemia.

Meningitis means swelling of the lining around the brain and spinal cord. In some cases, bacterial meningitis can lead to septicaemia (blood poisoning). Meningitis and septicaemia are caused by many different organisms but the meningococcal bacteria is the most common serious kind. Meningococcal disease is very dangerous and can come on very quickly.

What are the signs and symptoms of meningitis?



Fever/vomiting



Severe headache



Stiff neck



Dislike of bright lights





Confused/ delirious



Rash



Selzures

What are the signs and symptoms of septicaemia?



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What is the treatment?

- Antibiotics are used to treat bacterial meningococcal disease
- The earlier the treatment, the better the prospect of recovery. Often GPs will give treatment even before the person is admitted to hospital.
- If meningitis or septicaemia is suspected, contact the doctor immediately. If the doctor is unavailable the affected individual should be taken to the nearest Accident and Emergency or Walk-In Department. Prompt action is vital.

How soon can an individual return to school after meningitis or septicaemia?

- Cases are followed up by the hospital consultant; and the decision will be made when they are fully recovered.
- There is no reason to exclude any siblings or other close contacts of the case from school.

Meningococcal Disease

What is the risk of spread?

Meningococcal disease is spread through respiratory droplets and direct contact with nose and throat secretions. Close prolonged contact is needed to pass the bacteria from one person to another.

- The risk of getting the disease is very low. Although meningococcal disease is infectious and can occasionally cause outbreaks, 97 out of every 100 cases have no known link to any other cases.
- The meningococcal bacteria is very common and at any time about one in ten individuals carry them harmlessly in their noses and throats.

- The bacteria are passed by close contact, so family members of a case and others who have close contacts (such as a boyfriend or girlfriend) in the previous seven days may be at slightly higher risk of being exposure to meningococcal and will be offered antibiotics.
- Close contact in residential accommodation such as student halls of residence or boarding schools can slightly increase the risk for the spread of infection.
- Preventive antibiotics in the school setting are usually are only recommended in the rare event of two cases occurring in the same school or playgroup within a short space of time.
- The bacteria cannot live longer than a few moments outside the human body, so they are not carried on items like clothes and bedding, toys or dishes, water supplies, swimming pools, or buildings.
- An individual being treated for meningococcal disease will usually no longer be infectious after 24 hours of appropriate antibiotic treatment.
- An individual with meningococcal disease will need immediate medical attention but once they have been treated, can return to school as soon as they are well enough.
- Exclusion is not necessary for any close contacts (unless they also have symptoms of meningococcal disease).

Is there an incubation period?

- Yes. Symptoms normally appear within two to seven days of picking up the bacteria.
- Be aware symptoms can develop within hours and immediate treatment is vital.

Are there vaccines available to protect against meningococcal disease? Effective vaccines are available to prevent some types of meningococcal disease as part of the UK Routine childhood immunisation schedule.

What does the rash look like?

Septicaemia occurs if the bacteria enter the bloodstream. A characteristic rash develops and may start as a cluster of pinprick blood spots under the skin, spreading to form bruises under the skin. The rash can appear anywhere on the body.

Do the glass test





Press the side of a clear glass to the skin. The spots/rash may fade at first but keep checking.

A rash that does not fade under pressure is a sign of meningococcal septicaemia. This is a MEDICAL EMERGENCY DIAL 999

- Do not wait for a rash. If someone is ill and getting worse, get medical help immediately
- On dark skin the spots/rash can be more difficult to see.

Bacterial meningitis (other than meningococcal disease)

There are several causes of bacterial meningitis other than meningococcal disease.

Haemophilus influenzae type b (Hib)

Hib bacteria can cause meningitis and septicaemia (blood poisoning). Before the vaccine was introduced in 1992, Hib was the leading cause of meningitis in children under 5 years of age, with around 800 cases and 25 deaths reported each year. Cases of Hib meningitis are now rare, with around 30 – 40 cases reported annually in the UK. Hib is part of the combined vaccine that also protects against diphtheria, tetanus, and pertussis (whooping cough) and polio. This combined vaccine is offered to children as part of the UK Routine childhood immunisation schedule.

Viral meningitis

Most people with viral meningitis will have mild flu-like symptoms, such as:

- Headaches
- Fever
- Generally not feeling very well

In more severe cases of viral meningitis, your symptoms may include:

- Neck stiffness
- Muscle or joint pain
- Nausea and vomiting
- Diarrhoea
- Sensitivity to light (photophobia)

Unlike bacterial meningitis, viral meningitis doesn't usually lead to septicaemia (blood poisoning).

Is there an incubation period?

- Yes. Symptoms normally appear within two to seven days of picking up the virus.
- Be aware symptoms can develop within hours.

Action check list for all schools:

Single case of suspected Meningitis or septicaemia in a student or staff member

The school should contact the health protection team with details of the individual. The health protection team will contact microbiology and the medical team to obtain further information. The health protection team will then follow up with the school to discuss any further action required.

If the diagnosis is likely to be meningococcal disease, the health protection team will:

- Discuss composition of a letter of reassurance to parents / guardians to raise awareness of signs and symptoms
- Discuss the rational for antibiotic prophylaxis for close household contacts and why school contacts are unlikely to receive prophylaxis

I wo or more students or staff members with suspected meningitis is or septicaemia

Further public health action may be required when two or more individuals who are linked at the school have confirmed or probable meningococcal disease within a short period of time (usually four weeks). The health protection team will:

- Establish an outbreak team including school staff members, school nurse and public health professionals
- Discuss the need for prophylaxis within the school and to a defined close contact group within the establishment (e.g. dormitory contacts, classroom contacts, children who share common social activities and/or close friends).
- Discuss composition of a letter of reassurance to parents / guardians to raise awareness of signs and symptoms.
- Lead on any media messages or involvement.

In the event of an two or more cases the health protection team will liaise with:

- Microbiology
- GPs
- Local Director of Public Health and their team within the local authority

The Spotty Book: Notes on infectious diseases in schools

If staff or students have a general question about meningitis, septicaemia or require support, there are two charities available (9am – 5pm Monday – Friday).

- Meningitis Now: 0808 80 10 388, helpline@meningitisnow.org or https://www.meningitisnow.org/
- Meningitis Research Foundation: 080 8800 3344 or https://www.meningitis.org/

More information on Meningitis and Septicaemia can be found in chapter nine of the Health protection in schools and childcare facilities guidance.