

Meningococcal Meningitis

What is Meningitis?

Meningitis is an infection which causes inflammation of the lining of the brain and the spinal cord.

There are five types of meningococcal meningitis that are typically responsible for clinical illness worldwide. These are referred to as groups A, B, C, W135 and Y.

Meningitis groups A, B and C are the most common causes of illness worldwide, with B and C predominant in Europe, Americas, Australia and New Zealand. A and C types are predominant in Africa and Asia. It is only in recent years that another group called W135 emerged in Africa and the Middle East.

Where does it occur?

Meningococcal disease occurs sporadically in small clusters all over the world with seasonal variations.

The majority of meningococcal disease occurs in the 'African meningitis belt', which extends across the dry, savannah parts of sub-Saharan Africa from Senegal in the west, to Ethiopia in the east. During epidemics this region has a disease incidence rate of more than 1,000 cases per 100,000 population. Globally the highest incidence is in children under 5 years of age and older teenagers.

The risk of meningitis can also increase during mass gatherings at pilgrimages such as the Hajj or Umrah. In addition, subsequent outbreaks can occur among pilgrims on return to their home countries.

All pilgrims to Saudi Arabia for Hajj and Umrah are required to have the meningitis quadrivalent vaccine for visa purposes as a condition of entry.

Risk for Travellers:

The risk for meningococcal meningitis is low for most tourists; the risk is higher for: Healthcare workers, people visiting friends and relatives, those who live or travel rough such as backpackers, long stay, living or working with local people
Those with rare immune system disorders and no spleen.

Transmission:

Meningitis is transmitted from human to human via the respiratory route from coughing and sneezing.

Transmission is associated with overcrowded conditions. Most epidemics occur during the winter-spring period in temperate areas and during the dry season in tropical areas. In the meningitis belt of sub-Saharan Africa, the highest transmission period is between December to June.

Signs and Symptoms:

The disease usually has a sudden onset of fever, intense headache, nausea and vomiting. These symptoms can develop within minutes or hours. The patient is often irritable and prefers to lie still. Neck stiffness from meningeal irritation is also found.

A characteristic rash (which does not disappear when pressed with a glass) may occur from septicaemia (blood poisoning), and confusion and coma can ensue. With early diagnosis and treatment, the case fatality rate varies between 5-15%.

Treatment:

The meningococcal infection is a medical emergency; investigation and treatment should be started immediately.

Prevention:

Travellers should be aware of the mode of transmission and to avoid overcrowded situations.

Vaccines are available to prevent four strains of meningitis A, C W135 and Y for those travelling to risk areas. The vaccine recommended for you can be discussed with your travel health advisor during your consultation.

Saudi authorities require proof of vaccination from pilgrims: - a) ACWY polysaccharide vaccine within 3 years and not less than 10 days before arrival in country. B) ACWY conjugate vaccine within the last 5 years and not less than 10 days before arrival in country.

Meningitis B vaccine is now included in the UK vaccine schedule and can be supplied on request at WTC