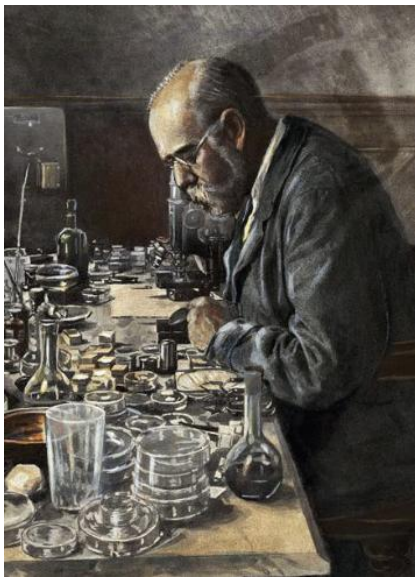
# Meningitis

Medical carers walk a narrow path between excessive caution with over-investigation and the risk of censure for missing a serious and life threatening condition. Meningitis is more effectively treated, if recognised early in the course of its evolution.



The first documented accounts of meningococcal disease date from the 16th century. It was the German doctor Robert Koch, in the mid-nineteenth century, who was able to successfully identify some of the different bacteria that cause common diseases.

From the beginning, the disease was dreaded because of its epidemic nature, predilection for previously healthy children and adolescents, and high mortality.

Until the early 20th century and the advent of effective antibiotics, the use of antibodies from the blood of immunised horses was the only means of treatment.

Investigators in the field of bacteriology soon realised that there were several different strains of meningococcal bacteria, as well as other organisms (*Haemophilus Influenzae*) that could cause the dreadful illness. The meningococcal types (illustrated at the top of the page) were initially classified into Groups A and B.

Modern bacteriologists now identify them on the basis of the structure of the polysaccharide capsule and the outer membrane proteins. The most common serogroups causing meningococcal disease are A, B, C, W135, X, and Y.

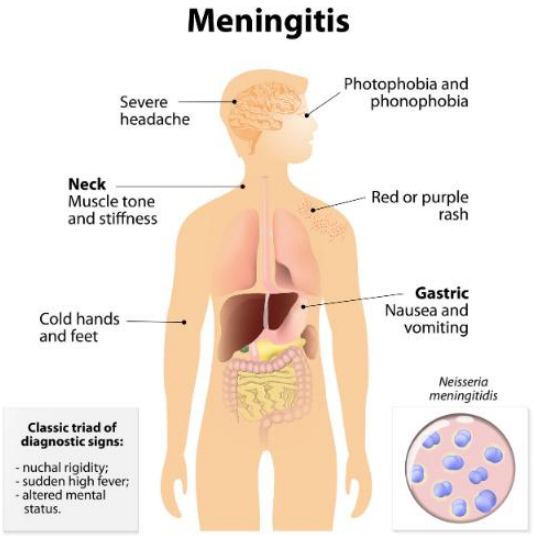
These serogroups are responsible for over 95% of cases of meningococcal disease worldwide. To make life more complicated, the serogroups are further divided into capsular groups and type subgroups, with each group containing several subtypes. The detailed knowledge is crucial for the development of vaccines and understanding the epidemiology of meningococcal disease.

The recent outbreak in Kent amongst young adult students has been attributed to a genetically distinct strain of meningococcal bacteria, specifically the MenB strain. This strain, belonging to the clonal complex ST-41/44, has been circulating since 2010 but has increased in frequency since then.

It is important to note that this strain is not a new variant but a new subvariant of the previously identified strain. The UK Health Security Agency (UKHSA) has confirmed that the current Bexsero MenB vaccine is effective against this strain. The outbreak has led to emergency measures being taken across the county to contain the spread of the disease, with over 12,000 people receiving antibiotics and more than 9,000 vaccinated. The situation is being closely monitored, and further analysis is ongoing to understand the implications of this discovery.


Most young people in the UK should have had the MenACWY vaccine at school in Year 9 or 10. It protects against four types of meningitis – MenA, MenC, MenW and MenY. However, you may have missed this vaccine – you can check whether you've it by contacting your GP or checking the NHS app.

Students who have missed the vaccine remain eligible up to the age of 25. Currently, the MenB vaccine is available privately but there is an active campaign going on to increase its availability to those at greatest risk.




Being aware of the early signs is also important. Follow this link to a useful guide sheet that lists the symptoms and signs:

Meningitis signs and symptoms | Meningitis Now

Lancet Infect Dis. 2019 Apr 30;19(8):e284–e294.
Meningitis outbreak: what you need to know – UK Health Security Agency
The MenB vaccine is available privately.