



WHAT IS MENINGITIS?

Meningitis is an infection of the fluid and membranes that protect the brain and spinal cord. It is usually caused by bacteria, fungi, or viruses.

Bacterial and fungal meningitis are less common but more serious than viral meningitis. They require rapid diagnosis and treatment to help prevent severe complications and even death.

WHO IS MOST AT RISK FOR MENINGITIS?



Infants and children (under 5 years)



The elderly



Adolescents and young adults living in community settings such as college campuses or military barracks



Immunocompromised people



People who live in or travel to high-risk areas

WHAT IS THE BURDEN OF MENINGITIS?

~3 MILLION CASES causing **250,000 DEATHS** worldwide each year

Many survivors are left with long-term neurological problems and disabilities.



The highest number of cases occur in an area of sub-Saharan Africa known as the "meningitis belt".

WHAT ARE THE MOST COMMON SIGNS AND SYMPTOMS OF MENINGITIS?



Headache or stiff neck



Fever



Nausea or vomiting



Sensitivity to light



Confusion or decreased alertness



Seizures

CAN MENINGITIS BE PREVENTED?



Vaccines can prevent many of the causes of meningitis, such as certain types of pneumococcal, *H. influenzae* type b (Hib), meningococcal meningitis.

Vaccination is widely recommended in infants, children, adolescents, and young adults.

HOW IS MENINGITIS DIAGNOSED?



Cerebrospinal fluid is collected using a needle (usually from the lower back).



Lab tests detect the virus, bacteria, or fungi in this fluid.



CT* scans or MRI** may be used to assess damage to the brain or spinal cord.



Blood tests may also provide important information about the infection.

HOW IS MENINGITIS TREATED?



VIRAL MENINGITIS

Most cases will get better without treatment. Some severe cases may need **specific antiviral treatment**.



BACTERIAL MENINGITIS

Antibiotics should be given as soon as possible, as many cases may be fatal if not treated rapidly.



FUNGAL MENINGITIS

Rare but life-threatening. Should be treated rapidly with **antifungal medication**.

*CT: Computed Tomography. **MRI: Magnetic Resonance Imaging.

References:

- <https://www.mayoclinic.org/diseases-conditions/meningitis> • Accessed on September 15, 2023.
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- <https://ourworldindata.org/grapher/death-rate-from-meningitis> • Accessed on September 15, 2023.
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