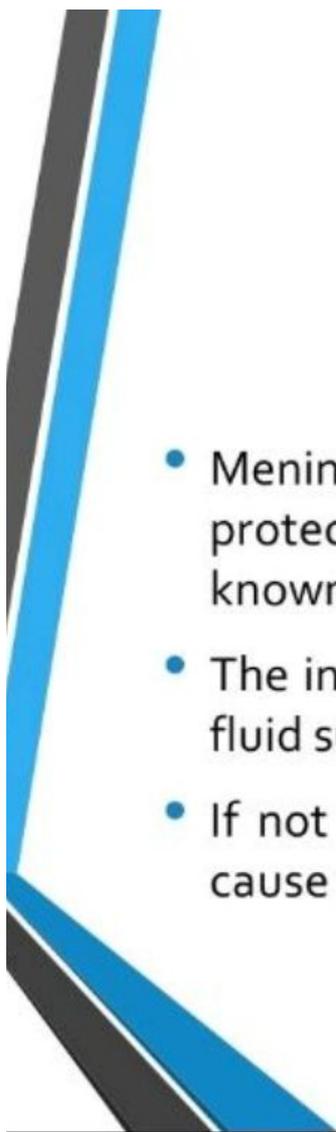




# MENINGITIS

PREPARED BY



## Overview

- Meningitis is a disease caused by the inflammation of the protective membranes covering the brain and spinal cord known as the meninges.
  - The inflammation is usually caused by an infection of the fluid surrounding the brain and spinal cord.
  - If not treated meningitis can lead to brain swelling and cause permanent disability, coma, and even death.
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# Etiology

- There are mainly 3 organisms which can cause meningitis
  1. Bacterial meningitis
  2. Viral meningitis
  3. Fungal meningitis



## Etiology:

# 1. Bacterial meningitis

- *Streptococcus pneumoniae* (pneumococcus)  
Most common cause. Also responsible for pneumonia
- *Neisseria meningitidis* (meningococcus)  
Commonly occurs when bacteria from an upper respiratory infection enter bloodstream. This infection is highly contagious
- *Haemophilus influenzae* (haemophilus)  
Before the 1990s, haemophilus influenzae was the leading cause of bacterial meningitis in children.

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## Etiology: 2.Viral meningitis

- Enterovirus (coxsackie, echovirus)
- Arboviral (mosquito-borne diseases)
- Influenza
- Herpes simplex virus type 2
- Varicella zoster
- HIV
- Mumps
- measles

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## Etiology: 3.Fungal meningitis

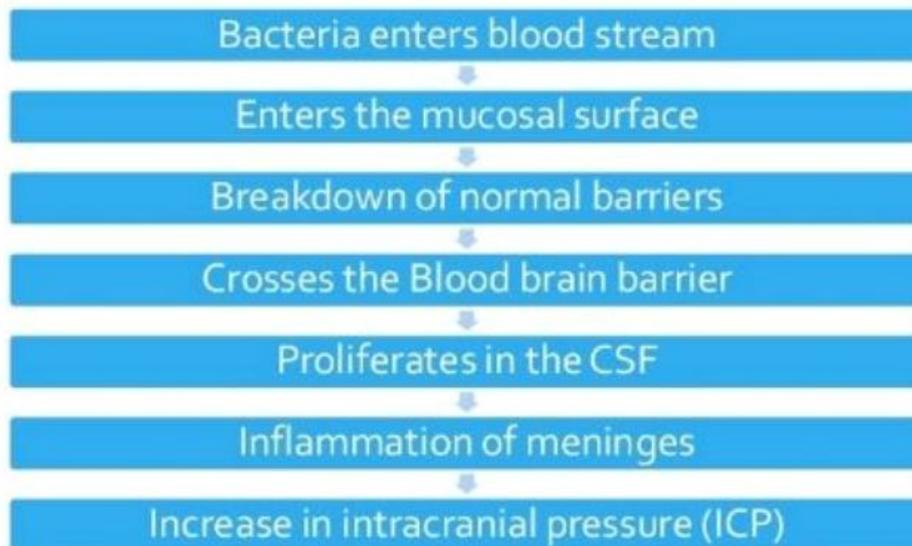
- Cryptococcus
- Coccidioides
- Histoplasma
- Mucormycosis
- Aspergillus
- Candida (yeast)

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## Etiology: Other causes

- Protozoa
- Rickettsial
- Physical injury
- Cancer
- Certain drugs

# Pathophysiology





## Signs and symptoms

- Fever, cold hands and feet
- Vomiting
- Drowsiness, difficult to wake
- Confusion and irritability
- Severe muscle pain
- Severe headache
- Spots and rashes
- Stiff neck
- Dislike bright lights
- convulsions