

## Cerebrospinal Fluid (CSF) Analysis

Cerebrospinal Fluid (CSF) is the fluid that moves in the space around the spinal cord and brain (fluid surrounding the brain and spinal cord), CSF protects the brain and spinal cord from injury. This fluid sample is used for diagnosis of many central nervous system diseases CNS infections e.g. meningitis and encephalitis.

There are only two tests ordered for this sample:

1. CSF smear
2. CSF culture

### 1.CSF smear:

Also named Spinal fluid smear, prepared like sputum smear and staining, but the smears are examined by specialist physician in Cytopathology.

### 2.CSF culture:

CSF culture ordered when the physician suspected with bacterial neurological infection like bacterial meningitis. The same Routine culture procedure of any other clinical sample culture can be followed. The most common bacterial pathogens are:

*Neisseria meningitides*

*Heamophilus influenza*

*Streptococcus pneumonia*

*Streptococcus pyogenes*

*Enterobacteriaceae*

*Listeria monocytogenes*

Also the fungi *Cryptococcus neoformans* and several viruses can cause meningitis too.