

# Viral Meningitis

## What is Viral Meningitis?

Meningitis is inflammation of the thin tissue that surrounds the brain and spinal cord, called the meninges. There are several types of meningitis. The most common is viral meningitis, which is when a virus enters the body through the nose or mouth and travels to the brain.

## Spread of Disease



Enteroviruses, the most common cause of viral meningitis, are most often spread from person to person through fecal contamination (which can occur when changing a diaper or using the toilet and not properly washing hands afterwards). Enteroviruses can also be spread through respiratory secretions (saliva, sputum, or nasal mucus) of an infected person. Enteroviruses appear most often during the summer and the fall in climates with changing seasons. Other viruses, such as mumps and varicella-zoster virus, may also be spread through direct or indirect contact with saliva, sputum, or mucus of an infected person. Contact with an infected person may increase the chance of becoming infected with the virus that made them sick; however, you are not as likely to develop meningitis as a complication of the illness.

## Signs and Symptoms

Meningitis infection is characterized by a sudden onset of fever, headache, and stiff neck. It is often accompanied by other symptoms, such as:

- Nausea
- Vomiting
- Photophobia (sensitivity to light)
- Altered mental status

Viral meningitis can affect anyone at any age. It is usually less severe than bacterial meningitis and normally clears up without specific treatment, but in some cases viral meningitis can be severe or fatal. The symptoms of viral meningitis are similar to those for bacterial meningitis, which can be fatal. Because of this, it is important to see a healthcare provider right away if. Symptoms of viral meningitis may differ depending on age. These symptoms are experienced:

Common symptoms in infants:

- Fever
- Irritability
- Poor eating
- Hard to awaken

Common symptoms in adults:

- High fever
- Severe headache
- Stiff neck
- Sensitivity to bright light
- Sleepiness or trouble waking up
- Nausea, vomiting
- Lack of appetite

The symptoms of viral meningitis usually last from 7 to 10 days, and people with normal immune systems usually recover completely. Viruses that cause meningitis can also cause nearby brain tissue infection (meningoencephalitis) or spinal cord infection (meningomyelitis) at the same time.

## Diagnosis

If meningitis is suspected, naso-oro-pharyngeal swabs, rectal swabs, stool, cerebrospinal fluid and blood serum are collected and sent to the laboratory for testing. It is important to know the specific cause of meningitis because the severity of illness and the treatment will differ depending on the cause.

The specific causes of meningitis may be determined by tests used to identify the virus in samples collected from the patient.

## Treatment

Usually there is no specific treatment for viral meningitis, but in some instances specific treatment is available depending on the virus (such as herpes virus). Antibiotics do not help viral infections, so they are not useful in the treatment of viral meningitis. Most patients completely recover on their own within 7 to 10 days. A hospital stay may be necessary in more severe cases or for people with weak immune systems.

## Prevention

There are no vaccines for the most common causes of viral meningitis. Thus, the best way to prevent viral meningitis is to prevent the spread of viral infections. However, that can be difficult because sometimes people infected with a virus do not appear sick, but they can still spread it to others.

Make sure children are vaccinated on schedule. Vaccinations included in the childhood vaccination schedule can protect children against some diseases that can lead to viral meningitis. These include vaccines against measles and mumps (MMR) vaccine and chickenpox (varicella-zoster) vaccine.



***For more sources of information on this topic visit:***

ST. CLAIR COUNTY HEALTH DEPARTMENT [www.scchealth.co](http://www.scchealth.co)

MICHIGAN DEPARTMENT OF HEALTH AND HUMAN SERVICES [www.michigan.gov/mdhhs](http://www.michigan.gov/mdhhs)

CENTERS FOR DISEASE CONTROL AND PREVENTION [www.cdc.gov](http://www.cdc.gov)