



## ***Viral Encephalitis and Viral (Aseptic) Meningitis*** **Frequently Asked Questions**

### **What are viral encephalitis and viral meningitis?**

Viral encephalitis is inflammation (or swelling) of the brain caused by a viral infection. Symptoms of viral encephalitis include headache, fever, stiff neck, seizures, changes in consciousness such as confusion or coma, and sometimes death. Viral (or aseptic) meningitis is also caused by a viral infection resulting in inflammation (or swelling) of the meninges, the protective covering of the brain and spinal cord. The symptoms of viral meningitis are similar to those of viral encephalitis, although loss of or changes in consciousness are not common symptoms of viral meningitis. Viral and bacterial meningitis are **not** caused by the same organisms, and viral meningitis is usually not as serious as bacterial meningitis.

### **What causes viral encephalitis and viral (aseptic) meningitis?**

Organisms called viruses cause viral encephalitis and viral meningitis. Many different types of viruses cause these illnesses. Some of these viruses can be passed from person to person, such as when people (especially young children) do not practice good hygiene by washing their hands thoroughly. Other viruses can be passed to people through the bites of infected mosquitoes or ticks.

### **When do most cases of viral encephalitis and viral meningitis occur?**

Viral encephalitis and viral meningitis occur year-round. Encephalitis from mosquito bites usually occurs in the late summer and fall, when mosquitoes are most active. Tick-borne viral encephalitis usually occurs in the spring and early summer, although cases of tick-borne encephalitis have never been documented in Georgia.

### **How serious are these illnesses?**

The viruses that cause viral encephalitis and viral meningitis usually cause no symptoms or only a mild, flu-like illness. A very small number of infections with these viruses result in encephalitis or meningitis.

Viral encephalitis can be more serious in some persons than in others. The majority of cases, however, result in complete recovery. The seriousness of these illnesses also depends on the health of those who are infected. Persons with chronic medical conditions and the elderly are usually more likely to suffer serious disease.

### **What treatments are there for viral encephalitis and viral meningitis?**

In most cases, there are no treatments to fight the viruses that cause these illnesses. Doctors can treat a person's symptoms, however, such as swelling of the brain, seizures, and breathing complications.

### **Do we see viral encephalitis and viral meningitis in Georgia?**

Viral meningitis is not uncommon in Georgia. Several cases of viral encephalitis are also reported each year. The Georgia Department of Public Health (GDPH) monitors cases of viral encephalitis and viral meningitis to detect any unusual increases in the number of persons affected.

### **How can I protect myself and my family from contracting viral encephalitis or viral meningitis?**

For most causes of viral encephalitis and viral meningitis, there is no vaccine available. As with many diseases, proper personal hygiene is the best way to reduce transmission of viruses from person to person. In particular, frequent and thorough hand-washing is the most effective way to avoid becoming infected with viruses that can cause meningitis or encephalitis. To prevent illness from infected mosquitoes or ticks, use insect repellants and wear long sleeves and pants when outdoors.

To prevent mosquitoes from breeding near your home, empty containers that can collect water, such as toys, buckets, flowerpots, and tires. Be sure that swimming pools are properly treated and have effective filtration systems. Mosquitoes love to breed in containers or swimming pools filled with stagnant, untreated water. Keeping your yard well maintained by cutting grass regularly and trimming shrubs will help to decrease tick populations near your home.

### **A mosquito or a tick has bitten me. Should I contact my doctor?**

Most mosquito and tick bites will not cause illness. It is not necessary to contact your doctor or the health department after a bite—most mosquitoes and ticks **do not** carry disease. Even if you live in an area where cases of viral encephalitis have been found, most mosquitoes will not carry an encephalitis virus, and your chances of being bitten by an infected mosquito are very low. In addition, if an infected mosquito bites you, you have an extremely small chance of becoming sick.

If you begin to feel ill after a mosquito or tick bite, especially if you develop a high fever, rash, confusion, muscle weakness, or seizures, you should contact your doctor immediately. Remember that in most cases, bug bites do not transmit disease—if you do not experience any symptoms, you **do not** need to call a medical professional.

### Other Resources:

- Centers for Disease Control and Prevention Information on Viral Meningitis – <http://www.cdc.gov/meningitis/viral.html>
- Centers for Disease Control and Prevention (CDC) Information on Arboviral Encephalitides -- <http://www.cdc.gov/ncidod/dvbid/arbor/arbdet.htm>