



GERMS THAT ATTACK THE BRAIN

How to Protect Yourself from Encephalitis & Meningitis

Did you know that certain germs can attack your brain? When you get sick, some germs can attack the brain or the protective lining that surrounds the brain. This can cause swelling and lead to severe illness, or even death. It's important to recognize the symptoms so you can get medical help as quickly as possible.

When the brain swells, it's called encephalitis. When the lining of the brain, or meninges, becomes inflamed, it's called meningitis. The symptoms can be similar for both.

At first, you might get a fever, feel tired, and sometimes have a rash. Those things can last a day or two, or a little bit longer. Then, you may have a headache, along with fever, neck stiffness, and you can get sensitivity to light.

Other symptoms include nausea or vomiting, double vision, drowsiness, and confusion. More severe illnesses can cause

speech, hearing, or vision problems. If it's left untreated, you could develop cognitive difficulties with progressive loss of consciousness, seizures, or muscle weakness.

You need to get immediate medical help if you have symptoms of encephalitis or meningitis. Early treatment is important for the best recovery. Treatment will depend on the cause. Viruses, bacteria, parasites, and fungi can all cause encephalitis and meningitis. The most common causes can be different depending on where you live.

Worldwide, the most common cause of meningitis is bacterial meningitis. In the United States, however, we don't see a lot of bacterial meningitis because we have certain vaccines. So, the most common cause of meningitis is viral meningitis.



TREATMENT & PREVENTION

Early treatment for bacterial causes may be antibiotics and other medicines to treat swelling and other symptoms of the illness. There aren't any specific anti-viral treatments for most viral causes. But treating the symptoms can affect the course of the illness. More severe illnesses may require hospitalization.

Anyone can get these conditions. Protecting yourself and your family from germs and staying up-to-date on vaccines is the best way to guard against both encephalitis and meningitis. Vaccines are available to prevent some bacterial causes of meningitis, including *Haemophilus influenzae*, pneumococcal pneumonia, and meningococcal disease.

Researchers are looking for other ways to prevent or treat encephalitis and meningitis. Some are studying how to stop germs from infecting the brain or its lining.

Many scientists are trying to develop broad antivirals. "Broad" means the antiviral would stop many viruses rather than just one. This would be helpful, since doctors

wouldn't have to know which virus is causing the problem before starting treatment.

Until we have better treatments, prevention is still the best medicine. Children, older adults, and those with weakened immune systems are most at risk for infections.

PROTECT YOU AND YOUR FAMILY

You can guard against meningitis and encephalitis if you:

- » Wash your hands with soap and water often.
- » Avoid people who are coughing or showing other signs of sickness.
- » Stay up-to-date on your vaccines.
- » Protect yourself from mosquito and tick bites. Use insect repellents and wear full-sleeve shirts and pants when you're outside. Keep insects out of your home. Use screens on windows and doors or use air conditioning instead. Empty all standing water from your yard.

