## Meningitis- Viral and Bacterial

What is it: Meningitis is an infection of the membrane covering the brain and spinal cord, or meninges.

Who is at risk: Meningitis can happen at any age, but infants and children are at greater risk than adults. Viral meningitis is most likely to occur in the summer. Bacterial meningitis tends to happen more often in winter and early spring. Some types are contagious, particularly in close quarters like daycare centers and college dorms.

Cause: Meningitis can be viral, fungal or bacterial.

- Bacterial causes: The 3 main bacteria that are responsible for most cases of bacterial meningitis are Pneumococcus, Meningococcus, and Hemophilus influenza.
- Viral causes: Enteroviruses (including the virus that causes hand, foot and mouth disease) are the most common cause of viral meningitis. The mumps virus and West Nile Virus are other common causes.

**Symptoms**: Symptoms of viral and bacterial meningitis include a stiff neck, headache, vomiting, and fever. Young children are also likely to have lethargy or inconsolable crying. One form of meningitis can also cause bleeding into the skin (dark red spots or dots).

**Diagnosis:** Meningitis is diagnosed by obtaining spinal fluid from a spinal tap.

**Transmission**: Viral Meningitis can be transmitted in diarrhea stool or respiratory secretions.

Bacterial Meningitis is transmitted by respiratory secretions.

**Complications:** Complications from Bacterial Meningitis occur in 20% of children. These can include deafness, developmental delays or learning disabilities, weakness or seizures. Viral Meningitis usually has no long-term complications.

**Home Treatment**: Viral Meningitis is usually treated using home care measures such as acetaminophen for pain and fever. Antibiotics are not useful in the treatment of viral meningitis. Bacterial Meningitis usually requires hospitalization and a 1 to 2-week course of IV antibiotics. While improvement can usually be seen after 2 to 3 days of antibiotics, the total recovery time may be several weeks.

**Did you know?** Mumps can cause meningitis. It is important to be sure children are up to date on all their vaccinations. 3 vaccines that reduce the risk of developing Bacterial Meningitis are the pneumococcal vaccine, Hib vaccine and the meningococcal vaccine.

## Sources:

http://www.healthline.com/health/meningitis-awareness/bacterial-viral-fungal-meningitis#Overview1

https://www.cdc.gov/meningitis/

Schmitt-Thompson protocols-Pediatric Meningitis Exposure Protocol, version 2015.