Pneumococcal Disease
(*Streptococcus pneumoniae*)

Pneumococcal disease is a name for any infection caused by the bacteria *Streptococcus pneumoniae*. Pneumococcal infections can cause severe illness in children, older adults, and people with weakened immune systems. *Streptococcus pneumoniae* is the most common cause of ear infections and blood infections in children as well as pneumonia in people with weakened immune systems and older adults. There are vaccines to help prevent pneumococcal disease.

What causes it?

- You can get pneumococcal disease through droplets from a sneeze or cough from an infected person.
- People can carry the bacteria in their throat, nose, and mouth without becoming ill.
- It is unknown why certain people get sick with pneumococcal disease while others do not.

What are the signs and symptoms?

- Pneumococcal disease can include many different types of illnesses. Symptoms depend on the part of the body that is infected.

- Symptoms of **pneumococcal pneumonia,** a lung infection, include:
  - Fever and chills
  - Cough
  - Rapid breathing or difficulty breathing
  - Chest pain

- Symptoms of pneumococcal **meningitis,** an infection of the lining of the brain and spinal cord, include:
  - Stiff neck
  - Fever
  - Headache
  - Eye sensitivity to light
  - Confusion

How is it diagnosed and treated?

- If a doctor thinks you may have a serious pneumococcal disease, like meningitis or bloodstream infections, they will collect samples of your cerebrospinal fluid or blood. Cerebrospinal fluid is the fluid that surrounds the brain and spinal cord.
- Doctors can use a blood test, chest x-ray, or mucus sample to help diagnose pneumococcal pneumonia in adults.
- A doctor may prescribe antibiotics to help treat severe illnesses caused by pneumococcal bacteria.

How can it be prevented?

- Vaccines are the best way to prevent pneumococcal disease.
- Good hygiene and frequent hand washing practices can prevent spreading the bacteria.
- It is also important to get a flu vaccine every year because having the flu increases the likelihood of getting pneumococcal disease.