What is pneumococcal disease?
Pneumococcal disease is a leading cause of serious illness in children and adults. It is caused by the *Streptococcus pneumoniae* bacterium, which by entering the bloodstream through the lungs can cause severe pneumonia, other illnesses and even death.

What are the types of pneumococcal disease?
If the bacteria attack the lungs, it causes pneumococcal pneumonia. If it enters the bloodstream, it causes bacteremia. If the bacteria cause an infection of the tissues and fluids covering the brain and spinal cord, this is called meningitis. The bacteria may also cause otitis media (middle ear infection) and sinusitis (sinus infection).

What are some of the symptoms of these diseases?
Pneumococcal pneumonia – high fever, cough and shortness of breath, chest pain.
Bacteremia – fever and generally feeling poorly, muscle pain, shaking chills, drenching sweats.
Meningitis – Sudden onset fever, severe headache, stiff neck, possibly also nausea, vomiting, photophobia (light sensitivity), and altered mental status or confusion. Health care providers may also examine young babies for a bulging fontanelle (a soft spot on an infant's head) and/or abnormal reflexes.

If your baby appears to have any of these symptoms, contact your child's health care provider immediately. Seizures and coma caused by these diseases can be very serious.

How is the *Streptococcus pneumoniae* bacterium transmitted?
Streptococcus pneumoniae is in many people's noses and throats, often without causing illness. This bacterium is spread by person-to-person contact such as coughing, sneezing or contact with respiratory secretions. Why it suddenly invades the body and causes disease is unknown.

How can pneumococcal disease be prevented?
The best way to protect against pneumococcal disease is through vaccination. The vaccine is very effective at preventing severe disease, hospitalization and death. However, it is not guaranteed to prevent all symptoms in all people.

There are two types of pneumococcal vaccine currently available: Prevnar 13® and Pneumovax 23®.
1. Prevnar 13®:
- Protects from the 13 types of pneumococcal bacteria which cause the most severe illness in children and adults.
- This vaccine is recommended for:
    o Children at age 2 months, 4 months, 6 months and 12-15 months;
    o Adults 19 and older with certain medical conditions; and
    o All adults age 65 and above.
2. Pneumovax 23®:
- Protects from 23 types of pneumococcal bacteria;

- This vaccine is recommended for all adults ages 65 and above; and also for children or adults age 2 to 64 who may be at increased risk for pneumococcal disease.

Who is at risk?

Children:

- Younger than age two years;
- Those with certain illnesses (i.e., sickle cell disease, HIV infection, diabetes, immunocompromised, nephrotic syndrome, chronic heart, lung, kidney, or liver disease);
- Those with cochlear implants or cerebrospinal fluid (CSF) leakage (fluid surrounding the brain and spinal cord escapes).

Adults:

- Age 65 and above;
- Some adults ages 19-64 with certain medical conditions: chronic illness (chronic heart, liver, kidney, or lung disease, diabetes, or alcoholism); weakened immune system (HIV infection, cancer, damaged/absent spleen); or cochlear implants or CSF leakage; and
- Smokers.

For more information, contact Guilford County Department of Public Health, Public Health Division at 336-641-7777 or visit our website at https://www.guilfordcountync.gov

Free language assistance is available upon request.

PEC APP 04/11, Revised 1/19