

PNEUMOCOCCAL INFECTION

Streptococcus pneumoniae is a bacterium commonly found in the nose and throat (but is not the cause of strep throat) and is the most common cause of middle ear infections and sepsis (blood infection) in children. Rates of serious pneumococcal infections in children have decreased markedly since use of the conjugate pneumococcal vaccine.

CAUSE	<i>Streptococcus pneumoniae</i> bacteria.
SYMPTOMS	Symptoms of ear infection can include fever, ear pain, pulling at the ear, behavior or appetite change, and sometimes ear redness or drainage. More serious pneumococcal infections include lung infection (pneumonia), bloodstream infection (septicemia), and infection of the brain (meningitis).
SPREAD	Spread by touching the secretions from the nose or mouth of an infected or colonized person and then touching one's eyes, nose, or mouth. Persons may "carry" pneumococcus in their nose or throat (also referred to as being colonized) meaning that the bacteria are present without causing illness. Spread may occur when a "carrier" of the pneumococcus bacteria coughs or sneezes the bacteria into the air and another person breathes them in.
INCUBATION	Varies by type of infection.
CONTAGIOUS PERIOD	Unknown.
EXCLUSION	None, if the child is well enough to participate in routine activities.
DIAGNOSIS	Recommend parents/guardians call their health care provider if their child has a high fever or persistent ear pain.
TREATMENT	Pneumococcal infections may be treated with antibiotics.

PREVENTION/CONTROL

- Minnesota state law requires that all children under the age of 2 years enrolled in childcare settings be vaccinated with pneumococcal vaccine or have a legal exemption. Pneumococcal conjugate vaccine (PCV13) should be given at 2, 4, and 6 months, plus a booster at 12-14 months of age.
- Pneumococcal polysaccharide vaccine (PPSV23) should be given to children over the age of 2 who have certain high-risk conditions (e.g., a weakened immune system), adults 65 years of age and older, and those 19 years of age or older who are smokers or have asthma. A health care provider can determine the need for this vaccine.
- Pregnant women who have been exposed to someone with a pneumococcal infection should contact their health care provider and follow treatment guidelines.

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PREVENTION/CONTROL (CONTINUED)

- Unnecessary antibiotic use or not taking antibiotics as prescribed (not finishing the entire prescription or sharing the antibiotics with others) contribute to the development of antibiotic-resistant bacteria.
- Do not expose children to second-hand tobacco smoke. Smoke increases the risk for serious respiratory infections and middle ear infections.
- Cover nose and mouth with a tissue when coughing and sneezing or cough/sneeze into your sleeve. Dispose of used tissues in the trash.
- Wash hands thoroughly with soap and warm running water after contact with secretions from the nose or mouth. **Thorough handwashing is the best way to prevent the spread of communicable diseases.** If soap and water are not available, use an alcohol-based hand sanitizer.
- Clean and sanitize mouthed toys, objects, and surfaces at least daily and when soiled (see Section 2).

For more information, call Hennepin County HSPHD-Epidemiology at (612) 543-5230 or call your local health department.

