WISCONSIN DIVISION OF PUBLIC HEALTH
Department of Health Services

Streptococcus pneumoniae, Invasive
(Pneumococcal disease)

Disease Fact Sheet Series

What is invasive *Streptococcal pneumoniae* infection (Pneumococcal disease)?
Streptococcus pneumoniae is a bacterium commonly found in the nose and throat. The bacterium can sometimes cause severe illness in children, the elderly and other people with weakened immune systems. *Streptococcus pneumoniae* is the most common cause of ear infections (otitis media), sepsis (blood infection) in children as well as pneumonia in immunocompromised individuals and the elderly.

Streptococcus pneumoniae is considered "**invasive**" when it is found in the blood, spinal fluid or other normally sterile sites.

How does a person get invasive *Streptococcus pneumoniae*?
Many people carry the bacteria in their upper respiratory system without becoming ill. *Streptococcus pneumoniae* is spread from person to person by the inhalation of respiratory droplets (e.g. coughing, sneezing) from an infected person. It is not known why certain individuals develop invasive *Streptococcus pneumoniae* disease while others do not.

How is *Streptococcus pneumoniae* diagnosed and treated?
Invasive *Streptococcus pneumoniae* is diagnosed when the bacterium is grown from cultures of sterile body fluids, such as the blood or spinal fluid. *Streptococcus pneumoniae* can cause different symptoms depending on the part of the body it infects. Invasive *Streptococcus pneumoniae* can cause blood infections and meningitis (inflammation of the lining of the brain).

Invasive *Streptococcus pneumoniae* infections are treated with antibiotics. There is an increasing problem of *Streptococcus pneumoniae* bacteria developing drug resistance due to the overuse and misuse of antibiotics.

Can invasive *Streptococcus pneumoniae* disease be prevented?
There is a "pneumococcal" vaccine that can help to prevent invasive *Streptococcus pneumoniae* infections. The vaccine is currently recommended for people that are immunocompromised, or over the age of 65. Recently the vaccine was also approved for use in children under 2-years of age.

The best way to prevent the spread of the bacteria is by covering your mouth when coughing or sneezing, as well as frequent and thorough hand washing.

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