PNEUMOCOCCAL DISEASE (Invasive Pneumococcal Disease or IPD)

What is pneumococcal disease?

Pneumococcal disease is caused by infection with the bacteria *Streptococcus pneumoniae*. Pneumococcal infection can lead to; pneumonia (infection of the lungs), otitis media (infection of the middle ear) and meningitis (infection of the membranes around the brain and spinal cord).

What are the symptoms?

Symptoms depend on the site of infection and the age of the person.

- Pneumonia can cause shortness of breath, fever, lack of energy, loss of appetite, headache, chest pain and cough.
- Otitis media. In children, can cause crying, tugging at the ear, fever, irritability, poor hearing, and sometimes diarrhoea and vomiting.
- Meningitis can cause fever, headache, stiff neck, nausea, vomiting, and drowsiness.

How is pneumococcal disease spread?

The bacteria can live in the throat without causing any illness, however sometimes these bacteria will cause an infection.

How is pneumococcal disease diagnosed?

Your doctor or nurse practitioner can diagnose pneumococcal disease from the symptoms, doing an examination, and/or by doing some special tests. These tests may include a chest x-ray, and/or taking samples to look for the bacteria in the infected part of your body (e.g., blood or cerebrospinal fluid).

Who is at risk of pneumococcal infections?

Serious pneumococcal infections are most common in infants, toddlers and the elderly. People with certain health problems (e.g. immune deficiencies, sickle cell disease, lack of a functioning spleen), are at higher risk of invasive pneumococcal disease.

How can pneumococcal disease be prevented?

Vaccines are available to prevent many types of pneumococcal disease.

The New Brunswick (NB) routine immunization schedule provides pneumococcal conjugate vaccine (Prevnar®13) to all NB children at age two, four and 12 months of age. Children aged 12 to 59 months who are at high risk of pneumococcal disease are eligible to receive the pneumococcal conjugate vaccine. Children and adults aged 2 years and older and who are at high risk of pneumococcal disease are eligible for the pneumococcal polysaccharide vaccine which offers broader protection.

People who are not eligible for publicly-funded pneumococcal vaccine but wish to receive it should consult with their family physician.

How is pneumococcal disease treated?

Treatment includes antibiotics, medicine to control the fever and pain, and fluids to prevent dehydration.

What is the public health response?

Laboratories must report cases of invasive pneumococcal disease (IPD) to the local Public Health Office. Public Health staff will talk to the treating doctor and the patient or their caregiver to identify risk factors that the patient may have, and to enquire about immunization history. Close contacts of cases are not usually at increased risk of infection and don't require follow up. Information on the number of people who get invasive pneumococcal disease and their risk factors helps health authorities find better ways to prevent the illness.

Further Information

Please contact your health-care provider or local Public Health office

02/2011