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).

Invasive pneumococcal disease (IPD) is a serious bacterial infection commonly associated with severe respiratory tract infections. It is one of the leading causes of illness, hospitalization, and death worldwide.

Who is at risk of pneumococcal infections?

In Canada, serious pneumococcal disease is most common in the very young, persons at high risk due to underlying medical conditions or lifestyle factors and adults over 65 years of age. People with certain health problems or who are immunocompromised are at higher risk of invasive pneumococcal disease. Close contacts of positive cases are usually not at increased risk of infection, and if a follow up is required, individuals will be contacted by Public Health.

If you are unsure if your medical condition puts you at high risk, contact your Primary Care Provider.

How is pneumococcal disease spread?

People spread pneumococcal bacteria to others through direct contact with respiratory secretions, like saliva or mucus. Many people, especially children, have the bacteria in their nose or throat at one time or another and don't get sick; however, the bacteria sometimes can cause an infection.

What are the symptoms?

Pneumococcal disease can include many different types of infections. Symptoms depend on the part of the body that is infected 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 diarrhea and vomiting.
- Meningitis can cause fever, headache, stiff neck, nausea, vomiting, and drowsiness.

How is pneumococcal disease diagnosed?

Early diagnosis is very important for serious pneumococcal infections. 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.

How is pneumococcal disease treated?

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

How can pneumococcal disease be prevented?

Vaccines are available to prevent many types of pneumococcal disease. There are two vaccines available against pneumococcal disease:

- Pneumococcal Conjugate Vaccine (Prevnar® 13)
- Pneumococcal polysaccharide 23-valent (Pneu-P-23) vaccine

The New Brunswick routine immunization schedule provides routine pneumococcal conjugate vaccine (**Prevnar® 13**) to all New-Brunswick children at age two months, four months and 12 months of age.

Adults aged 65 and over should routinely receive **one dose** of the pneumococcal polysaccharide 23-valent (Pneu-P-23), even if they have previously received a dose before reaching 65 - based on other eligibility criteria.

Newly admitted residents of long-term care facilities should receive one dose:

- For those who receive on admission under 65 years, another dose should be given at 65 years or after (with a minimum of 5 years interval between each dose)
- If already received a dose at age 65 or older before admitted, there is no need to repeat, unless specific high risk conditions outline in table #2 in the NBIPG: Standard 3.3-Eligibility criteria for publicly funded vaccines in NB.

Children over the age of 2 and adults who are considered at high risk of pneumococcal disease are eligible to receive both vaccines. Contact your Primary Health Care Provider to discuss which vaccines are recommended for you.

The pneumococcal vaccines are publicly funded vaccines for those who qualify. Individuals who qualify do not require a prescription and do not need to pay. People who are not eligible but wish to receive it can, at a cost, and should discuss this with their Primary Health Care provider.

How do I book a pneumococcal vaccine?

For individuals under 65 years of age with high-risk medical conditions, please contact your local Public Health office or your Primary Health Care provider to discuss and book the right pneumococcal vaccines for you. Pharmacies do not offer this vaccine under 65 years of age.

Anyone aged 65 years of age and older is encouraged to get a polysaccharide 23-valent vaccine (**Pneu-P-23**) vaccine. Contact your local pharmacy to book an appointment.

Your Primary Health Care Provider may also administer the pneumococcal vaccines if you are aged 65 years and older. Contact them today to discuss and book the right pneumococcal vaccines for you.

Further Information

Please visit New-Brunswick's Public Health page on Pneumococcal (gnb.ca). You may also contact your Primary Health Care provider or your local Public Health office.