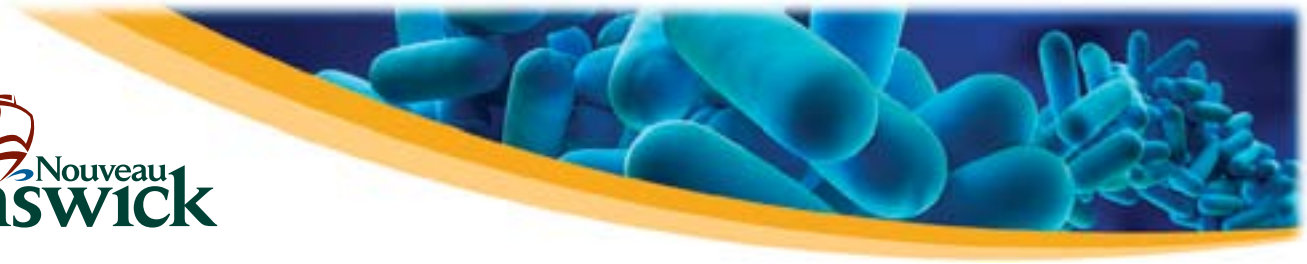

HAEMOPHILUS INFLUENZAE TYPE B (Hib)

What is haemophilus influenzae type b (Hib)?

Hib is a disease caused by the bacteria *Haemophilus influenzae type b.* This bacterium was the most common cause of meningitis (infection of membranes around the brain and spinal cord) in children under five. Hib can also cause epiglotitis (severe swelling of the epiglottis at the back of the throat), pneumonia (infection of the lungs), osteomyelitis (infection of the bones and joints), and cellulitis (infection of the tissue under the skin, usually on the face).

These conditions can develop quickly; meningitis and epiglotitis can sometimes be fatal. After the introduction of the Hib vaccine the disease is now quite rare in Canada.

What are the symptoms?

The onset of symptoms is usually sudden. Symptoms depend on which part of the body is infected.

- **Meningitis** – fever, headache, stiff neck, nausea, vomiting and drowsiness.
- **Pneumonia** – shortness of breath, fever, lack of energy, loss of appetite, headache, chest pain and cough.
- **Epiglotitis** – difficulty breathing and swallowing, pale colour and fever.
- **Osteomyelitis** – swelling, inflammation and pain over the affected bone.

The time period between when someone is exposed to Hib and when symptoms develop is unknown, but may be as short as two to four days.

How is Hib spread?

It is spread by direct contact with the saliva or droplets of an infected person or carrier who sneezes or coughs. It is possible for people who are not ill to carry Hib and spread it to others ("carriers"). It is then spread to the next person through contact with discharge or droplets from the nose or mouth.

How is Hib diagnosed?

Hib is diagnosed by a history of exposure to the disease, symptoms, and laboratory testing. Tests can include taking a sample from the blood, spinal fluid, lung fluid, or joint fluid.

Who is at risk of Hib infection?

Hib is very rare in Canada, but there are still outbreaks in other parts of the world. Anyone at any age who has not had the disease or been immunized is at risk.

How can Hib be prevented?

The best protection is immunization. The New Brunswick Routine Immunization Schedule provides *Haemophilus influenzae type b* vaccine combined with diphtheria, tetanus, acellular pertussis, polio and *Haemophilus influenzae type b* vaccine (DTaP-IPV-Hib) as part of the routine childhood immunization at two, four and six months of age.

Although, routine immunization has contributed enormously to the prevention of serious Hib disease in young children and infants, it is very important that all the doses be given on time.

01/2011 CNB 8535

How is Hib treated?

Treatment involves antibiotics, to treat and prevent Hib infection. Supportive care and treatment in hospital is often needed. Medication can be given to control the fever and pain and fluids to prevent dehydration.

Antibiotics may be recommended for household and daycare contacts.

What is the public health response?

Health care providers, hospitals and laboratories, schools and childcare centres are required to notify cases of Hib to Public Health. Public Health staff will interview the health-care provider and patient (or care-givers) to find out how the infection occurred, identify other people at risk of infection, implement control measures (such as immunization and restrictions on attending school or work) and provide other advice.

Further Information

For additional information, contact your health-care provider, local Public Health office or Tele-Care 811.

Useful websites:

- Canadian Coalition for Immunization Awareness and Promotion http://www.immunize.cpha.ca
- Public Health Agency of Canada http://www.phac-aspc.gc.ca
- Canadian Pediatric Society http://www.cps.ca

01/2011