

Communicable Diseases Factsheet

# Haemophilus Influenzae type b (Hib) Disease

Last updated: 1 July 2018

Infection with Hib bacteria can lead to serious illness including meningitis and epiglottitis. With the introduction of Hib vaccine these conditions are now rare. Urgent treatment is necessary as Hib disease can be life threatening.

#### What is Hib Disease?

Hib disease is caused by infection with Haemophilus influenzae type b bacteria. Infection can cause

- Meningitis (infection of the membranes around the brain and spinal cord)
- Epiglottitis (severe swelling of the epiglottis at the back of the throat)
- Pneumonia (infection of the lungs)
- Osteomyelitis (infection of the bones and joints)
- Cellulitis (infection of the tissue under the skin, usually on the face)

These conditions can develop quickly, and meningitis and epiglottitis can sometimes be fatal (other germs can also cause these diseases). There are other types of H. *influenzae* bacteria (apart from type b), but these are not associated with outbreaks. Before the introduction of the Hib vaccine, Hib disease was the leading cause of meningitis in children under five years old. Hib infections are now quite rare.

#### What are the symptoms?

Symptoms depend on which part of the body is infected.

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

#### How is it spread?

Hib bacteria can live harmlessly in the throat of healthy people. The bacteria are spread through contact with droplets from the nose or throat of an infected person, in household-like settings. A person does not have to have symptoms to spread the bacteria.

### Who is at risk?

People most at risk of infection include:

- children under five years of age
- Aboriginal and Torres Strait Islander children
- people with medical conditions such as sickle cell disease, HIV/AIDS, a non-functioning spleen, a bone marrow transplant or who are being treated for cancer

# How is it prevented?

Four doses of Hib vaccine are recommended in NSW for all infants at two, four, six and eighteen months of age.

## How is it diagnosed?

A doctor can diagnose Hib disease from symptoms, an examination, and doing some tests. Tests may include taking samples to test for the bacteria in the infected part of the body (e.g. blood or cerebrospinal fluid).

#### How is it treated?

Treatment involves antibiotics, medicine to control the fever and pain (such as paracetamol), and fluids to prevent dehydration.

## What is the public health response?

Hospitals and laboratories must confidentially notify cases of Hib disease to the local public health unit. Public health unit staff will work with the doctor, the patient or the patient's family to identify close contacts at risk of infection and arrange for those at risk to receive information about the disease, and if necessary, special antibiotics.

For further information please call your local public health unit on 1300 066 055 or visit the New South Wales Health website <a href="https://www.health.nsw.gov.au">www.health.nsw.gov.au</a>