

# PERTUSSIS (whooping cough)

### What is pertussis?

Pertussis, also known as "whooping cough", is a disease of the lungs and throat caused by the bacteria Bordetella pertussis.

It is the second most frequently reported vaccine-preventable disease in Canada. During 2005 and 2006, about 2500 cases were reported each year.

In 2010 in California, a pertussis epidemic was declared. There have been more illnesses and deaths due to pertussis than at any time in the past 50 years. California has recorded over 6000 cases and ten children under the age of three months died. Similar outbreaks occurred in parts of Canada, with five children under three months dying of pertussis in Saskatchewan.

The last outbreak of pertussis in New Brunswick occurred in 2004, with 300 cases reported. Since then there has been an average of 27 pertussis cases reported each year. New Brunswick is significantly overdue for a major outbreak and the emerging pattern in the North American region suggests that the outbreak will occur soon.

### What are the symptoms?

Pertussis starts like a cold with sneezing, runny nose, low-grade fever and mild cough. Over the next week or two, the cough gets worse leading to serious coughing spells that often (but not always) end with a "whoop". The coughing may be so bad that it makes the person gag or vomit. Sometimes thick clear mucus is spat out. This cough can last up to one or two months and occurs more at night. Symptoms start within five to 21 days (usually seven to ten days) after someone has been exposed to an infected person.

### How is pertussis spread?

It is easily transmitted from person to person, mainly through droplets from the nose, mouth and throat of an infected person. Untreated, a person with pertussis can spread it to other people for up to three weeks after the onset of cough.

Babies less than six months, and teenagers and adults, often do not have the 'whoop' sounding cough, so anyone who has a cough that lasts more than one week without getting better should see their health-care provider to make sure the cough is not pertussis.

The time between exposure and becoming sick is usually seven to ten days, but can be up to three weeks.

## How is pertussis diagnosed?

A health-care provider can take a swab from the back of the nose, or a blood test may be done to help confirm the diagnosis.

### Who is at risk of pertussis infection?

It can occur at any age, but often causes serious problems and even death in young infants. It is usually milder in older children and adults. Children who are too young to be fully immunized and those that have not received all their vaccinations are at highest risk for severe illness and complications.

People living in the same household as someone with pertussis are more likely to catch it. Immunization greatly reduces your risk of infection, but re-infection can occur.

### How can pertussis be prevented?

The best way to protect against pertussis is to be immunized.

The New Brunswick Routine Immunization Schedule provides pertussis immunization as part of the routine childhood immunizations. The vaccine is given at two, four, six and 18 months of age (DTaP-IPV-Hib), and again before starting school at age four (DTaP-IPV) and at 14 years of age. As of January 1<sup>st</sup>, 2011, parents of newborns will be eligible to receive a booster pertussis vaccine (Tdap).

The pertussis vaccine does not provide life-long protection. We recommend that all adults receive a pertussis vaccine booster every ten years. However, because we are overdue for an epidemic, we are asking all close contacts of newborns who have not had a booster in the last **FIVE** years to have a booster Tdap vaccine. This will ensure they don't pass on pertussis infection to newborns who are not protected. Close contacts include health-care providers, parents, care-givers, relatives and friends who will be in close contact with babies.

Persons wishing to be vaccinated but who are not eligible for publicly-funded vaccine should consult their health-care provider or pharmacist.

An infected person should be excluded from school, daycare, workplace or other settings with susceptible individuals. Infants need to receive at least three vaccinations before they have some protection against pertussis. For this reason, it is very important to keep people with coughing illnesses away from your baby so they don't pass on pertussis or other germs.

#### How is pertussis treated?

Pertussis is treated with an antibiotic, and if treated soon enough, the antibiotic may prevent the spread of the germ to other people and decrease the severity of the disease. Coughing often continues for many weeks despite treatment

### What is the public health response?

Health-care providers and laboratories must confidentially notify cases of pertussis to Public Health. Public health staff can advise on the best way to stop further spread.

Infectious children are restricted from going to childcare and school. Contacts who have not been immunized may be excluded from childcare unless they take the special antibiotics.

#### **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 <a href="http://www.immunize.cpha.ca">http://www.immunize.cpha.ca</a>
- Public Health Agency of Canada http://www.phac-aspc.gc.ca
- · Canadian Pediatric Society http://www.cps.ca

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