



## WHOOPING COUGH (PERTUSSIS)

### The Issue

Whooping cough is the most frequently reported, vaccine preventable disease in Canada. It poses serious health risks to young infants, so it is important to make sure your child is vaccinated on schedule, starting at the age of two months.

### Background

Whooping cough is the common name for Pertussis, a highly contagious infection of the respiratory tract. It is caused by a bacterium called *Bordetella pertussis*. One of the main symptoms is severe coughing spells, and the disease gets its common name from the “whoop” sound people often make as they try to catch their breath after one of these coughing spells.

The bacteria that cause whooping cough are spread through droplets in the air when an infected person coughs or sneezes. You can also become infected through direct contact with discharges from the nose or throat of an infected person.

Widespread immunization with pertussis vaccine started in Canada in the 1940s, and subsequently the incidence of whooping cough began to decline dramatically. Over the past decade, however, the annual number of reported cases has ranged from 2,400 to 10,000, with many cases occurring in older children and young adults. One of the main reasons the rate has been going up is that the protection provided by the type of vaccine used until the mid-nineties tends to fade over time.

Anyone can get whooping cough, but the health effects are usually much worse for children less than a year old. In Canada, whooping cough now kills one to three infants per year, usually those who are unvaccinated, or under-vaccinated.

### The Health Effects of Whooping Cough

Whooping cough can be quite miserable, especially for young infants. It may start with common cold-like symptoms, such as a runny nose, mild fever and cough, but it often turns into a series of severe coughing spells that can continue over a period ranging from six to 12 weeks.

Some of the complications for young infants can include vomiting after a coughing spell, weight loss, breathing problems, choking spells, pneumonia, convulsions, brain damage, and in rare cases, death. There is no reason for young children to suffer these serious health effects when there is a safe and effective vaccine to protect them from the harm caused by whooping cough.

In older children and adults, the disease is less serious, and complications are rare. The only sign of infection may be a persistent cough that lasts longer than a week. Older members of a household may have whooping cough without realizing it, and this can pose serious risks to younger children and infants in the home who are unvaccinated, or under-vaccinated.

### The Vaccine for Whooping Cough is Safe and Effective

The vaccine to protect against whooping cough is provided free to all young children in Canada as part of the publicly funded routine immunization schedule. It is usually given by a needle “shot” in combination with other childhood vaccines. To be fully immunized, a child needs five doses of whooping cough vaccine, starting at two months of age. Talk to your health care provider to



make sure your child gets the complete series of shots on schedule.

The current whooping cough vaccine is safer and more effective than the old vaccine. Many children have some swelling or tenderness at the spot where the vaccine is injected, and some may also develop a mild fever, but these reactions are minor and temporary. Serious side effects are extremely rare, and the benefits of the vaccine far outweigh the slight risk of a serious adverse reaction.

The vaccine used in Canada prevents the disease approximately 85% of the time. If a vaccinated child does get whooping cough infection, the health effects will be far less severe due to protection from the vaccine.

## Minimizing Your Risks

The best way to minimize the risk of complications from whooping cough is to make sure your child is fully immunized.

- Call your health care provider to set up a time for your child's shots.
- Talk to your health care provider about ways to treat the minor side effects of shots, such as mild fever and tenderness.
- Ask for a written record of your child's shots. Keep it in a safe place at home where you can find it easily.
- If your child is exposed to anyone with whooping cough, check your child's immunization record right away. Seek immediate medical attention if the shots are not up to date.
- See your health care provider if anyone in your household has a cough that lasts longer than a week. It is important to get an accurate diagnosis, and to make sure that anyone with whooping cough gets treatment and avoids

close contact with young children while the disease is still contagious.

- Even if your child has had whooping cough, continue with the complete series of shots. You can get whooping cough more than once, and immunization is the best way to protect children from serious complications if they become infected again.

## Health Canada's Role

Health Canada regulates vaccines through a rigorous licensing process that includes an extensive pre-market review of information about a product's safety and effectiveness, and post-market assessments, such as adverse reaction tracking. In addition, Health Canada monitors and analyzes the incidence of vaccine preventable diseases, identifies risk factors, develops guidelines for the control of vaccine preventable diseases, and works with the provinces and territories during emergency situations to ensure that outbreaks of disease are contained.

Health Canada also participates in public information initiatives, such as the Canadian Immunization Awareness Program, and works globally with other countries to develop and implement disease-reduction or eradication strategies.

## Need More Info?

It is important to get your information about whooping cough, vaccines, and other health issues from reliable sources. Health Canada recommends the following web sites as sources of credible information.

Division of Immunization and Respiratory Diseases, Health Canada

<http://www.hc-sc.gc.ca/pphb-dgspsp/dird-dimr/index.html>

Canadian Immunization Guide, 6th edition, 2002

<http://www.hc-sc.gc.ca/pphb-dgspsp/publicat/cig-gci/index.html>

For related It's Your Health fact sheets on "Childhood Immunization," "Misconceptions about Vaccine Safety" and "Immunization Registries," visit:

<http://www.hc-sc.gc.ca/english/iyh/medical/index.html>

Other Web sites of interest include the following:

The Canadian Coalition for Immunization Awareness and Promotion

<http://www.immunize.cpha.ca/english/index.htm>

The Canadian Paediatric Society

<http://www.caringforkids.cps.ca/immunization/index.htm>

World Health Organization - Immunizations

<http://www.who.int/vaccines>

U.S. Centres for Disease Control and Prevention, National Immunization Program

<http://www.cdc.gov/nip>

Additional It's Your Health articles can be found at:

[www.healthcanada.ca/iyh](http://www.healthcanada.ca/iyh)

You can also call (613) 957-2991