



Preventing pertussis in infants and young children

The facts about pertussis

- Pertussis is a highly infectious, acute bacterial infection.
- Infants and young children are at particular risk of contracting pertussis until they have completed their primary immunization series.
- Infants can develop serious complications or die from pertussis despite treatment.
- The best way to prevent mortality and significant morbidity from pertussis is for physicians and other health care providers to
 - ensure that infants and young children are immunized according to the recommended schedule, and
 - recommend that caregivers and close contacts of infants and young children receive a pertussis immunization.

Protecting infants and young children from pertussis

For maximum protection, children need pertussis vaccines at 2, 4, 6, and 18 months, and between 4 to 6 years of age. The best way to protect very young, under-immunized children from pertussis is to ‘cocoon’ them from exposure to the bacterium. That is, ensure that all caregivers and close contacts have had a recent immunization with Tdap vaccine (tetanus, diphtheria, acellular pertussis). Health care providers should also receive a Tdap booster, if needed, especially those who work in areas such as postnatal wards, pediatric units, special care settings, primary care offices, and emergency departments.

Recommendations

For pregnant women, new mothers, partners, families, childcare workers, babysitters, and anyone who spends time around young children.

- Mothers should receive Tdap vaccine if they have not received it as an adult, as soon after birth as possible, to maximize protection to infants.
- Mothers who are breastfeeding should be included. Pertussis vaccine is safe for breastfeeding mothers.
- Pregnant women should not receive pertussis immunization during pregnancy, as there is not sufficient evidence to recommend it. There are studies underway in Nova Scotia and the U.S. The vaccine is safe and the antibody transfer does provide neonatal protection, but the maternal antibody may interfere with the infant’s antibody response to pertussis vaccines.
- Partners and families of pregnant women should receive a Tdap vaccination before the baby is born if they have not already been immunized as an adult.
- Babysitters, childcare workers, and early childhood educators should receive a Tdap vaccination if they have not already been immunized as an adult.

Please note: While breastfeeding has many health benefits including conferring passive immunity for many diseases, breastfeeding does NOT protect a baby from contracting pertussis.

**For all Nova Scotians:**

- Adults should be offered the Tdap vaccine if their immunization is incomplete or if they have never received a dose of acellular pertussis vaccine in adulthood.
- The duration of protection from pertussis with this vaccine is unknown. At this time there is no recommendation for adults to receive more than one dose of acellular pertussis
- There is no minimum interval required after the individual has received a tetanus-diphtheria- only (Td) vaccine.
- Adult pertussis vaccine is publicly funded in Nova Scotia.

Background

Before the introduction of whole cell pertussis vaccine in the 1940s, there were over 250,000 cases of pertussis each year in the United States with up to 9,000 deaths. Vaccination reduced the incidence of this disease by over 99 per cent. Acellular pertussis vaccine, in use since the 1990s, is more effective than whole cell vaccine was and results in far fewer complications. However, childhood immunization does not confer life-long immunity. As a result, there have been outbreaks of pertussis reported across North America since the 1980s. In Manitoba and Saskatchewan five infants under three months of age have died since 2007. Seventy-five per cent of infants who become ill with pertussis acquire the infection from their immediate family and household contacts.

History of pertussis immunization in Nova Scotia

Acellular pertussis vaccine has been used in Nova Scotia since 1998. Between September 2004 and September 2007, grade 10 students received Tdap as part of the school-based immunization program. Since 2007, the school-based immunization program, which includes Tdap, has been moved to students in grade 7. In 2007, Tdap also became publicly funded for adults.

For additional information please contact your local Public Health office or refer to:

Canadian Immunization Guide 7th ed. 2006

<http://www.phac-aspc.gc.ca/publicat/cig-gci/p04-pert-coqu-eng.php>

PHAC Pertussis Fact Sheet

<http://www.phac-aspc.gc.ca/id-mi/pertussis-coqueluche-eng.php>.