

Pertussis: Infection Prevention and Control Information for Health Care Workers

Infectious agent	Pertussis, also known as whooping cough, is caused by the fastidious, gram-negative aerobic bacteria, <i>Bordetella pertussis</i> . It is primarily a toxin-mediated disease.
Clinical presentation	<p>Pertussis is an acute and prolonged infectious cough with course of illness varying with age^{1,2}. Severity of illness and risk of complications is greatest for young infants (<1 year old) who are not fully immunized.¹ Generally, the clinical course is divided into three stages:</p> <ul style="list-style-type: none"> • Stage 1: Initial catarrhal stage with common cold symptoms (runny nose, low-grade fever, mild cough, etc.), lasting 1-2 weeks. • Stage 2: Paroxysmal stage with worsening cough (rapid, violent, and uncontrolled coughing fits) sometimes ending with an inspiratory whoop and/or vomiting), lasting from 2-8 weeks. Whooping sound may not be present in some cases. • Stage 3: Convalescent stage with gradual recovery, taking weeks to months. Paroxysmal coughs become milder and less frequent. <p>For more information on clinical presentation and complications refer to information for health-care providers from Public Health Agency of Canada and US Centre for Disease Control.</p>
Reservoir and Source	Humans
Surveillance	For surveillance information in BC, refer to BC Centre for Disease Control (BCCDC)'s Reportable Diseases Dashboard and Summaries .
Transmission	Spread by direct contact with respiratory droplets (inhalation) from a person with pertussis infection, through sneezing, coughing. Indirect spread through contaminated objects occurs rarely ¹ .
Incubation	Usually 9-10 days (ranging from 6-20 days) ^{1,3}
Communicable period	From onset of symptoms to 21 days after onset of coughing, if not treated. If treatment is received, patients are no longer contagious after 5 days.
Case definition	Refer to BCCDC's pertussis case definitions for confirmed, probable, and suspect cases.
Laboratory testing	Refer to BCCDC's Communicable Disease Control Manual – Pertussis section and Laboratory Services webpage for more information on testing.
Notification	<p>Pertussis is a reportable communicable disease under the Public Health Act⁴.</p> <ul style="list-style-type: none"> • Notify and consult with local Public Health as soon as possible to initiate follow-up, appropriate isolation, and testing. • Notify and consult with local infection prevention and control (IPC) team (where available).

<p>Prevention</p>	<p>Immunization Pertussis is a vaccine preventable disease. Ensure health-care worker immunizations are up to date. Refer to BCCDC Immunization Manual for information on recommended vaccines for health care workers.</p>
	<ul style="list-style-type: none"> Encourage patients to be up to date with their immunizations. Refer to the BC Centre for Disease Control for information on available vaccines in BC. <p>Chemoprophylaxis For information on chemoprophylaxis refer to BCCDC’s Communicable Disease Control Manual Pertussis section.</p>
<p>Infection prevention and control recommendations in health-care settings</p>	
<p>Case management For patients presenting with symptoms and/or with suspected or confirmed pertussis:</p> <ul style="list-style-type: none"> Provide instructions to wear a medical mask (if tolerated) and clean their hands. Follow routine practices and implement droplet precautions: <ul style="list-style-type: none"> Health-care workers should wear a medical mask and eye protection and wear additional personal protective equipment based on point-of-care risk assessment (PCRA). Place droplet precautions sign at the entrance to the patient/examination room. Refer to the provincial additional precautions signs on the PICNet website. Place patient in a single occupancy room and consult with local IPC team (where available). Continue droplet precautions until pertussis is ruled out or 3 weeks after onset of paroxysmal stage if not treated, or until 5 days after antimicrobial treatment is received. For information on treatment refer to BCCDC’s Communicable Disease Control Manual Pertussis section. <p>Exposure and Contact Management</p> <ul style="list-style-type: none"> For patient exposure and contact management, consult with Public Health and local IPC team (where available). Refer to BCCDC’s Communicable Disease Control Manual Pertussis section on contact management. For health-care worker exposures and contact management, consult with the Provincial Workplace Health Contact Centre (for health authority operated settings) and Public Health. 	
<p>Additional Resources</p>	
<ul style="list-style-type: none"> BC Centre for Disease Control. Communicable Disease Manual Pertussis (June 2010) Public Health Agency of Canada. Routine Practices and Additional Precautions for Preventing the Transmission of Infection in Healthcare Settings (September 2017) Public Health Agency of Canada (PHAC). Pertussis (whooping cough) For Health Professionals (March 2024) 	

- U.S. Centre for Disease Control and Prevention (CDC). [Pertussis \(Whooping Cough\) for Clinicians](#) (August 2022)
- HealthLink BC. [Whooping Cough](#) (November 2015)

References

1. Public Health Agency of Canada. Pertussis (whooping cough): For health professionals. Published January 28, 2014. Accessed March 27, 2024. <https://www.canada.ca/en/public-health/services/immunization/vaccine-preventable-diseases/pertussis-whooping-cough/health-professionals.html>
2. BC Centre for Disease Control. Chapter 1 - Management of Specific Diseases - Pertussis.; 2010. Accessed March 27, 2024. http://www.bccdc.ca/resource-gallery/Documents/Guidelines%20and%20Forms/Guidelines%20and%20Manuals/Epid/CD%20Manual/Chapter%201%20-%20CDC/EPI_Guideline_CDChapt1Pertussis_20100625.pdf
3. Public Health Ontario. Public Health Management Considerations for Pertussis. Published online December 2022.
4. Government of British Columbia. Reporting Information Affecting Public Health Regulation, Public Health Act. Accessed March 26, 2024. https://www.bclaws.gov.bc.ca/civix/document/id/lc/statreg/167_2018.