Follow-up Recommendations for Pertussis Exposures in the Health Care Setting

Transmission of *Bordetella pertussis (B. pertussis)* occurs through deposition of respiratory, oral, or nasal secretions from an infected source person on the mucous membranes of a susceptible host. Unprotected (e.g., not wearing a facemask), close, face-to-face contact with an infectious source person or contact with their secretions may be considered an exposure to pertussis.

Health care workers exposed to a patient infected with pertussis

For health care workers (HCW) caring for a patient with pertussis who have a cough that developed less than 21 days ago, identify the type of exposure:

Type of HCW exposure	Recommended follow-up	
Face-to-face contact with coughing or sneezing patient while HCW not masked*, or	Antibiotic prophylaxis** or 21-day symptom watch from time of exposure:	
Performing or assisting with procedures that induce coughing or produce aerosols while HCW not masked*, or Presence in same room with coughing or sneezing patient while HCW not masked* and performing a close-contact activity (e.g., bathing, feeding).	 Decision whether to prophylax** or initiate symptom watch should take into consideration the patient population seen by the HCW. Example: Antibiotics would likely be preferred over symptom watch for a HCW who staffs a neonatal intensive care unit. CDC recommends staff not receiving postexposure prophylaxis** who are likely to interact with persons at increased risk*** for severe pertussis be restricted from contact with patients or other persons at increased risk for severe pertussis for 21 days after last exposure. 	
Presence in same room with coughing or sneezing patient while HCW not masked* and without close contact.	Recommend 21-day symptom watch from time of exposure.	

* Surgical or procedure mask is sufficient.

**The preferred agents for postexposure prophylaxis are azithromycin, erythromycin, and clarithromycin

*** Populations at increased risk for serious complications and death from severe pertussis include infants aged under 12 months, women in their third trimester of pregnancy, persons with preexisting health conditions that may be exacerbated by a pertussis infection.

Patients/staff exposed to a health care worker infected with pertussis

If a HCW has pertussis, please contact your local/tribal public health jurisdiction for guidance. For patients or staff in close contact with an infected HCW, who have a cough that developed less than 21 days at time of exposure, identify the type of exposure:

Type of patient exposure	Recommended follow-up	
HCW was masked* while infectious and working with patients.	No notification of patients is needed.	
HCW was not masked* while infectious and had contact with patients less than 12 months of age or pregnant women.	Call local/tribal public health jurisdiction and notify of exposure. Public health will work with you to recommend post-exposure prophylaxis** letters and/or phone calls.	
HCW was not masked* while infectious and had contact with patients who had a pre-existing lung condition that would make them susceptible to a more severe case of pertussis.	Mail notification letter and recommend post- exposure prophylaxis.	
HCW was not masked* while infectious and patient was not less than 12 months old, pregnant, or otherwise compromised with a lung condition.	Mail notification letter recommending testing if symptoms develop.	
Staff who worked with an infected HCW and had prolonged, close proximity, and unprotected contact.	 Recommend antibiotic prophylaxis** or 21-day symptom watch from time of exposure: Decision whether to prophylax** or initiate symptom watch should take into consideration the patient population seen by the exposed HCW. Example: For exposed HCW that normally sees patients who are pregnant or less than 12 months of age, antibiotics may be preferred over a 21-day symptom watch. 	

* Surgical or procedure mask is sufficient.

**The preferred agents for postexposure prophylaxis are azithromycin, erythromycin, and clarithromycin

*** Populations at increased risk for serious complications and death from severe pertussis include infants aged under 12 months, women in their third trimester of pregnancy, persons with preexisting health conditions that may be exacerbated by a pertussis infection.

Healthcare Worker Restrictions

Exclude symptomatic healthcare personnel with known or suspected pertussis from work for 21 days from the onset of cough, or until 5 days after the start of effective antimicrobial therapy.

Work restrictions are not necessary for **asymptomatic** healthcare personnel who have an exposure to pertussis <u>and</u> receive postexposure prophylaxis**, regardless of the patient population they interact with.

Asymptomatic healthcare personnel who interact with persons at increased risk for severe pertussis*** should be restricted from patients and other persons at increased risk for severe pertussis*** for 21 days after the last exposure if they do not receive postexposure prophylaxis**.

Asymptomatic healthcare personnel, who have an exposure to pertussis and are not likely to interact with persons at increased risk for severe pertussis***, do not need to be restricted for work and should undergo symptom monitoring for 21 days after last exposure.

Transmission-Based Precautions:

The table below shows the Transmission-Based Precautions that should be implemented in healthcare settings or by healthcare personnel when caring for infectious individuals with either suspected or confirmed pertussis.

Infection/Condition	Type of Precaution	Duration of Precaution	Precautions/Comments
Pertussis (whooping cough)	Droplet + Standard	Until 5 days after initiation of effective antibiotic therapy. Exclude symptomatic healthcare personnel with known or suspected pertussis from work for 21 days from the onset of cough, or until 5 days after the start of effective antimicrobial therapy.	Single patient room preferred. Cohorting an option. Postexposure chemoprophylaxis for household contacts and HCWs with prolonged exposure to respiratory secretions [863]. Recommendations for Tdap vaccine in adults under development. Tdap Vaccine Recommendations [2018] $\underbrace{} Update: Currentrecommendations can befound at Tdap / Td ACIPVaccineRecommendations (accessedSeptember 2018).$

Repeat exposures: For questions on whether to repeat prophylaxis, please call your local/tribal public health jurisdiction or the 24/7 Communicable Disease Epidemiology/ICP/HAI line (406-444-0273).

Useful Resources:

- Infection Control in Healthcare Personnel: Epidemiology and Control of Selected Infections Transmitted Among Healthcare Personnel and Patients
- Appendix A: Type and Duration of Precautions Recommended for Selected Infections and Conditions | Infection Control | CDC
- droplet precautions final rev4

This document was adopted from the Minnesota Department of Health.