



## RESPONSE TO COMMUNICABLE DISEASES

### A QUICK GUIDE FOR SAN FRANCISCO CLINICIANS

### Pertussis (Whooping Cough)

#### CLINICAL DISEASE

Pertussis usually presents in 3 phases: 1) *Catarrhal stage*: Cold-like symptoms and a mild cough that worsens. 2) *Paroxysmal stage*: Spasms of severe cough followed by a sudden deep inspiration may cause “whooping”. Infants may gag, gasp, or develop apnea. Post-tussive emesis is common in all ages. Adolescents and adults often have mild disease. 3) *Convalescent stage*: Resolution of coughing, whooping, and vomiting. Consider Pertussis in a patient with cough lasting at least 2 weeks with paroxysmal cough, inspiratory “whoop,” or post-tussive emesis. **Mortality is highest in infants < 6 months old.**

#### CLINICAL RESPONSE

#### 1. PLEASE REPORT WITHIN ONE WORKING DAY ALL SUSPECT AND CONFIRMED CASES TO:

SFDPH Communicable Disease Control Unit (CDCU) &  
Telephone: 415-554-2830

Your Infection Preventionist (IP)  
(check your institution’s directory)

\* The San Francisco Public Health Department (SFDPH) and IPs will take steps to prevent additional cases.

#### 2. IMPLEMENT APPROPRIATE INFECTION CONTROL PRECAUTIONS

\* Patients are **infectious from onset of any catarrhal symptoms** until **21 days after onset of paroxysmal cough** (if no or partial treatment was given). Communicability ends **after 5 days** of appropriate **antibiotic treatment**.

\* Use **droplet precautions** for all suspect cases:

- **Isolate** and **provide a face mask** for suspect patient to wear.
- Put the patient in a private room. Anybody entering the patient’s room should wear a surgical mask regardless of prior immunity. For transport, patients should be masked and requested to follow respiratory hygiene/cough etiquette.

#### 3. PURSUE DIAGNOSTIC TESTING (commercial labs are OK)

\* The best diagnostic tests for pertussis are **culture** and **PCR** from **nasal aspirate** or **nasopharyngeal** specimens. Sensitivity varies and can decrease with specimen collection after antibiotic treatment (culture) and delayed collection (both). Obtain both tests. Negative test results in cases with compatible symptoms do not rule out pertussis.

\* Serology is a less reliable test for pertussis. DFA and ELISA tests are the least reliable and not recommended.

\* For more info see: [http://www.cdph.ca.gov/programs/immunize/Documents/CDPH\\_Pertussis\\_laboratory\\_testing\\_March2010.pdf](http://www.cdph.ca.gov/programs/immunize/Documents/CDPH_Pertussis_laboratory_testing_March2010.pdf)

#### 4. INITIATE ANTIBIOTIC TREATMENT FOR ALL SUSPECT CASES

\* Do not wait for diagnostic testing results. Begin empiric **antibiotic treatment immediately** in all suspect cases. For dosing recommendations, see <http://www.sfcdep.org/pertussis.html>

#### 5. ENCOURAGE PATIENTS TO TAKE APPROPRIATE STEPS TO PREVENT THE SPREAD OF DISEASE

\* Encourage all pertussis cases to stay away from infants, young children, pregnant women and immunocompromised persons until they are **non-infectious**. Cases are non-infectious after 5 days of appropriate antibiotic treatment. If no or partial treatment was given, then cases are infectious until 21 days after onset of paroxysmal cough.

\* While infectious, SFDPH will exclude cases from sensitive situations (e.g. daycares, pre-schools, schools).

#### 6. HELP IDENTIFY EXPOSED CONTACTS AND PROVIDE POST-EXPOSURE PROPHYLAXIS (PEP)

\* Please provide information about exposed close contacts to CDCU and your IP; **they will identify and manage contacts** including making **PEP** recommendations for antibiotic therapy, vaccination or both.

\* **High risk close contacts** for PEP are infants <1 year old, 3<sup>rd</sup> trimester pregnant women, and persons who may expose them, including health care workers.

\* Clinicians may be asked to provide PEP and/or vaccinations to high risk close contacts. If PEP is recommended, it should be provided even if the contact is up-to-date with pertussis vaccine.

#### 7. PREVENT DISEASE WITH IMMUNIZATION

\* Universal immunization with pertussis containing vaccine is recommended for children and adults. Immunity wanes over time. Although the vaccine is licensed for those <65 years, we recommend that **all adults** receive one (1) Tetanus, Diphtheria, Pertussis (Tdap) vaccine; especially close contacts to infants and pregnant women and all health care workers.

\* Consider an accelerated infant DTaP schedule (1<sup>st</sup> dose at 6 weeks, 2<sup>nd</sup> and 3<sup>rd</sup> doses at 4 week intervals) per AAP 2009 Red Book recommendations. For immunization schedules see: <http://www.sfcdep.org/yourvaccines.html>.