



PIMA COUNTY HEALTH DEPARTMENT
3950 S. COUNTRY CLUB RD., #100 • TUCSON, AZ 85714-2056

Date: 11/19/2013

Dear Colleague:

In 2012, many states across the nation reported increased Pertussis cases or outbreaks. Arizona saw a thirty percent increase in reported Pertussis cases from 2011 to 2012. Similarly, Pima County experienced a forty percent increase in reported Pertussis cases from 2011 to 2012. So far through 31 Oct 2013, Arizona and Pima County trends continue to rise.

Pima County has investigated sixty-three confirmed or probable Pertussis cases in 2013. Analysis of our cases show seventy eight percent were younger than 20 years old, while thirteen percent were younger than six months. Additionally, cases reside across twenty-nine of Pima County's zip codes. The zip codes with the highest percentage of cases include 85710, 85713, 85718, 85641, and 85747.

PCHD continues to track and characterize the changing incidence of Pertussis and reminds clinicians to report, test, and properly treat patients they suspect to have Pertussis:

- Have a low threshold for culture/PCR testing patients with Pertussis related symptoms. We recommend using either a culture or a Polymerase Chain Reaction (PCR) test. Culture and PCR requires collection of an appropriate nasopharyngeal specimen, obtained either by aspiration or with Dacron swabs (cotton, rayon or calcium alginate swabs should not be used) and obtained prior to antibiotic use. Specimens must be placed into special transport media (Regan-Lowe) immediately.

If you currently do not stock the transport media, we recommend consulting your contracted laboratory for the appropriate collection supplies. Send specimens to the Arizona State Laboratory for testing if culture or PCR is not available through your lab. **Do not** delay either treatment or reporting to the Health Department while you await laboratory results.

- For treatment or chemoprophylaxis, the antimicrobial agents of choice are azithromycin, clarithromycin and erythromycin. Exposed household members are considered close contacts and should be offered chemoprophylaxis. Administer a course of chemoprophylaxis to close contacts within 3 weeks of exposure. Close contacts are administered the same doses as in the treatment schedule. Please remind cases to remain home from work or school until treatment is completed.

- “Cocooning” is encouraged in families with or expecting infants younger than 12 months. PCHD recommends Tdap booster for everyone who has contact with an infant: brothers, sisters, mother, father, grandparents (including those older than 65 years), caregivers, and healthcare workers.
- Physicians should also encourage families to update their vaccination status with their children’s school. This will prevent their child from being mistakenly excluded from school for being under vaccinated in the event of an outbreak.
- Children being treated for Pertussis should be held from school and school related activities until their antibiotic treatment is completed.
- Finally, take steps to assure your staff received a booster for Pertussis, particularly if there are infants in your practice.

Please do your part to assure that levels of circulating Pertussis remain as low as possible in our community. Feel free to contact PCHD with questions or concerns at 520.243.7797 or visit our website at www.pima.gov/health

Sincerely,

Francisco Garcia, MD, MPH
Director and Chief Medical Officer

Enclosures (3)

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Guidance for Identifying Pertussis Close Contacts

Standard Close contact definition: Those who have had direct contact with respiratory, oral or nasal secretions from a symptomatic case (catarrhal or paroxysmal stages), e.g., a cough or sneeze in the face, sharing food/eating utensils, kissing, performing a medical examination of the nose and throat, or within 3 feet of symptomatic case for a prolonged period of time (≥ 1 hour).

Close Contacts in Childcare and School Settings:

Child care centers – With extensive contact between children, consider entire class (or entire center if the child care center is not divided into classes). With minimum interaction between children, consider only individual(s) or groups with significant exposure.

Home child care setting – Consider all children, the child-care provider and members of his/her family who have had contact with case.

High School – Consider patterns of interaction that increase exposure time among groups.
*Chemoprophylaxis groups with significant exposure.

Kindergarten, Elementary or Middle School – Consider entire classroom, staff, aides and volunteers where students do not change classes frequently or high-risk settings such as residential schools for ill or developmentally delayed children. Investigate after school activities and core groups of close friends for extent of exposure.

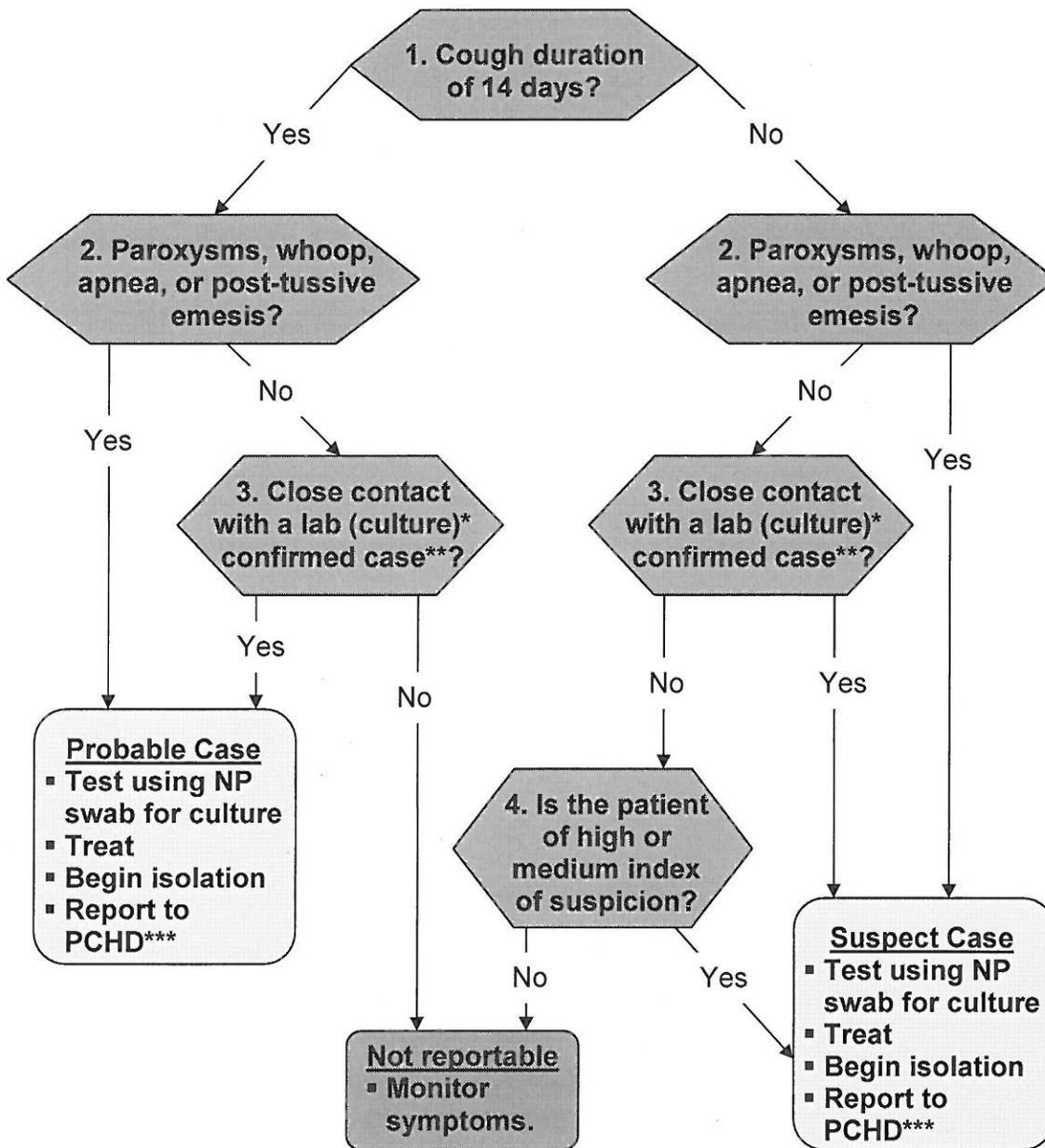
Other school settings: Consider contacts based on extent of exposure; the presence/absence of coughing persons in the group; whether any other pertussis has been reported in area; and whether high-risk individuals or unvaccinated young children are present. Consider students who work closely together, students sitting next to case in school or extra-curricular activities, bus seatmates, carpool contacts, core group of close friends, and social or work contacts.

Extra-curricular activity groups: Teammates are considered close contacts. Other extra-curricular groups are examined based on criteria mentioned above in other school settings.

For classrooms, teams and other groups in which there are > 2 confirmed cases, it may be appropriate to expand the definition of a close contact (i.e. entire class, team or group who would not have been considered with only one confirmed case).

Pertussis Algorithm

Clinical Evaluation and Management of Suspect Pertussis Cases



NOTE:

*The gold standard for pertussis testing is culture using a nasopharyngeal specimen (NP swab). A positive serology test result or a direct fluorescent antibody (DFA) test is not confirmatory tests for pertussis.

** A positive culture result is a confirmed case. A negative test does not rule out a probable case.

*** Report to the Pima County Health Department within 24 hours after a case or suspect case is diagnosed, treated, or detected or an occurrence is detected. Do not wait for lab results.

Pertussis (Whooping Cough): Questions and Answers

Information about the disease and vaccines

What is pertussis or whooping cough?

Pertussis or “whooping cough” is a very serious and contagious respiratory disease caused by bacteria.

What are the symptoms of pertussis?

Pertussis begins with a mild cold for the first 1–2 weeks with the following symptoms:

- a runny or stuffy nose
- sneezing
- low-grade fever
- a mild cough

After 1-2 weeks, the coughs starts or becomes worse:

- The cough can be very hard, over and over.
- Coughing fits make it hard to breathe, eat, drink, or sleep. Coughing fits happen more at night;
- Some have to gasp for breath after a coughing fit, and may make a “whooping” sound. This sound is where the name “whooping cough” comes from. Babies may not cough or make this sound;
- Vomiting after a coughing fit can occur;
- Coughing fits can last up to 10 weeks;
- The cough may be milder in adolescents, adults, or vaccinated people, but these individuals are still able to transmit the disease to others.

How serious is pertussis?

Pertussis can be a very serious disease, especially for babies and young children. About 1 out of 4 babies and children with pertussis will get pneumonia (a serious lung infection). Pertussis can also cause seizures and brain damage.

How is pertussis spread?

Pertussis is spread through the air when an infected person breathes, coughs, or sneezing. People with pertussis can spread the disease since they begin having cold-like symptoms up through 2 weeks after the cough starts.

How long does it take to show signs of pertussis?

Pertussis usually takes 7 to 10 days to show symptoms, but the range is anywhere between 4 to 21 days.

How do I know if I have pertussis?

Pertussis can be diagnosed by a health care provider based on symptoms and/or laboratory testing.

What is the treatment for pertussis?

Antibiotics can treat pertussis. After completing an antibiotic treatment, a person with pertussis is no longer contagious. However, the cough can still be present.

Is there a vaccine for pertussis?

Yes. Children should get five doses of the DTaP vaccine at the following ages for best protection:

- One dose each at 2 months, 4 months, and 6 months;
- A fourth dose at 15 through 18 months; and
- A fifth dose at 4 through 6 years of age.

Pre-teens and adults should get a booster vaccine called Tdap to stay protected against the disease.

What can I do to protect me and my family from pertussis?

- Keep newborns away from anyone with cold symptoms or a cough;
- Vaccinate your child on time;
- Make sure you, your child’s caregivers, and older siblings get a one-time recommended dose of Tdap vaccine to protect themselves and children too young to be fully vaccinated;
- Talk with your child’s doctor if you have questions;
- Keep a record of your child’s vaccinations – to make sure your child is up-to-date.

How can I learn more about pertussis or the vaccine?

To learn more talk to your healthcare provider, visit the CDC website <http://www.cdc.gov/pertussis/>, or call the Pima County Health Department.



Pima County Health Department
Monday through Friday 8:00 AM to 5:00 PM
(520) 243-7797

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