

STATE OF COLORADO

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Dedicated to protecting and improving the health and environment of the people of Colorado

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Colorado Department
of Public Health
and Environment

HEALTH ALERT NETWORK BROADCAST

MESSAGE ID: 08202012 11:25

FROM: CO-CDPHE

SUBJECT: Health Advisory – Increasing rates of pertussis in Colorado

RECIPIENTS: Local Public Health Agencies/IPs/Clinical Labs/EDs

RECIPIENT INSTRUCTIONS: Local Health Departments – please forward to healthcare providers

This message can also be found on www.satool.org/group/cohan/home.

HEALTH ADVISORY Increasing Rates of Pertussis in Colorado August 20, 2012

KEY POINTS:

- Colorado is experiencing increased rates of pertussis (whooping cough) consistent with an epidemic, with the highest rate of disease in infants < 6 months of age. There have been no reported deaths due to pertussis in 2012.
- Pertussis in early infancy is frequently severe and potentially fatal. **Young infants might present without classic cough symptoms and may instead have gasping or apnea only.**
- Vaccination is the safest and most effective tool we have to prevent pertussis. All patients with infant contact (caring for an infant; or member of a household with an infant) should receive a Tdap vaccine, particularly pregnant women.**
- Persons who should be tested include: persons with a cough of any duration who are a contact to a confirmed case; persons with a cough of at least 5 days and either paroxysms or post-tussive vomiting; persons with a cough of at least 14 days; infants with apnea or gasping; and when the clinical suspicion for pertussis is high. Testing is particularly important in high-risk patients, including pregnant women, infants, and unvaccinated individuals. Avoid testing in patients for whom the clinical suspicion for pertussis is low, as false positive results will be more likely.

BACKGROUND INFORMATION

From January 1 through August 11, 2012, a total of 715 cases of pertussis have been reported in Colorado, compared to a 2007-2011 average of 158 cases during the same calendar period. Rates of pertussis are highest among infants < 6 months of age, followed by infants 6-11 months, and children 11-14 years. Though the increase is widespread, the largest number of cases have been reported from Adams, Arapahoe, Boulder, Denver, and Jefferson counties. There have been no reported deaths due to pertussis in 2012. A number of other states have also reported an increase in pertussis. In particular, Washington is currently experiencing a pertussis epidemic with 3,484 cases reported statewide through August 11, 2012.

RECOMMENDATIONS

The primary objective of testing, treating, and prophylaxing for pertussis is to prevent pertussis illness in persons at increased risk of severe or complicated illness, particularly infants ages <12 months.

Diagnosis

- CDPHE recommends providers consider a diagnosis of pertussis in persons with a cough accompanied by paroxysms and/or post-cough vomiting OR a cough of ≥ 2 weeks duration especially if there are household or other close contacts who are infants or pregnant women in mid-to-late third trimester.
- Fever is generally absent or minimal.
- Disease presentation varies with age and vaccination status, with milder illness generally seen among vaccinated persons.
- **Young infants might present without classic cough symptoms and may instead have gasping or apnea only.**

Vaccine Recommendations

Vaccines are the safest and most effective tool we have to prevent pertussis.

- Health Care Personnel
 - **Tdap is recommended for health care personnel who have not previously received it.**
 - Health care facilities should adopt and enforce Tdap vaccination policies for their personnel.
 - Priority should be given to vaccinating those who have direct contact with infants.
- Pregnant and postpartum women
 - **Those who have not previously been vaccinated should get one dose of Tdap during the third trimester or late second trimester.**
 - Tdap is recommended in the immediate postpartum period for new mothers who were not previously vaccinated or whose vaccination status is unknown.
- Others with infant contact
 - **Parents, siblings, caregivers, and other potential visitors of infants should be up to date on pertussis immunizations before having contact with an infant.** This includes a one-time dose of Tdap for adults/adolescents that have not previously received a dose.
- Emergency Department and Urgent Care use of Tdap
 - **When a tetanus booster is indicated, Tdap should be used in place of Td for wound management in adults aged 19 years and older who have not received Tdap previously.**
- Accelerated immunization of infants
 - An accelerated schedule of pertussis vaccination for infants (aged <2 months at initial vaccination) can be considered during pertussis outbreaks. While pertussis vaccine is usually given at 2, 4, and 6 months of age, the minimum acceptable age for initial vaccination is six weeks of age with a minimum interval of 4 weeks for subsequent doses. On this schedule, infants could complete their three-dose primary series by 14 weeks of age.
- Other pertussis vaccination recommendations
 - Vaccinate all patients using the current Advisory Committee for Immunizations (ACIP) guidelines, see link below.
 - Health care providers and facilities should consider using seasonal influenza immunization clinics as an opportunity to give Tdap and DTaP boosters

Testing Recommendations

The following persons are recommended to be tested for pertussis:

- Adults and children with a cough of short duration (e.g., 1-4 days) in close contact* with a confirmed case
- Adults and children with a cough of medium duration (e.g., 5-13 days) in close contact* with a confirmed case; OR when accompanied by paroxysmal cough and/or post-cough vomiting OR when clinical suspicion is high
- Adults and children with a cough of ≥ 2 weeks duration especially if there is any household or other close contact* with infants, pregnant women in mid-to-late third trimester, or unvaccinated children

- Infants with apnea or gasping that may or may not be accompanied by a cough, or hypoxia following paroxysms.

The following persons are NOT routinely recommended to be tested for pertussis:

- No symptoms - only possible exposure to pertussis
- URI symptoms without cough, whether or not they are a close contact* of a case
- Cough of short duration (e.g., 1-4 days) and NOT close contact* of a case – but monitor for persistence/worsening of cough
- Cough of medium duration (e.g., 5-13 days) in absence of close contact*, or paroxysms, or post-cough vomiting, AND clinical suspicion is low.

***Definition of Close Contact:** persons who are either household members of a case; attended the same daycare center with a symptomatic case; or had close contact (distance of \leq 3 feet for \geq 1 hour) with a pertussis case.

PCR Testing

- PCR is the preferred test for diagnosing pertussis.
- PCR testing methodologies vary among laboratories and false positive results are not uncommon.
- In order to prevent DNA contamination of specimens for PCR testing, healthcare providers should:
 - Wear gloves immediately before and during specimen collection, dispose of gloves and wash hands immediately after specimen collection
 - Routinely clean clinic (exam and specimen collection rooms, and vaccine preparation areas) surfaces using a bleach solution
 - Limit testing to patients with symptoms compatible with pertussis.

Prevention and prophylaxis

- **Instruct patients with pertussis to avoid prolonged public contact because they are contagious until they have completed 5 days of antibiotic treatment or 3 weeks of coughing.**
- Household and other close contacts* of a confirmed or suspected pertussis case should receive prophylaxis promptly without waiting for results of pertussis testing, regardless of age or immunization history.
- Droplet precautions should be used by health care workers caring for patients with suspected or confirmed pertussis.

Reporting

- Report pertussis cases (lab positive and/or clinically diagnosed) to your local health department or CDPHE (303-692-2700 or 1-800-866-2759).

FOR MORE INFORMATION

For additional information regarding pertussis testing, prophylaxis, and treatment, go to:

<http://www.cdphe.state.co.us/dc/Epidemiology/Pertussis/index.html>

For additional information on PCR testing, go to:

<http://www.cdc.gov/pertussis/clinical/downloads/diagnosis-pcr-bestpractices.pdf>

For additional information on immunization schedules, go to: <http://www.cdc.gov/vaccines/schedules/>