



# Microbe Monthly

Communicable Disease Report

December 2008

El Paso County Department  
of Health & Environment

## Pertussis: Identification, Testing and Treatment

Cough illnesses are common this time of year and pertussis should be considered when the cough is severe or lasts more than 2 weeks. Symptoms that distinguish pertussis from other respiratory illnesses include paroxysmal coughing, inspiratory whoop and posttussive vomiting.

The most commonly used diagnostic assay to diagnose pertussis is polymerase chain reaction (PCR). Culture has historically been the gold standard for diagnosis, but sensitivity is low and many commercial laboratories are not equipped to do pertussis culture. Serologic testing for pertussis is not standardized in commercial laboratories, has only limited systematic validation for diagnosis and should not be used to diagnose pertussis. Specimen collection guidelines are available online:

[www.cdphe.state.co.us/dc/Epidemiology/Pertussis/pertussiscollection.pdf](http://www.cdphe.state.co.us/dc/Epidemiology/Pertussis/pertussiscollection.pdf)

Persons with pertussis are most contagious from illness onset until approximately 3 weeks of cough. An infected person is no longer considered contagious after 5 days of appropriate antibiotic therapy. Pertussis can be treated with a 5-day course of azithromycin (there is insufficient data evaluating the 3-day course of azithromycin). Alternative antibiotics include clarithromycin, erythromycin and Bactrim. The Health Department often directs persons identified as contacts of pertussis to obtain prophylactic antibiotic from their health care providers—these contacts should receive prophylaxis with the same antibiotics used for treatment. We request that providers prescribe antibiotics when recommended, even if the person is asymptomatic. Contact the Health Department's Communicable Disease Program if you have questions, 719-578-3220.

Pertussis Testing Options	
<b>Culture</b>	Not widely available
<b>PCR</b>	Good alternative to culture
<b>Serology (IgG, IgM)</b>	Not standardized Not recommended

## El Paso County Disease Trends

- In November 2008, 32 communicable diseases were reported and investigated: *Campylobacter* (4), *Giardia* (3), chronic hepatitis B (3), hospitalized influenza (1), invasive pneumococcal disease (2), legionellosis (1), invasive meningococcal disease (1), pertussis (2), *Salmonella* (2), *Shigella* (2), STEC (shiga-toxin producing *E. coli*) (1), *Varicella* (3) and viral meningitis (7).
- Also in November, the Communicable Disease Program received 19 possible foodborne illness complaints, bringing the year-to-date total to 142 complaints.
- Thus far in 2008, there have been 40 illness outbreaks reported: 8 influenza in long-term care facilities (LTCFs), 10 norovirus/gastrointestinal in LTCFs, 16 outbreaks associated with retail food establishments, 5 associated with schools and 1 in a home.

County	# of Reported Pertussis Cases (2007)	Rate Per 100,000 Population
COLORADO (Statewide)	307	6.2
EL PASO	53	9.0
DENVER	35	5.9
ARAPAHOE	34	6.2
JEFFERSON	30	5.6
LARIMER	24	8.3

## Hot Topics—State and National

- **Influenza** arrived in Colorado in November, with the first culture positive and the first confirmed (hospitalized) case both being reported from El Paso County. Colorado reported "sporadic" flu activity to the CDC for the week ending November 29. Providers should encourage any patients not already vaccinated to get their shot soon, before flu activity increases. Vaccine should be plentiful throughout the flu season. **It's not too late to vaccinate!**
- A **shortage of Hib vaccine** from a 2007 voluntary recall is continuing, as it was recently announced that restoration of the vaccines to the market would be delayed until mid-2009. Because continued delay and deferral of 12- to 15-month booster doses might result in an increase in Hib disease, surveillance for invasive Hib disease has become particularly important. This shortage heightens the need for timely reporting of *H. influenzae* cases and forwarding of all invasive *H. influenzae* isolates to the state for serotyping. For full report see the 11/21/08 MMWR at [www.cdc.gov/mmwr/preview/mmwrhtml/mm5746a2.htm](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5746a2.htm)

## Contact Information

<b><u>CD/TB Program</u></b>	
Weekday Hours	719-578-3220
After-Hours Emergency	719-385-9622
<b><u>Immunizations</u></b>	
	719-578-3272
<b><u>Environmental Health</u></b>	
	719-575-8636
<b><u>STD Program</u></b>	
	719-578-3296
(Sexually Transmitted Diseases, Hep C, HIV/AIDS, Blood-borne Exposures)	
<b><u>Colorado Department of Public Health and Environment</u></b>	
Weekday Hours	303-692-2700
After Hours	303-370-9395