

Diseases and conditions reported during Sept. 17-30, 2023:

This report is a bi-monthly snapshot of communicable diseases reported in El Paso County, as well as a report of disease trends and local health alerts. El Paso County Public Health's (EPCPH) Communicable Disease Program partners with the medical community and the public to limit and reduce the spread of diseases in our community.

Reportable diseases and conditions:

- 21 animal bites – 15 pediatric, 6 adults; 3 recommended to receive rabies post-exposure prophylaxis (PEP)
- 6 Campylobacteriosis - 1 pediatric, 5 adults
- 1 Carbapenem-Resistant Enterobacterales (CRE) - adult
- 721 COVID-19 – 114 pediatric, 627 adults
- 5 Cryptosporidiosis – 1 pediatric, 4 adults
- 3 Giardiasis – 1 pediatric, 2 adults
- 1 Haemophilus influenzae – adult
- 3 Legionellosis- 3 adults
- 2 Salmonellosis- 1 pediatric, 1 adult
- 3 Shiga Toxin Producing E. coli – 1 pediatric, 2 adults

- 1 Strep Pneumo Invasive – adult
- 2 Varicella – pediatric
- 2 Vibriosis – adult
- 13 West Nile Virus - adult

Additional reports:

- Animals positive for rabies 2023, year to date: 1 (bat)
- Outbreaks reported—1 COVID-19 outbreak associated with a residential youth program, 1 RSV outbreak associated with a school.

For a list of reportable diseases and conditions and instructions on how to report, follow this [link](#).

Health News: Pertussis

- Pertussis (whooping cough) can occur at any time during the year; however, cases tend to increase during the fall. Pertussis is highly communicable, as evidenced by secondary attack rates of 80 percent among immunocompromised/susceptible (unvaccinated) household contacts. Persons with pertussis are infectious from the beginning of the catarrhal stage through the third week after the onset of paroxysms (21 days) or until five days after the start of effective antimicrobial treatment. The typical incubation period (time from exposure to onset of symptoms) is seven to 10 days, with a range of four to 21 days. Persons with a history of pertussis vaccination can still get pertussis infection.

Stages of pertussis:

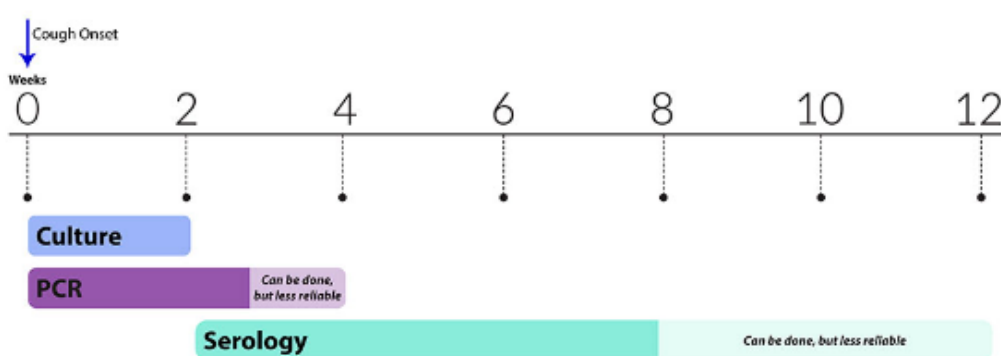
1. **Catarrhal stage** - mild upper respiratory tract symptoms, such as nasal congestion, runny nose, mild sore throat, mild dry cough, and minimal or no fever. The cough gradually becomes more severe and after one to two weeks the next stage (paroxysmal stage) develops.
2. **Paroxysmal stage** - characterized by coughing fits (**paroxysms**), which may be followed by a crowing or high-pitched inspiratory whoop, vomiting, and/or apnea. This stage usually lasts one to six weeks but may continue as long as 10 weeks.
 - Paroxysmal cough is sudden uncontrollable “spasms” or spells of coughing where one cough follows the next without a break for breathing. Paroxysmal episodes occur more frequently at night. The person usually appears relatively well between coughing fits.
 - Whoop is a high-pitched noise heard upon inhalation after a coughing spasm, due to a constricted airway.
 - Apnea is a period of not breathing, which may occur either after a coughing spasm or spontaneously, in an infant. Apnea may be the only symptom exhibited by young infants.
 - Post-tussive vomiting is vomiting that follows a paroxysm of coughing.
3. **Convalescent stage** - characterized by gradual recovery with fewer paroxysmal coughing episodes and cough usually disappears in two to three weeks but may continue for months.

How to test:

PCR- A nasopharyngeal swab for pertussis PCR is the preferred diagnostic test for pertussis and is available through most commercial laboratories. The best practice is to utilize PCR in the first two weeks of cough.

Serology - Serology detects antibodies to pertussis bacterial cells or proteins. Serologic testing for pertussis should only be considered in persons in whom cough has been ongoing for several weeks (too late for PCR testing) and there is absence of a more likely diagnosis. Pertussis antibody testing is not standardized across commercial laboratories and processes for test validation vary from lab to lab. Nor can commercial IgG antibody assays distinguish between prior vaccination, prior infection, or acute infection. Within those constraints, serologic testing for anti-pertussis toxin IgG ELISA might be useful for diagnosis in later phases of the disease. Do not use serologic assays for IgA or IgM, which lack adequate sensitivity and specificity for diagnosing pertussis. Serology may be performed on specimens collected up to 12 weeks following cough onset.

Optimal Timing for Pertussis Diagnostic Testing



cdc.gov/pertussis



Challenges with PCR respiratory panels:

Many commercial laboratories offer PCR-based respiratory panels for viral pathogens, some of which may also include Bordetella (B. Pertussis). Public health has identified numerous instances when a multiplex PCR assay does not distinguish between B. pertussis and other Bordetella species (such as holmseii or parapertussis). Using these tests, it is not possible to confirm pertussis infection specifically; in addition, testing done for other etiologies can result in erroneous diagnoses of pertussis. Providers suspecting pertussis based on clinical presentation should order a B. pertussis specific PCR rather than a general respiratory PCR panel.

How to treat:

Antibiotic treatment for pertussis infection can shorten the duration of illness and eliminates infectivity if given early in the course of illness. Treatment should be strongly considered for infants and children who are more likely to present sooner because of severity of symptoms. For adolescents and adults, weigh treatment decisions based on duration of illness (<3 weeks), severity, presence of young children or immunocompromised persons in the household, school attendance, and occupation. Infected persons remain contagious until 5 days of antibiotic treatment have been completed. A person is no longer considered infectious after 5 days of antibiotics, or after 21 days of cough. Additional information regarding treatment can be found on Table 4. <https://www.cdc.gov/mmwr/preview/mmwrhtml/rr5414a1.htm>

Prevention:

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

Children should receive five doses of DTaP at 2, 4, 6, and 15-18 months of age with a fifth dose at 4 to 6 years of age. Tdap is recommended between 11 to 12 years of age and for all adults aged 19 years and older who have not yet received a dose of Tdap.

Antibiotic prophylaxis after a pertussis exposure:

Recommended for all asymptomatic household and high-risk contacts of pertussis cases if the exposure occurred within the last 21 days. The same antibiotics and dosages used for pertussis treatment are recommended for pertussis prophylaxis. Chemoprophylaxis is given to persons who are not yet symptomatic and should be offered regardless of prior pertussis vaccination history.

Questions? Please Contact:

El Paso County Public Health CD/TB Program
Hours: M-F, 7:30 a.m. - 4:30 p.m.
(719) 578-3220; after-hours emergency: (719) 235-2278
Colorado Department of Public Health and Environment
(303) 692-2700; after-hours emergency: (303) 370-9395
www.elpasocountyhealth.org
Reportable Diseases and Conditions List