

DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT

Disease Control and Environmental Epidemiology Division

EPIDEMIC AND COMMUNICABLE DISEASE CONTROL

6 CCR 1009-1

[Editor's Notes follow the text of the rules at the end of this CCR Document.]

Adopted by the Board of Health on May 16, 2018. Effective July 15, 2018.

Regulation 1. Reportable Diseases

For the purpose of these regulations, the diseases named in the Reportable Diseases Table (Appendix A) are declared to be potentially dangerous to public health and shall be reportable in accordance with these regulations. In addition, any language specifying “(the) Department” refers to the Colorado Department of Public Health and Environment.

The Board of Health also requires the reporting of any unusual illness, or outbreak, or epidemic of illnesses, which may be of public concern whether or not known to be, or suspected of being, communicable. Such illnesses, outbreaks, or epidemics include, but are not limited to: 1) those which may be a risk to the public and which may affect large numbers of persons such as illnesses transmitted through food, water, animal to person, or from person to person; 2) cases of a newly recognized entity, including novel influenza; 3) those related to a health care setting or contaminated medical devices or products; and 4) those related to environmental contamination by any infectious agent or toxic product of such an agent.

The occurrence of a single case of any unusual disease or manifestation of illness which the health care provider determines or suspects may be caused by or related to a bioterrorist agent or incident must be reported immediately by telephone to the Department or county, district, or municipal public health agency by the health care provider and the hospital, emergency department, clinic, health care center, and laboratory in which the person is examined, tested, and/or treated. The same immediate reporting is required for any unusual cluster of illnesses that may be caused by or related to a bioterrorist agent or incident. Bioterrorist agents include, but are not limited to, anthrax, plague, smallpox, tularemia, botulism, viral hemorrhagic fever and brucellosis.

Manner of Reporting

All cases are to be reported with patient’s name, date of birth, sex, race, ethnicity, and address (including city and county) and name and address of responsible physician or other health care provider; and such other information as is needed to locate the patient for follow up. In addition, all laboratory information reported shall include specimen accession number. For animal bites by dogs, cats, bats, skunks, foxes, raccoons, coyotes, and other wild carnivores, the name and locating information of the owner of the biting animal shall be reported, if known, by the health care provider. For healthcare-associated infections, except as provided in § 25-3-601, C.R.S., facilities choosing to voluntarily participate in applied public health projects on a project by project basis shall make medical records available for review by the Department upon request within a reasonable time frame. In addition, for sexually transmitted infections, the patient’s sex at birth, gender identity and relevant treatment shall be reported. For reports from a publically funded anonymous testing site, as provided in §25-4-411, C.R.S, the patient’s name and address are not required.

See Appendix A, Reportable Diseases Table and Footnotes to determine time frame for reporting (from diagnosis or test result), who shall report, the reporting area, whether laboratory information is required for a report, and whether an isolate or clinical material must be sent to the Department, Laboratory Services Division.

Reports on hospitalized patients may be made part of a report by the hospital as a whole.

The Department shall develop systems and forms for reporting for physicians, other health care providers and hospitals. When hospitals and laboratories transmit disease reports electronically using systems and protocols developed by the Department or Federal agencies that ensure protection of confidentiality, such reporting is acceptable and is considered good faith reporting.

Regulation 2. Reporting by Individuals

Where Reporter = 'P' in the Appendix A, Reportable Diseases Table, cases of diseases shall be reported by the physician or other health care provider and by other persons either treating or having knowledge of a reportable disease, including, but not limited to coroners, persons in charge of hospitals or other institutions licensed by the Department (or their designees), persons in charge of schools (including school nursing staff), licensed day care centers, or any other person providing testing and/or counseling to a person with a sexually transmitted infection.

Regulation 3. Laboratory Reporting

Where Reporter = 'L' in the Appendix A, Reportable Diseases Table, cases of diseases shall be reported with the information required in Regulation 1 by the laboratory, or by an outpatient clinic that performs laboratory testing on site, whether or not associated with a hospital. The following laboratories shall also report: 1) out-of-state laboratories that maintain an office or collection facility in Colorado or arrange for collection of specimens in Colorado; and 2) in-state laboratories that send specimens to out-of-state referral laboratories. The case shall be reported by a laboratory when a result diagnostic of or highly correlated with clinical illness is found. Laboratory assays which demonstrate only immunity should not be reported (for example, a single elevated rubella antibody titer obtained during routine prenatal screening should not be reported).

For organisms so noted in Appendix A, Reportable Diseases Table, testing laboratories shall routinely submit bacterial culture isolates or patient clinical material that yields positive findings to the Department, Laboratory Services Division. Clinical material is defined as: (i) A culture isolate containing the infectious organism for which submission of material is required, or (ii) If an isolate is not available, material containing the infectious organism for which submission of material is required, in the following order of preference: (A) a patient specimen; (B) nucleic acid; or (C) other laboratory material.

All specimens shall be accompanied by the following information: (a) Patient's name, date of birth, sex, race, ethnicity, and address (b) Name and address of responsible physician or other health care provider (c) Name of disease or condition (d) Laboratory information - test name, collection date and specimen type. Laboratories should make an effort to report all test results electronically, whenever possible.

Regulation 4. Treatment and Control of Tuberculosis

The emergence of multiple drug-resistant tuberculosis in this country and state dictates a coherent and consistent strategy in order to protect the public health from this grave threat. The underlying principles of disease control expressed in the following rules are as follows: use of the most rapid and modern diagnostic methods by laboratories, rapid reporting, full patient compliance with medical treatment, and prevention of spread of tuberculosis in health care settings. The tuberculosis statute (C.R.S. 25-4-501 et seq.) covers subject matters not included in these regulations.

- A. All confirmed or suspected cases of active tuberculosis disease, regardless of whether confirmed by laboratory tests, shall be reported to the Department or county, district, or municipal public health agency within 1 working day by physicians, health care providers, hospitals, other similar private or public institutions, or any other person providing treatment to the confirmed or suspected case. The reports shall include the following information: the patient's name, date of birth, sex, race, ethnicity, address (including city and county), name and address of the reporting physician or agency; and such other information as is needed to locate the patient for follow-up. If reported by a physician, the physician shall also give the evidence upon which the diagnosis of tuberculosis was made, the part of the body affected, and the stage of disease.
- B. Physicians, health care providers, and health care facilities shall report within 7 calendar days the following tuberculin skin test (TST) or Interferon-Gamma Release Assay (IGRA) result if it occurs in a health care worker, correctional facility worker, or detention facility worker; a positive TST (defined as = or > 5 mm induration) or positive IGRA test (based on manufacturer's interpretation criteria) if the worker has had prolonged or frequent face-to-face contact with an infectious tuberculosis case.
- C. Laboratories shall report within 1 working day any result diagnostic of or highly correlated with active tuberculosis disease, including cultures positive for *Mycobacterium tuberculosis* and sputum smears positive for acid fast bacilli, and shall report the results of tests for antimicrobial susceptibility performed on positive cultures for tuberculosis.
- D. Results must be reported by the laboratory which performs the test, but an in-state laboratory which sends specimens to an out-of-state referral laboratory is also responsible for reporting the results.
- E. A laboratory may fulfill its requirement to report (in parts C and D of this regulation) by submitting a sputum specimen from the patient to either the Department, Laboratory Services Division, or for facilities located in Boulder, Broomfield, Denver, Adams, Douglas, Arapahoe, and Jefferson counties, to the Denver Public Health laboratory. The reporting requirement is not fulfilled if the laboratory submits an isolate from a culture to either of the public health laboratories or if the laboratory delays sending the sputum specimen for more than 2 calendar days after collection of the specimen.
- F. When a laboratory performs a culture that is positive for *Mycobacterium tuberculosis*, the laboratory shall submit a sample of the isolate to the Department, Laboratory Services Division no later than one working day after the observation of positive findings.
- G. The Department or county, district, or municipal public health agency is authorized to perform evaluations of the timeliness of laboratory diagnostic processes. The data collected in an evaluation may include the mean, median, and range for the following indices: the length of time from specimen collection to isolation; the length of time from isolation of an organism to identification of the organism as *Mycobacterium tuberculosis*; and the length of time from isolation until susceptibility test results are finalized. The Department or county, district, or municipal public health agency shall provide the laboratory and hospital the results of its evaluation, including comparison of the laboratory indices to norms for other similar laboratories.

- H. The Board of Health determines that to prevent the emergence of multi drug-resistant tuberculosis (MDR-TB), it is necessary and appropriate and good medical practice that persons with active tuberculosis disease receive directly observed treatment for their disease. All health care providers and health care organizations are required to provide directly observed therapy for patients with active tuberculosis disease for the full course of therapy, unless a variance for a particular patient from this requirement is approved by the tuberculosis control program of the Department or Denver Public Health. Directly observed therapy is not required for patients with extrapulmonary tuberculosis disease provided that the presence of pulmonary tuberculosis has been investigated and excluded. In applicable situations, a variance shall be granted in accordance with C.R.S. 25-4-506(3).

Health care providers and health care organizations shall report to the Department or county, district, or municipal public health agency within 7 calendar days the name of any patient on directly observed therapy who has missed one dose. When requested by health care providers and health care organizations, the Department or county, district, or municipal public health agency shall provide directly observed treatment to outpatients with active tuberculosis disease and this shall fulfill the requirement for the health care providers and health care organizations.

- I. All hospitals and health care facilities providing in-patient treatment to persons with active tuberculosis disease shall notify the Department or county, district, or municipal public health agency immediately after plans are made to discharge the patient from the facility. The notification is intended to discuss the treatment plan for the patient and to assure adequate follow-up and coordination among providers so that the standard of directly observed treatment is met.
- J. All licensed hospitals and nursing home facilities shall maintain a register of the TST and/or IGRA test results of health care workers in their facility, including physicians and physician extenders who are not employees of the facility but provide care to or have face-to-face contact with patients in the facility. The facility shall maintain such TST and IGRA test results as confidential medical information. Pursuant to C.R.S. 25-4-508, authorized personnel of the Department may inspect and have access to such register in the course of an investigation intended to identify sources and contacts of a case of active tuberculosis disease and to control tuberculosis.
- K. (1) With respect to tuberculosis treatment and control, the chief medical officer of a county, district, or municipal public health agency must be a physician licensed to practice medicine in the State of Colorado. The chief medical officer of a county, district, or municipal public health agency may design a program, consistent with good medical practice, of required screening for latent tuberculosis infection. The objective of the program must be to target persons who are at high risk of such infection based on recent local, state, national, or international epidemiologic data concerning the incidence of and risk factors for tuberculosis. The programs shall be limited to screening persons who participate in activities or who work in occupations and job categories that have a reasonably large proportion of persons at increased risk of tuberculosis. The programs should be designed so that the initial step in screening is the determination of whether a person has recognized risk factors for tuberculosis and if yes, then said person should undergo a TST or IGRA test and clinical evaluation. If free of signs and symptoms of tuberculosis, subsequent testing would be dependent on the results of the TST or IGRA test.
- (2) The chief medical officer of a county, district, or municipal public health agency, with the prior approval of the local board of health and pursuant to the requirements of subparagraph 3 of this paragraph K, may require screening be performed for a particular group or population that has been identified as high risk based on the criteria set forth in this paragraph K, but each individual shall be informed of his or her right to be exempt from the screening because of medical or religious reasons. The county, district, or municipal public health agency should provide at least 30 calendar days notice to potentially affected persons, groups, and businesses prior to consideration of the proposed program by the local board of health.

- (3) Except as provided in subparagraph 6 of this paragraph K, no program approved by a local board of health shall be implemented without the approval of the Board of Health. Within 30 calendar days of a program having been approved by a local board of health, the county, district, or municipal public health agency shall submit a copy of the proposed program to the Board of Health. When considering a proposed county, district, or municipal public health agency program, the Board of Health shall provide notice to all parties on its mailing list at least 20 calendar days prior to the hearing.
- (4) If an individual has signs and symptoms compatible with tuberculosis in the infectious stages, the chief medical officer may require examination pursuant to 25-4-506, C.R.S. The screening may be performed by an institution, organization, or agency acting at the direction of the county, district, or municipal public health agency. The results of the screening shall be given in writing to the person screened. Any person who is found to have latent tuberculosis infection without evidence of active disease shall be counseled and offered appropriate treatment by the agency performing the screening, but the person is not required to take such treatment.
- (5) Locally required screening programs shall be evaluated and reviewed by the local board of health every three years.
- (6) Nothing in this rule shall prohibit the Department or county, district, or municipal public health agencies from developing voluntary screening programs, from investigating and screening contacts of suspected or confirmed cases of tuberculosis in a contagious form, or from responding to potential outbreaks of tuberculosis in a community.

Regulation 5. Investigations to Confirm the Diagnosis, Treatment, and Causes of Epidemic and Communicable Diseases and to Determine Appropriate Methods of Epidemic and Communicable Disease Control

Investigations may be conducted to confirm the diagnosis, treatment, and causes of reportable conditions and shall be considered official duties of the Department or county, district, or municipal public health agencies. Such investigations may include, but are not limited to:

- A. Review of pertinent, relevant medical records by authorized personnel, if necessary to confirm the diagnosis; to investigate causes; to identify other cases related to the outbreak or the reported communicable disease in a region, community, or workplace; to determine if a patient with a reportable disease has received adequate treatment to render him/her non-infectious or a person exposed to a case has received prophylaxis, if appropriate. Such review of records may occur without patient consent and shall be conducted at reasonable times and with such notice as is reasonable under the circumstances. Where feasible, facilities are encouraged to provide remote electronic access to authorized health department staff for this purpose;
- B. Performing follow-up interview(s) with the case or persons knowledgeable about the case to collect information pertinent and relevant to the cause(s) of or risk factors for the reportable condition;
- C. Medical examination and testing of persons with the explicit consent of such persons;
- D. Obtaining from public or private businesses or institutions the lists of persons with a similar or common potential exposure to a reported case; such exposure may be current or have occurred in the past;

- E. Interviewing or administering questionnaire surveys confidentially to any resident of a community or any agent, owner, operator, employer, employee of a public or private business or institution, that is either epidemiologically associated with a reported case or has had a similar exposure as a reported case;
- F. Collecting and analyzing samples or measurements of items that may be related to the cause of the outbreak or reportable disease;
- G. Taking photographs or videos related to the purpose of the investigation; If the photographs/videos are taken in a business, the employer shall have the opportunity to review the photographs/videos taken or obtained for the purpose of identifying those which contain or might reveal a trade secret;
- H. Entering a public or private entity, such as a business or school, for the purpose of conducting investigations of those processes, conditions, structures, machines, apparatus, devices, equipment, records, and materials within the place of employment which are relevant, pertinent, and necessary to the investigation; such investigations shall be conducted during regular working hours or at other reasonable times and with such notice as is reasonable under the circumstances.
- I. Review of workers' compensation claims;
- J. Review of toxic tort or product liability claims filed with state or federal courts within the state; and
- K. Review of previously conducted environmental or product sampling data that may be related to the cause of the outbreak or reportable disease.

Regulation 6. Information Sharing

Whenever a county, district, or municipal public health agency learns of a case of a reportable disease or an epidemic or communicable disease exposure potentially threatening to public health, it shall notify the Department in a timely manner, usually within the timeframe for reporting in Regulation 1.

The Department shall, in turn, notify the appropriate county, district, or municipal public health agency in a timely manner, usually within the timeframe for reporting in Regulation 1, whenever it learns of a case of a reportable disease or it learns of an epidemic or communicable disease exposure potentially threatening to public health.

These requirements shall not apply if the Department and county, district, or municipal public health agencies mutually agree not to share information on reported cases.

Sharing of medical information on persons with reportable diseases between authorized personnel of the Department and county, district, or municipal public health agencies shall be restricted to information necessary for the treatment, control, investigation, and prevention of epidemic and communicable diseases dangerous to public health.

Regulation 7. Food Handling and Infected Persons

No person, while infected with a disease in a communicable form which can be transmitted by foods or who is afflicted by a boil, or an infected wound, shall work in a food processing, milk producing, milk processing or food service setting in any capacity in which there is a likelihood of such person contaminating food or food contact surfaces with pathogenic organisms or transmitting diseases to other persons. The employer is responsible for ensuring the absence from work of an employee with an infectious disease for which there is evidence of transmission to persons in a food service, food processing, milk producing, or milk processing setting, as determined by the Department.

Regulation 8. Reporting of Diseases Among Animals and Waiver Process for Rabies Inoculation

- A. Every veterinarian, livestock owner, veterinary diagnostic laboratory director, or other person having the care of, or knowledge of, the existence of animals having or suspected of having any disease which may endanger public health such as rabies, anthrax, plague, tularemia, encephalitis, bovine spongiform encephalopathy, etc., shall promptly report the facts to the Department or county, district, or municipal public health agency.
- B. Pursuant to C.R.S. § 25-4-607 (2), a veterinarian licensed in Colorado may issue a written waiver, as provided in this section, exempting an animal from a rabies vaccination order if the veterinarian, in his or her professional opinion, determines the rabies inoculation is contraindicated due to the animal's medical condition. The terms "waiver" and "exemption" as used in this section are interchangeable. A veterinarian may issue a waiver if:
1. The animal to be exempted has a medical condition defined as "a disease, illness, or other pathological state" for which, in the opinion of the exempting veterinarian, a rabies inoculation is contraindicated;
 2. A valid veterinary-client-patient relationship, as defined under C.R.S. § 12-64-103 (15.5), has been established between the veterinarian, owner and animal to be exempted from rabies inoculation;
 3. The veterinarian completes and signs the veterinary section of the Exemption from Rabies Vaccination form provided by the Department;
 4. The animal owner signs the informed consent section of the Exemption from Rabies Vaccination form;
 5. The veterinarian maintains the signed exemption as part of the animal's medical record and provides a copy to the owner;
 6. The exemption issued is limited to the anticipated duration of the animal's medical condition that precludes inoculation; and
 7. The veterinarian provides a copy of the exemption form to the Department or county, district, or municipal public health agency or animal control agency, when requested.
- C. A waiver may not exceed a period of three years from the date of issuance. If the medical condition persists beyond a three year period and, in the professional opinion of a veterinarian licensed in Colorado, the exemption continues to be appropriate, a new waiver may be issued.
- D. Upon receiving a complaint regarding the validity of a rabies inoculation exemption, the executive director or his/her designee(s) may review Exemption from Rabies Vaccination forms and examine the veterinary records pertaining to the medical condition to determine if the medical condition legitimately contraindicates rabies inoculation. If appropriate, the executive director or his/her designee(s) may refer the case to the Board of Veterinary Medicine.

Regulation 9. Confidentiality

All personal medical records and reports held or viewed by the Department or county, district, or municipal public health agency in compliance with these regulations shall be confidential information subject to C.R.S. 25-1-122(4) and C.R.S. 25-4-406(1). Reasonable efforts shall be made by the Department to consult with the responsible physician, other health care provider, or medical facility caring for the patient prior to any further follow-up by Department or county, district, or municipal public health agencies. This information is to be used by the public health agencies as source material for necessary disease control efforts and the development of prevention programs.

Regulation 10. Use of Sterile Needles, and Cleaning and Disinfection of Other Instruments, Probes, and Devices Used by Practitioners of Acupuncture and Adjunctive Therapies (promulgated by the Executive Director)

This regulation is promulgated pursuant to Section 12-29.5-111, C.R.S., which states the Department shall promulgate rules relating to the proper cleaning and sterilization of needles used in the practice of acupuncture and the sanitation of acupuncture offices.

All parts of the premises of an acupuncture establishment shall be kept in a clean, sanitary, neat, and orderly condition at all times. All surfaces (e.g., tables, counters, chairs) used in connection with procedures involving equipment items shall be cleaned and disinfected with a disinfectant registered by the U.S. Environmental Protection Agency for use in health care settings according to labeled instructions. Equipment shall be defined as any needle, instrument, probe, or device utilized by practitioners of acupuncture that punctures the skin or enters tissue of any patient/client.

Prior to and after each treatment of acupuncture, the practitioner shall perform hand hygiene by either washing his/her hands with soap and water or using an alcohol-based hand sanitizer.

Needles and other equipment items that puncture the skin or enter the tissues of any patient/client shall be disposable single-use items that are appropriately discarded immediately after use in an appropriate sharps container, and shall never be used on more than one patient. Equipment that are vehicles for needles and other puncturing devices shall either be disposable, single-use items (preferred), or thoroughly cleaned and disinfected between each patient use according to the manufacturers' instructions. If there are no manufacturers' instructions for how to clean and disinfect the device, the device shall not be used on more than one patient.

Regulation 11. Sexually Transmitted Infections

The Board of Health recognizes that non-sexual transmission may occur for some infections, and in individual cases, based on clinical and epidemiologic information, the responsible physician or other health care provider may conclude the patient's infection was not sexually acquired.

Information concerning testing, treatment, causes, or the prevention of sexually transmitted infections shall be shared, to the minimum extent necessary to achieve the public health purpose, between the appropriate county, district, or municipal public health agency, contracted agency, Ryan White-funded agency, other health agency or person providing direct services related to sexually transmitted infections and the Department, as provided by Section 25-4-406(1)(b), C.R.S.

With respect to Regulation 5, investigations related to sexually transmitted infections will be limited to the information necessary to confirm the diagnosis, treatment, source of infection, and identification of measures that may be used to prevent additional sexually transmitted infections.

The Department shall destroy personal identifying information on all persons with CD4 or viral load results if the investigation subsequent to the report finds no evidence of a sexually transmitted infection.

Section 25-4-411 (1)(a), C.R.S. requires the Department to conduct an anonymous counseling and testing program for persons considered to be at high risk for infection with human immunodeficiency virus (HIV). The provision of confidential counseling and testing for HIV is the preferred screening service for detection of HIV infection. Local boards of health who provide HIV counseling and testing through a contractual agreement with the Department shall consider the need for an anonymous HIV testing option in their jurisdiction, upon petition. The consideration of this option must provide an opportunity for public comment in a public forum, including anonymous testimony presented in writing or through an organization. Local boards of health electing to provide confidential HIV testing with an anonymous option must do so in conjunction with publicly funded HIV testing and counseling projects.

Operational Standards

- A. All persons providing HIV testing and counseling at a publicly funded HIV testing and counseling project in a non-health-care setting will have completed an HIV testing and counseling course approved by the Department.
- B. All persons performing partner services will have completed courses concerning introduction to sexually transmitted disease interviewing and partner notification, and other related courses as specified by the Department.
- C. Of all HIV tests performed at a publicly funded HIV testing and counseling project, 99% of those persons testing HIV positive will receive test results and appropriate post-test counseling related to those test results. Publicly funded HIV testing sites shall make a good faith effort to inform all persons of their test results and shall provide pertinent HIV prevention counseling and referrals.
- D. All persons newly diagnosed with HIV will be referred for partner services. A minimum of 75% of those offered partner services will receive an interview and appropriate referrals. Partner services standards will be determined by the best practices guidance and code of conduct standards for sexually transmitted infection prevention providers developed by the Department. These standards shall be made publicly accessible.
- E. Operational and evaluation standards for HIV testing and counseling sites will be determined by the best practices guidance developed by the Department.
- F. In accordance with Section 25-4-404(2), C.R.S., the Department shall create and maintain guidelines, subject to approval by the Board of Health, concerning the public health procedures described in Sections 25-4-412 and 25-4-413, C.R.S. These guidelines will include code of conduct standards for the delivery of partner services and clients' rights, responsibilities and protections.

Appendix A. Reportable Disease Table

| Disease/Event | Pathogen/Organism | Time* | Reporter¹ | Specimen Source(s)² | Send Clinical Material³ |
|---|--|----------------------|-----------------------------|---------------------------------------|---|
| <i>Acinetobacter baumannii</i> , carbapenem-resistant (CRAB) ^{4-Metro, 5} | Carbapenem-resistant <i>Acinetobacter baumannii</i> (including <i>Acinetobacter baumannii</i> complex and <i>Acinetobacter baumannii-calcoaceticus</i> complex) | 30 days | L | Sterile sites, urine | |
| Acute flaccid myelitis | | 4 days | P | | |
| Animal bites by dogs, cats, bats, skunks, foxes, raccoons, coyotes, or other wild carnivores ^{6,7} | | 24 hrs | P | | |
| Animal bites by mammals not listed above ⁶ | | 4 days | P | | |
| Anthrax ⁶ | <i>Bacillus anthracis</i> | Immed | L & P | All | Required |
| Arboviral Disease | Eastern equine encephalitis, Japanese encephalitis, LaCrosse encephalitis virus, California encephalitis serogroup, Powassan virus, St. Louis encephalitis virus and Western equine encephalitis virus | 4 days | L | All | |
| Botulism ⁶ | <i>Clostridium botulinum</i> | Immed | L & P | All | |
| Brucellosis ⁶ | <i>Brucella</i> species | 4 days | L & P | All | Required |
| Campylobacteriosis | <i>Campylobacter</i> species | 4 days | L & P | All | |
| <i>Candida auris</i> ⁸ | <i>Candida auris</i> , <i>Candida haemulonii</i> | Immed | L & P | All | Required |
| Candidemia ^{4-Metro} | <i>Candida</i> species | 30 days | L | Blood | Requested |
| Catheter-associated urinary tract infection (CAUTI) ⁹ | Any | Per CMS ⁹ | P | Urine | |
| Chancroid | <i>Haemophilus ducreyi</i> | 4 days | L & P | All | |
| Chikungunya | Chikungunya virus | 4 days | L | All | |
| Chlamydia | <i>Chlamydia trachomatis</i> | 4 days | L & P | All | |
| Cholera ⁶ | <i>Vibrio cholerae</i> | Immed | L & P | All | Required |
| CJD and other transmissible spongiform encephalopathies (TSEs) ⁶ | | 4 days | P | | |
| <i>Clostridium difficile</i> infection ^{4-Metro} | <i>Clostridium difficile</i> | 30 days | L | All | Requested ¹⁰ |
| Colorado tick fever | Colorado tick fever virus | 4 days | L | All | |
| Cryptosporidiosis | <i>Cryptosporidium</i> species | 4 days | L & P | All | |

| Disease/Event | Pathogen/Organism | Time* | Reporter ¹ | Specimen Source(s) ² | Send Clinical Material ³ |
|---|---|---------------|-----------------------|---------------------------------|-------------------------------------|
| Cyclosporiasis | <i>Cyclospora</i> species | 4 days | L & P | All | |
| Dengue | Dengue virus | 4 days | L | All | |
| Diphtheria ⁶ | <i>Corynebacterium diphtheriae</i> | Immed | L & P | All | Required |
| Encephalitis ⁶ | | 4 days | P | All | |
| Enterobacteriaceae, carbapenem-resistant (CRE) ¹¹ | Carbapenem-resistant <i>Escherichia coli</i> , <i>Klebsiella</i> species, <i>Enterobacter</i> species, <i>Citrobacter</i> species, <i>Serratia</i> species, <i>Raoultella</i> species, <i>Providencia</i> species, <i>Proteus</i> species, <i>Morganella</i> species, and any carbapenemase-producing Enterobacteriaceae of any genus and species | 4 days | L | All | Requested ¹⁰ |
| Enterobacteriaceae, extended-spectrum beta-lactamase (ESBL) ⁴ Boulder, 12 | <i>Escherichia coli</i> and <i>Klebsiella</i> species | 4 days | L | All | |
| Escherichia coli O157:H7 and Shiga toxin-producing Escherichia coli ¹³ | Shiga toxin-producing <i>Escherichia coli</i> ¹³ | 4 days | L & P | All | Required |
| Giardiasis | <i>Giardia lamblia</i> | 4 days | L & P | All | |
| Gonorrhea, any site | <i>Neisseria gonorrhoeae</i> | 4 days | L & P | All | |
| Group A streptococci ^{14, 4-Metro} | <i>Streptococcus pyogenes</i> | 4 days | L | Sterile only | Required |
| Group B streptococci ^{4-Metro} | <i>Streptococcus agalactiae</i> | 30 days | L | Sterile only | Required |
| <i>Haemophilus influenzae</i> | <i>Haemophilus influenzae</i> | 1 working day | L & P | Sterile only | Required |
| Hantavirus disease ⁶ | Hantavirus | 4 days | L & P | All | |
| Healthcare-associated infections ¹⁶ | | 4 days | P | | |
| Hemolytic uremic syndrome if < 18 years ⁶ | | 4 days | P | | |
| Hepatitis A ⁶ | Hepatitis A virus (+IgM anti-HAV) | 1 working day | L & P | All | |
| Hepatitis B | Hepatitis B virus (+HBsAg, +IgM anti-HBc, +HBeAg, or +HBV DNA) | 4 days | L & P | All | |
| Hepatitis C | Hepatitis C virus (+ serum antibody titer, including signal to cut-off ratio, or more specific + tests) | 4 days | L & P | All | |
| Hepatitis, other viral | | 4 days | P | | |

| Disease/Event | Pathogen/Organism | Time* | Reporter ¹ | Specimen Source(s) ² | Send Clinical Material ³ |
|---|---|----------------------|--|---------------------------------|-------------------------------------|
| Human immunodeficiency virus (HIV)/ acquired immunodeficiency syndrome (AIDS) | <ul style="list-style-type: none"> • Human immunodeficiency virus • CD4 counts (any value) • HIV viral load (any value) • <i>HIV genotype</i> | 4 days | <ul style="list-style-type: none"> • L & P • L & P • L & P • L | All | |
| Influenza-associated death if < 18 years | | 4 days | P | | |
| Influenza-associated hospitalization | | 4 days | P | | |
| Legionellosis | <i>Legionella</i> species | 4 days | L & P | All | |
| Leprosy (Hansen's Disease) | | 4 days | P | | |
| Listeriosis | <i>Listeria monocytogenes</i> | 4 days | L & P | All | Required |
| Lyme disease | <i>Borrelia burgdorferi</i> | 4 days | L & P | All | |
| Lymphogranuloma venereum (LGV) | <i>Chlamydia trachomatis</i> | 4 days | L & P | All | |
| Malaria ⁶ | <i>Plasmodium</i> species | 4 days | L & P | All | |
| Measles (rubeola) ⁶ | Measles virus | Immed | L & P | All | |
| Meningococcal Disease ⁶ | <i>Neisseria meningitidis</i> or gram-negative diplococci | Immed | L & P | Sterile only | Required |
| Methicillin-Resistant <i>Staphylococcus aureus</i> (MRSA) bacteremia ⁹ | Methicillin-Resistant <i>Staphylococcus aureus</i> (MRSA) | Per CMS ⁹ | P | Blood | |
| Mumps ⁶ | Mumps virus (acute infection) | 4 days | L & P | All | |
| Outbreaks - known or suspected of all types - including those transmitted from food, water, person-to-person, and related to a health care setting ⁶ | | Immed | L & P | | |
| Pertussis (whooping cough) ⁶ | <i>Bordatella pertussis</i> | 1 working day | L & P | All | Requested ¹⁰ |
| Plague ⁶ | <i>Yersinia pestis</i> | Immed | L & P | All | Required |
| Poliomyelitis ⁶ | Poliovirus | Immed | L & P | All | |
| Pseudomonas, carbapenem-resistant ¹⁷ | <i>Pseudomonas aeruginosa</i> | 4 days | L | All | Requested ¹⁰ |
| Psittacosis | <i>Chlamydia psittaci</i> | 4 days | L & P | All | |
| Q fever ⁶ | <i>Coxiella burnetii</i> | 4 days | L & P | All | |
| Rabies: human (suspected) ⁶ | Rabies virus (Lyssavirus) | Immed | L & P | All | |

| Disease/Event | Pathogen/Organism | Time* | Reporter¹ | Specimen Source(s)² | Send Clinical Material³ |
|---|--|---------------|-----------------------------|---------------------------------------|---|
| Rickettsiosis | <i>Rickettsia</i> species, including Rocky Mtn spotted fever and typhus groups | 4 days | L & P | All | |
| Rubella (acute infection) ⁶ | Rubella virus | 1 working day | L & P | All | |
| Rubella (congenital) ⁶ | Rubella virus | 4 days | L & P | All | |
| Salmonellosis | <i>Salmonella</i> species | 4 days | L & P | All | Required |
| Severe or novel coronavirus | Severe acute respiratory syndrome coronavirus (SARS-CoV), Middle East respiratory syndrome coronavirus (MERS-CoV) | Immed | L & P | All | |
| Shigellosis | <i>Shigella</i> species | 4 days | L & P | All | Required |
| Smallpox ⁶ | Variola virus (Orthopox virus) | Immed | L & P | All | |
| <i>Staphylococcus aureus</i> , Vancomycin-resistant | Vancomycin-resistant <i>Staphylococcus aureus</i> | 4 days | L | All | Required |
| Streptococcal toxic shock syndrome | <i>Streptococcus pyogenes</i> | 4 days | P | All | Required ¹⁵ |
| <i>Streptococcus pneumoniae</i> | <i>Streptococcus pneumoniae</i> | 4 days | L | Sterile only | Required ¹⁵ |
| Syphilis ⁶ | <i>Treponema pallidum</i> | 1 working day | L & P | All | |
| Tetanus ⁶ | <i>Clostridium tetani</i> | 4 days | P | All | |
| Tick-borne relapsing fever ⁶ | <i>Borrelia</i> species | 4 days | L & P | All | |
| Toxic shock syndrome (non-streptococcal) | | 4 days | P | | |
| Trichinosis ⁶ | <i>Trichinella</i> species | 4 days | P | All | |
| Tuberculosis disease (active) ⁶ | <i>Mycobacterium tuberculosis</i> ¹⁸ | 1 working day | L & P | All | See Reg 4F |
| Tularemia ⁶ | <i>Francisella tularensis</i> | 1 working day | L & P | All | Required |
| Typhoid fever ⁶ | <i>Salmonella</i> Typhi | 1 working day | L & P | All | Required |
| Varicella (chicken pox) ⁶ | Varicella virus | 4 days | L & P | All | |
| Vibriosis | <i>Vibrio</i> species, non-cholera | 4 days | L | All | Required |
| Viral hemorrhagic fever | Crimean-Congo hemorrhagic virus, Ebola virus, Lassa fever virus, Lujo virus, Marburg virus, Guanarito virus, Junin virus, Machupo virus, Sabia virus | Immed | L & P | All | Required |

| Disease/Event | Pathogen/Organism | Time* | Reporter ¹ | Specimen Source(s) ² | Send Clinical Material ³ |
|---|------------------------------------|--------|-----------------------|---------------------------------|-------------------------------------|
| West Nile virus (acute infection, IgM+) | West Nile virus | 4 days | L | All | |
| Yellow fever | Yellow fever virus | 4 days | L | All | |
| Yersiniosis ^{4-Seven} | <i>Yersinia non-pestis</i> species | 4 days | L | All | Required |
| Zika virus | Zika virus | 4 days | L | All | |

All cases are to be reported with patient's name, date of birth, sex, race, ethnicity, and address (including city and county) and name and address of responsible physician or other health care provider; and such other information as is needed in order to locate the patient for follow up. In addition, all laboratory information reported shall include specimen accession number.

*Time: 1) "Immed" = by phone, within 4 hours of suspected diagnosis. 2) Unless the term "working day" is specified, "days" refers to calendar days.

- 1 Reporter: The party responsible for reporting is indicated by one of the following: L = Laboratory (whether or not associated with a hospital; by out-of-state laboratories that maintain an office or collection facility in Colorado; and by in-state laboratories which send specimens to an out-of-state laboratory referral laboratory), P = health care provider or other person knowing of or suspecting a case (including but not limited to coroners, persons in charge of hospitals or other institutions licensed by the Department (or their designees), persons in charge of schools (including nursing staff) and licensed day care centers), L & P = Both.
- 2 Specimen sources: A condition is reportable when the pathogen is isolated or detected from any specimen source unless where otherwise indicated. A normally "sterile site" is defined as blood, Cerebrospinal fluid (CSF), pleural fluid (includes chest fluid, thoracentesis fluid), peritoneal fluid (includes abdominal fluid, ascites), pericardial fluid, bone (includes bone marrow), joint or synovial fluid, needle aspirate or culture of any specific joint, internal body sites (sterilely obtained from biopsy/tissue/abscess/aspirate/fluid/swab from lymph node, brain, heart, liver, spleen, vitreous fluid, kidney, pancreas, vascular tissue, or ovary). Skin and skin abscesses are not considered sterile sites.
- 3 Testing laboratories shall routinely submit bacterial culture isolates or patient clinical material that yields positive findings to the Department, Laboratory Services Division. The isolate or clinical material shall be received at the Department, Laboratory Services Division no later than one working day after the observation of positive findings.

Clinical material is defined as: (i) A culture isolate containing the infectious organism for which submission of material is required, or (ii) If an isolate is not available, material containing the infectious organism for which submission of material is required, in the following order of preference: (A) a patient specimen; (B) nucleic acid; or (C) other laboratory material. All specimens shall be accompanied by the following information: (a) Patient's name, date of birth, sex, race, ethnicity, and address (b) Name and address of responsible physician or other health care provider (c) Name of disease or condition (d) Laboratory information - test name, collection date and specimen type.

- 4 Condition reportable only among residents of a specific catchment area.
 - 4-Metro Condition reportable only among residents of Denver Metropolitan Area (Adams, Arapahoe, Denver, Douglas and Jefferson Counties).
 - 4-Seven Condition reportable only among residents of seven-county Denver Metropolitan Area (Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas and Jefferson Counties).
 - 4-Boulder Condition reportable only among residents of Boulder County.
- 5 *Acinetobacter baumannii* (including *Acinetobacter baumannii* complex and *Acinetobacter baumannii-calcoaceticus* complex) that are intermediate or resistant to at least one carbapenem (including imipenem, meropenem, or doripenem) isolated from a normally sterile site or urine.
- 6 Report shall be based on the diagnosis or suspected diagnosis of the attending physician or other health care provider, whether or not supporting laboratory data are available.
- 7 For animal bites by dogs, cats, bats, skunks, foxes, raccoons, coyotes, and other wild carnivores, the name and locating information of the owner of the biting animal shall be reported, if known, by the health care provider Reporter.
- 8 *Candida auris* identified, or any suspected *Candida auris* (e.g., *Candida haemulonii* identified by a laboratory instrument not equipped to detect *Candida auris*).
- 9 Reporting requirement is fulfilled through the Department's access to the National Healthcare Safety Network (NHSN) for those health care facilities that are required to report catheter-associated urinary tract infection (CAUTI) and/or methicillin-resistant *Staphylococcus aureus* (MRSA) bacteremia to the Centers for Medicare & Medicaid services (CMS). In these instances these health care facilities shall confer rights to the Department to access the NHSN data for these conditions.
- 10 Clinical material is requested from selected laboratories.
- 11 *Escherichia coli*, *Klebsiella* species, *Enterobacter* species, *Citrobacter* species, *Serratia* species, and *Raoultella* species that are resistant to at least one carbapenem (including imipenem, meropenem, doripenem, or ertapenem); or *Providencia* species, *Proteus* species, *Morganella* species that are resistant to at least one carbapenem (including meropenem, doripenem, or ertapenem; but not including imipenem); or Enterobacteriaceae of any genus and species that test positive for production of carbapenemase (e.g., KPC, NDM, VIM, IMP, OXA-48) demonstrated by a recognized test (e.g., modified carbapenem inactivation method [mCIM], polymerase chain reaction [PCR], nucleic acid amplification test [NAAT], metallo-beta-lactamase test, modified-hodge test [MHT], carba-NP).
- 12 *Escherichia coli* and *Klebsiella* species resistant to at least one extended-spectrum cephalosporin (ceftazidime, cefotaxime or ceftriaxone) or *Escherichia coli* and *Klebsiella* species that test positive for production of an extended-spectrum beta-lactamase (EBSL) demonstrated by a recognized test (e.g., broth microdilution, disk diffusion).
- 13 This includes any shiga-toxin test or O157 antigen test that is positive, even if no culture is performed. If the laboratory does not have the capacity to perform H (flagellar) antigen tests, then *Escherichia coli* O157 should be reported.
- 14 If Group A streptococci is isolated from a wound or surgical tissue/specimen and is accompanied by necrotizing fasciitis or streptococcal toxic shock syndrome, the case shall be reported and the isolate shall be submitted.

- 15 Clinical material shall be submitted from laboratories when the material is from residents of the five-county metro area (Adams, Arapahoe, Denver, Douglas and Jefferson counties).
- 16 Reportable only by facilities that are voluntarily participating in applied public health projects. Appendix B includes a definition of healthcare-associated infections, a list of included infections, and a list of included health facility types.
- 17 *Pseudomonas aeruginosa* resistant to at least one of the following carbapenems: imipenem, meropenem, or doripenem; OR *Pseudomonas aeruginosa* that tests positive for production of a carbapenemase (i.e., KPC, NDM, VIM, IMP, OXA).
- 18 Including (+) AFB sputum smear.

Appendix B. Healthcare-Associated Infections

Definition of a healthcare-associated infection: a localized or systemic condition that results from an adverse reaction to the presence of an infectious agent or its toxins that was not present or incubating at the time of admission to the health facility.

Healthcare-associated infections include:

- Bloodstream infections
- Bone and joint infections
- Cardiovascular system infections
- Central nervous system infections
- Eye, ear, nose, throat, or mouth infections
- Gastrointestinal system infections
- Lower respiratory tract infections other than pneumonia
- Pneumonia
- Reproductive tract infections
- Skin and soft tissue infections
- Surgical site infections
- Systemic infections
- Urinary tract infections

Health facility types include:

- Ambulatory surgical centers
- Birth centers
- Convalescent centers

Dialysis treatment clinics/End-stage renal disease facilities

Hospices

Hospitals (general, psychiatric, rehabilitation, maternity, and long-term care)

Long-term care facilities

Outpatient clinics (community clinics; community clinics with emergency centers; rural health clinics; outpatient rehabilitation facilities; outpatient physical therapy, occupational therapy or speech pathology services; and private physician offices)

Editor's Notes

History

Regulations 1, 3 eff. 05/30/2007.

Regulation 3 eff. 03/30/2008.

Regulation 8 eff. 03/02/2010.

Regulations 1, 3, 11 eff. 04/14/2010.

Regulations 1, 3, Appendix A eff. 12/30/2010.

Regulations 1, 3 eff. 11/30/2012.

Regulations 1-3, 5, 9 eff. 10/15/2014.

Regulations 1-4, 8, 10, Appendices A-B eff. 11/14/2015.

Entire rule eff. 05/15/2017.

Entire rule eff. 07/15/2018.