

STATE OF COLORADO

Bill Owens, Governor
Jane E. Norton, Executive Director

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

4300 Cherry Creek Dr. S. Laboratory and Radiation Services Division
Denver, Colorado 80246-1530 8100 Lowry Blvd.
Phone (303) 692-2000 Denver, Colorado 80230-6928
TDD Line (303) 691-7700 (303) 692-3090
Located in Glendale, Colorado

<http://www.cdphe.state.co.us>



Colorado Department
of Public Health
and Environment

Procedures for the Submission of Laboratory Specimens for Rabies Analysis

BACKGROUND: Two laboratories perform rabies confirmation testing in Colorado: the Colorado Department of Public Health & Environment (CDPHE) and the Colorado State University Diagnostic Laboratory (CSU). Both utilize the fluorescent rabies antibody (FRA) technique for testing specimens. In addition, the CDPHE conducts intra-cerebral inoculation of weanling mice, on animals involved in human exposure. Local health departments and animal control agencies can be contacted for assistance in submitting specimens.

DOMESTIC ANIMALS: The submission of domestic animals (dogs, cats, ferrets, livestock, etc.) to the CDPHE is limited to those involved in human exposure. Dogs and cats that have bitten a person are required, under Colorado law, to be held for a 10-day observation period, as opposed to euthanizing and testing the animal. Any exception to this requirement must have prior approval from the CDH. If the biting animal remains healthy during the 10-day quarantine, the risk of rabies exposure is eliminated and the animal can be euthanized without the need for rabies testing.

WILDLIFE: Appropriate wild animals specimens are carnivorous, terrestrial mammal species and bats involved in human or domestic pet exposure. With prior approval bats, skunks or wildlife exhibiting neurological symptoms are accepted for surveillance purposes. Rodents and lagomorphs (rabbits and hares), whether wild or domestic, are not involved in rabies transmission, are rarely ever infected and are not accepted for rabies testing at CDPHE.

SPECIMEN PREPARATION: To insure a valid test an appropriate specimen must be submitted. For bats the entire animal should be sent. For dogs, cats, skunks, raccoons and similarly sized animals, the **head must be removed** and sent. For livestock, the brain should be removed and submitted. Removal of heads or brains should only be done by persons adequate protective equipment to protect them from rabies virus exposure. Specimens must be refrigerated immediately and held at 35-40°F until shipped. **DO NOT FREEZE OR PLACE THE SPECIMEN IN A PRESERVATIVE SUCH AS FORMALIN.**

SHIPMENT: Specimens should be double-bagged in plastic, placed in an inner waterproof container with cold packs (don't use dry or wet ice), and then placed in an outer shipping container. It is the responsibility of the submitting agency to insure no leakage occurs during shipment as this causes great concern for parties handling the package and may result in the loss of delivery service. A Rabies Epidemiology lab form, available from local health departments, animal control agencies or the CDH, should accompany each specimen. Multiple specimens in the same shipment each need a separate form and must be clearly identified. The package should be marked as a "biological specimen" and shipped by bus, air freight or overnight delivery. **DO NOT SEND BY MAIL** unless overnight delivery is guaranteed. The CDH must be advised of all incoming specimens by calling (303) 692-2700 during normal business hours. **Address packages to: COLORADO DEPARTMENT OF HEALTH; ATTN: VIRUS LAB; 8100 Lowry Blvd; Denver, CO 80230-6928.**

TEST RESULTS AND CONSULTATION: Specimens received by the laboratory before 11 a.m. on a regular business day will be processed that day. Those received after 11 a.m. will be run the following workday unless an emergency involving human exposure exists. Positive rabies tests are telephoned immediately. Due to volume, negative results are reported by mail. Submitting agencies can telephone the CDPHE lab for results during regular business hours at (303)-692-3299. The CSU Diagnostic Lab can be reached at (970) 491-1281. For consultation on rabies exposure, testing, bite follow-up and reporting, and rabies pre- and post-exposure prophylaxis contact the Disease Control and Environmental Epidemiology Division at **(303) 692-2700** during business hours or **(303)-370-9395** for after-hour, weekend and holiday emergencies.