

RABIES, HUMAN & ANIMAL

1. **Agent:** Rabies virus.
2. **Identification:**
 - a. **Symptoms:** An acute encephalomyelitis of mammals, especially carnivores, characterized by central nervous system involvement leading to paralysis and death.
 - b. **Differential Diagnosis:** Other causes of encephalitis, tetanus, tick paralysis, ascending myelitis, lead encephalopathy and various forms of acute meningitis.
 - c. **Diagnosis:** Suggested by a history of animal exposure and confirmed by recovery of virus from saliva and salivary gland of an infected person. Fluorescent rabies antibody (FRA) examination of brain section of the sacrificed animal or corneal impression and/or skin biopsy on suspect human case.
3. **Incubation:** In humans, from 10 days to greater than 1 year; in the majority of cases, 14 to 56 days. Period tends to shorten as severity of exposure increases. In animal, generally 15 to 50 days, but variable and in rare cases even several months or longer.
4. **Reservoir:** Wild and domestic *Canidae*, including dog, coyote, fox, wolf; also bobcat, skunk, raccoon, mongoose, ferret, and other biting carnivores and bats.
5. **Source:** Introduction of virus-laden saliva into bite wound or (rarely) by saliva entering scratch, other break in skin, or mucous membranes.
6. **Transmission:** Normally by bite or lick. Transmission from person to person remotely possible. Transmission can occur by ingestion of infected material or by inhalation of contaminated air (e.g., in caves where bats roost). Transplant of corneas from unsuspected rabies cases.
7. **Communicability:** In dogs and cats for 3-5 days before onset of clinical signs and during course of disease. Wild animals such as skunks, bats, and foxes may have virus present in saliva for long periods before onset of clinical symptoms.
8. **Specific Treatment:** None. See **Recommendations for Use and Storage of Immunobiologics and Other Prophylactic Agents (B-71)** and **Control of Communicable Diseases Manual** for specific instructions.
9. **Immunity:** None known. Uniformly fatal.

REPORTING PROCEDURES

1. **Reportable.** *California Code of Regulations*, Title 17, Sections 2500, 2604, and 2606. Los Angeles County Ordinance 10.72.010.
 - a. Immediately telephone report of human case or suspect to Morbidity Unit.
 - b. Call ACDC. After working hours, contact Administrative Officer of the Day through County Operator.
 - c. Immediately report wild or foreign animal bites to Veterinary Public Health.
 - d. For suspected animal cases of rabies, call Veterinary Public Health.
2. **Report Form: HUMAN RABIES CASE FORM (DHS 8526, 9/99 fillable).**
3. **Epidemiologic Data:**
 - a. Date person bitten; severity and location of bite; first signs of abnormal animal behavior.
 - b. Location and identification of biting animal and owner.
 - c. History of circumstances of bite, e.g., was animal provoked, was an attempt made to hold or pick up an injured animal. Feeding or playing with wildlife.
 - d. Vaccination status of biting animal.
 - e. Recent travel history of case and biting animal.
 - f. Occupational association with domestic and wild animals.
 - g. Vaccination status of case and other exposed contacts.

CONTROL OF CASE, CONTACTS & CARRIERS

Consult with ACDC regarding investigation.

HUMAN CASE:

1. **Precaution:** Contact isolation, especially for saliva and respiratory secretions, for duration of illness.

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2. Search for persons and other animals bitten or exposed to saliva.

CONTACTS: Anyone in contact with saliva.

The same guidelines are used for treatment of persons significantly exposed by animal bite as those exposed to human case's saliva.

CARRIERS: Not applicable.

PREVENTION-EDUCATION

1. Vaccinate dogs and cats; recommend pre-exposure prophylactic vaccination for animal control officers, veterinarians, zoo keepers, etc.
2. Report all animal bites to Veterinary of Public Health (323) 730-3723 and local animal control agency.
3. Animals manifesting strange behavior should be reported to animal control authorities.
4. Do not pick up or handle sick or strangely acting animals, especially bats.
5. Avoid exposure to carnivorous wildlife. Do not keep wild animals as pets.
6. Warn medical personnel of hazards of saliva and importance of universal infection control precautions.
7. Be sure owner of biting dog understands quarantine instructions.

DIAGNOSTIC PROCEDURES

Consult with ACDC and Virology Section of Public Health Laboratory.