RABIES, HUMAN & ANIMAL

1. **Agent**: Rabies virus.

2. **Identification**:
   a. **Symptoms**: An acute encephalomyelitis of mammals, 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, usually 3-8 weeks, rarely as short as 9 days or as long as 7 years. Period tends to shorten as severity of exposure increases. In animals, 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. In California the most common animals are bats, skunks, and foxes.

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 from an infected animal. Transmission from person to person is theoretically 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.

9. **Immunity**: None known. Uniformly fatal.

**REPORTING PROCEDURES**

Report immediately case or suspected case (Title 17, Section 2500, *California Code of Regulations*).

a. Immediately telephone report of human case or suspect to Public Health Services Communicable Disease Program at (209) 468-3822.

b. After working hours, contact Public Health through San Joaquin General Hospital Operator at (209) 468-6000.

c. Immediately report wild or domestic animal bites to local animal control agency. See list of Animal Control agencies in Section 1.

d. For suspected animal cases of rabies, call local animal control agency and Public Health Services.

**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 if domestic animal.

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 domestic 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

HUMAN CASE:

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

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 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

Testing of domestic and wild animals is available through the San Joaquin County Public Health Laboratory. Refer to the Laboratory Services Manual in Section 2, Disease Reporting.