

## VACCINATION OF ANIMALS

In California, all dogs four months or older are required to be vaccinated for rabies. It is also recommended that cats be vaccinated for rabies. It is neither economically feasible nor justified from a public health standpoint to vaccinate all livestock against rabies. However, consideration should be given to the vaccination of livestock, especially animals that are particularly valuable and/or may have frequent contact with humans beings.

The control of rabies among wildlife reservoirs is difficult. There are no approved vaccines for wildlife. Because of the risk of rabies in wild animals (especially raccoons, skunks, coyotes, foxes, and bats), it is strongly recommend they not be kept as pets. Vaccination of free-ranging wildlife or selective population reduction may be useful in some situations, but the success of such procedures depends on the circumstances surrounding each rabies outbreak. This is done with various baits and has been used in Texas and on the east coast.

Captive wildlife and zoo animals not completely excluded from all contact with rabies vectors can become infected. Moreover, wild animals may be incubating rabies when initially captured; therefore, wild-caught animals susceptible to rabies should be quarantined for a minimum of 180 days before exhibition. Employees who work with animals at such facilities should receive pre-exposure rabies immunization. The use of pre- or post-exposure rabies immunizations of employees who work with animals at such facilities may reduce the need for euthanasia of captive animals.

### **Domestic Animal Rabies Vaccination:**

**Rabies Vaccine Administration (HSC 121690, 121700):** Animal rabies vaccine may be administered only by a California-licensed veterinarian, or by veterinary technicians under the direct supervision (ie. veterinarian on premise) of a California-licensed veterinarian. This policy serves to assure the public that the animal has been properly vaccinated. In addition, the sale of animal rabies vaccines is restricted to licensed veterinarians or government agencies conducting rabies control programs.

**Accidental Human Exposure to Rabies Vaccine:** Accidental inoculation may occur during administration of an animal rabies vaccine. Such exposure to inactivated rabies vaccine represents no rabies hazard. Human rabies has not resulted from exposure to licensed modified live virus vaccine in this country. Currently, no modified live virus products are licensed for use in the United States.

**Canine Rabies Vaccination (HSC 121690, 17 CCR 2606.4):** The owner of every dog over the age of four months shall ensure that his or her pet is currently

vaccinated for rabies by a licensed veterinarian and secure a license for the pet as provided by local city or county ordinance.

By 30 days post-primary immunization, a peak rabies antibody level is achieved. At this time, the animal can be considered immunized. Dogs less than four months of age must be confined at home or kept under close leash supervision by the owner. Dogs over four months of age entering the State must be accompanied by a current rabies vaccination certificate.

Regardless of the age of the animal at primary immunization, a second rabies vaccination should be given one year later, and the three year booster schedule followed thereafter.

**Canine Rabies Vaccines Approved for Use in CA (17 CCR 2650):** Only canine rabies vaccines licensed by USDA and approved by the Department of Health Services can be used in the California Rabies Control Program (see Part III of the compendium).

**Route of Inoculation:** Unless otherwise specified on the product label or package insert, all canine rabies vaccines must be administered intramuscularly at one site in the thigh. Subcutaneous administration of IMRAB 3, RABVAC 3, DEFENSOR 3, and RABDOMUN just behind the upper shoulder is approved according to the package insert. For species other than the domestic dog, refer to the vaccine label.

**Livestock Rabies Vaccination** There are limited economic or public health justifications to vaccinate all livestock against rabies. However, vaccination of horses and livestock should be considered in areas where wildlife rabies is highly endemic, especially for valuable animals, for horses kept in boarding stables or racetracks, or for other animals having frequent contact with humans.

**Wildlife Vaccination and "Hybrids":** Vaccination of non-domestic animals or wildlife is not routinely recommended since no rabies vaccine is licensed for use in animal species other than dogs, cats, cattle, horses, sheep, and ferrets in the United States. The effectiveness of rabies vaccination in other species including domestic-wild animal hybrids is unknown. Because of their susceptibility to rabies, wild or nondomestic carnivores, and bats should not be kept as pets. Newly imported exhibit animals that are susceptible to rabies should be quarantined for at least 180 days. Such wild animals may be incubating rabies when captured. Due to the special rabies risk, the trapping, transport, sale or exchange of skunks in California is prohibited. Certain carnivore and bat species representing a high risk for rabies may not enter California without an import permit from the Department of Health Services.

Vaccination of the offspring of domestic dogs or cats bred to wild animals (e.g., wolf hybrids, civet-cat hybrids) and their subsequent generations may afford

some rabies protection to the animal. However, no rabies vaccine is currently licensed for use in wild animals or in wild-domestic animal hybrids. Complete rabies vaccine challenge and viral shedding studies have not been conducted with these animals. Vaccination of these animals is considered an extra label use of a biologic. There is no definitive evidence that the vaccine is effective in these animals.

State law does not prohibit the use of canine rabies vaccines in domestic dog-wolf hybrids. However, it is illegal to license these animals **as dogs** under the California Rabies Control Program. A rabies vaccine certificate issued for a vaccinated hybrid must identify the animal as a "wolf hybrid." Local jurisdictions are free to institute wolf hybrid licensing programs and issue such licenses in order to identify these animals in the community. Canine or feline hybrids previously rabies vaccinated cannot be recognized as "rabies immunized" in the event of a human bite or contact with a rabid or suspect rabid animal. The hybrid will be considered a "wild animal" under these circumstances, and managed accordingly.

**Canine Licensing and Vaccination Procedure (17 CCR 2606.4):** The vaccination of all dogs four months of age or older is a prerequisite to licensing. Completion of the licensing procedure consists of issuing a license tag or vaccination tag bearing the license data only after presentation of a current valid official rabies vaccination certificate. Official rabies vaccination certificates must show the following:

(a) Name, address and phone number of the dog's owner; (b) description of the dog, including breed, color, age, and sex; (c) date of immunization; (d) type of rabies vaccine administered; (e) name of the manufacturer, product, and lot number of the rabies vaccine used.

Each certificate must bear the signature of the veterinarian administering the vaccination or a signature authorized by him or her. The certificate must be stamped, printed or typed with the vaccinating veterinarian's name, address and telephone number.

**Rabies Immunization Exemptions:** A rabies immunization exemption may be issued by the local health officer upon the written recommendation of a California-licensed veterinarian where illness or a veterinary medical condition in a dog warrants. The exempted animal shall be maintained in strict rabies quarantine, under conditions that are at the discretion of the local health officer, until such time as the medical condition has resolved, and the animal can be rabies immunized.

**"Actual Cost" Rabies Vaccination Clinics (HSC 121690):** Each city, city and county, or county shall provide or arrange for canine rabies vaccination clinics in the community. No charge in excess of actual cost may be made for vaccination

administration. The current Department of Health Services approved "Actual Cost" vaccination fee is \$5.00.

**Feline Rabies:**

Cats are now the most frequently reported domestic rabid animals in the United States. Because of the rabies risk to cats and their owners, feline rabies vaccination is strongly recommended for ALL cats. An approved feline triennial rabies vaccine should be administered at three months of age (four months of age in unincorporated areas of Los Angeles County), twelve months later, and every 36 months thereafter. (See Part III of the Compendium). Feline licensing and identification programs at the local level are strongly endorsed by VPHS.