



Rabies Prevention and Control in Florida, 2008



FLORIDA DEPARTMENT OF HEALTH
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Executive Summary

The purpose of this compendium is to provide recommended policies and procedures for rabies prevention and control in Florida. It is intended primarily for use by county health department staff, animal control specialists, veterinarians, health care providers and others with related responsibilities or interests. This publication, while produced and distributed by the Florida Department of Health, Division of Environmental Health, has been developed by a multidisciplinary *Florida Rabies Advisory Committee* that represents the major agencies, institutions and organizations involved with rabies prevention and control in the state.

Much of the information presented has been derived from materials previously published by the department as an operational manual (*Rabies and Animal Bite Investigation*, HRSM 150-10, 1987), an informational monograph (*Rabies in Florida*, Burrige, Sawyer and Bigler, 1986) and various policy statements issued over the past decade. This document is referenced as procedural guidelines in 64D-3 of the Florida Administrative Code. Procedural guidelines recommended in this document follow national standards published in the annual *Compendium of Animal Rabies Control* by the National Association of State Public Health Veterinarians. All material included on the management of human exposure and treatment of rabies is consistent with recommendations published in "Rabies Prevention - United States, 1999 Recommendations on Immunization Practices (ACIP)" (MMWR;48:1-21) and *Control of Communicable Diseases Manual* (Heymann, APHA, 2004, 18th edition).

Specific areas addressed are coordination between relevant organizations, agencies and institutions; clinical descriptions of disease symptoms in animals and humans; protocols for proper handling, packing and shipping and testing of animals for rabies examination; confinement and management of biting animals; disposition of animals exposed to rabies; investigation of animal bites to people; human pre-exposure immunization and post-exposure prophylaxis; access to human rabies vaccine; and guidelines for epidemic control measures.

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Rabies Advisory Committee (RAC) Position Statements

Translocation of Raccoons and Other Wild Mammals (updated 1/07)

The translocation of raccoons from Florida to Virginia in the early 1970s is considered a major factor responsible for the expanding epidemic of animal rabies in the eastern part of the country. Within the state, the translocation of nuisance raccoons accounts for epizootics in counties previously unburdened by animal rabies problems.

The Florida Rabies Advisory Committee supports the Florida Fish and Wildlife Conservation Commission (FWC) rule (68 A-24.005, Florida Administrative Code (FAC).) that prohibits the transport of wild-trapped, live raccoons within, into or from Florida unless authorized by FWC permit due to the high prevalence of rabies in this species. The RAC strongly discourages the translocation of other rabies vector species.

Further, translocation of any wild animal species raises the possibility of the spread of other zoonotic diseases (e.g. plague) and should be discouraged.

Multi-year Rabies Vaccinations for Dogs and Cats (updated 1/08)

The Rabies Advisory Committee adopts the recommendation of the National Association of Public Health Veterinarians' Compendium of Animal Rabies Control, 2008 in regard to 3-year rabies vaccines for dogs and cats:

"Vaccines used in state and local rabies control programs should have at least a 3-yr duration of immunity. This constitutes the most effective method of increasing the proportion of immunized dogs and cats in any population."

Additionally, the Rabies Advisory Committee considers animals vaccinated by a licensed veterinarian using a USDA-approved multi-year vaccine to be currently vaccinated in accordance with the schedule for which the vaccine is licensed. Local governments cannot mandate revaccination of currently vaccinated animals except in instances involving post-exposure booster for rabies (Florida Statutes (F.S.) 828.30).

Managing Feral/Unowned/Stray Cats (updated 1/07)

The concept of managing free-roaming/feral domestic cats (*Felis catus*) is not tenable on public health grounds because of the persistent threat posed to communities from injury and disease. While the risk for disease transmission from cats to people is generally low when these animals are maintained indoors and routinely cared for, free-roaming cats pose a continuous concern to communities. Children are among the highest risk for disease transmission from these cats.

While free-roaming cats can be vaccinated against rabies, this does not address the ongoing need to provide them health care, medications and prevention of other zoonotic diseases. Should one of these cats bite or scratch a person, it would need to be captured and observed for 10 days for signs and symptoms of rabies, even if it had been previously vaccinated. If the cat is not found, the person bitten would need to undergo rabies post-exposure treatment.

In the past 10 years, cats were reported with rabies more frequently than dogs in Florida. The overwhelming majority of these cats were free roaming animals. Human rabies in Florida was largely controlled by the removal of stray dogs when dog rabies was common during the first half of the 1900s.

Ideally, cats should have regular veterinary care and be maintained inside people's homes. Allowing cats to roam free is not in the best interests of the community's health and deliberate release or abandonment of feral or domestic cats is not sanctioned under Florida's conservation and cruelty laws. Domestic cats are not "indigenous" or native to Florida, and relocating and releasing non-native species into the wild is a violation of F.S. 372.265 and FAC 68A-4.005. Due to their adverse impact on wildlife, the FWC does not issue permits to make lawful either the release of cats to the wild or the establishment of feral/free-ranging cat colonies.

Exhibition, Sale or Trade of Exotic or Wild Indigenous Mammals (updated 1/07)

The RAC condemns the practice of using most wild or exotic mammals for public contact activities (i.e., picture taking with Class II Wildlife).

Rabies vector species (e.g., raccoons, skunks, bats, foxes or bobcats) are being offered for exhibition, sale or trade at a variety of venues (flea markets, pet fairs, exotic animal shows, swap meets, etc.). All persons in possession of these animals must be appropriately permitted by FWC (372.921, F.S.) and the RAC recommends that both vendors and purchasers be pre-immunized against rabies.

Due to the high potential for bites or scratches and difficulty of follow-up investigations, the RAC recommends that county government monitor all events of this type. The FWC's law enforcement officers can seize illegally possessed wildlife.

CHAPTER 1

GENERAL INFORMATION

A. Background

The first known human case of rabies in Florida was recorded as “hydrophobia” on a death certificate of a 38 year-old man from Key West in 1881. Since then, a total of 73 human cases of rabies have been reported as Florida-acquired. Historical documents indicate that rabies was considered rare in 1894 but was becoming more common in northern Florida counties. In 1895, despite legislation giving authority to the state health officer to prevent rabies among dogs, the disease continued to increase. By the turn of the century, severe outbreaks of canine rabies were occurring in most major cities resulting in 14 human cases reported between 1911 and 1913. The last case of human rabies acquired in Florida occurred in 1948 when a man from Tampa was bitten by a neighbor’s dog. Three additional cases have been reported in adult males in 1994, 1996 and 2004. All three were found to have been bitten by dogs while visiting either Haiti (1994, 2004) or Mexico (1996).

The disease in dogs was finally brought under control in the early 1950s as public concern stimulated passage of rabies vaccination and animal control ordinances in many Florida cities and counties. Vaccination of cats was not initially included in many of these local ordinances. However, cat vaccination is now required as part of a statewide rabies law passed by the legislature during 1994. Additionally, during 1998, rabies vaccination of ferrets was legislatively mandated. Rabies in raccoons and other wildlife is considered endemic throughout the state with four to six epizootics occurring sporadically each year. There was a dramatic rise in cases of animal rabies during 1996 and 1997 with over 250 cases reported each year. According to the Florida Department of Health-Bureau of Laboratories one hundred thirty-one confirmed rabid animals were reported in 2007. Wild animals, mostly raccoons, foxes and bats represent the greatest number of cases. Among domestic animals, reported rabid cats outnumber dogs. Urban and suburban epizootics of raccoon rabies that spill over into foxes, bobcats, otters, feral cats, dogs and horses present unique control problems for local authorities.

Rabies continues to be a feared zoonotic disease. Human exposure to rabies most likely involves the bite of a rabid animal. Accurate figures are not available, but it is estimated that at least 60,000 Florida residents and visitors (especially children) are bitten each year by some type of domestic or wild animal. Dogs are the major source of animal bites in Florida, followed by cats, rodents, raccoons, bats, and other species. Among domestic animals, cats are more frequently reported with rabies than other animals. The threat of rabies transmission from animals to humans warrants the maintenance of a statewide surveillance system with thorough investigation and follow-up of all humans exposed to a suspected rabid animal. Successful control of this disease in any community ultimately depends upon a coordinated effort to: 1) immunize a large proportion of all dogs, cats and ferrets kept as pets; 2) manage domestic and wild nuisance and stray animals; 3) implement an effective public information campaign; and 4) provide continuous education and training for health care providers, animal control workers and employees of other allied agencies and organizations.

B. Viral Characteristics

Rabies is caused by a neurotropic (nerve-loving) virus of the genus *Lyssavirus* in the family *Rhabdoviridae* that occurs in most countries throughout the world. Other rabies-related viruses have been isolated in Africa from midges, mosquitoes, dogs, cats and humans, and in Australia from fruit-eating bats and a human. The bullet-shaped rabies virion consists of a helical ribonucleoprotein capsid enclosed within a lipoprotein envelope covered with glycoprotein projections. The virus is sensitive to ether, sunlight, ultraviolet radiation, strong acids/bases and formalin.

The virus is usually transmitted to people when they are bitten or have an open wound or mucous membrane exposed to the infectious saliva of a rabies vector. The virus initially replicates in muscle, connective tissue or nerves at the site of inoculation with subsequent entry into nerve endings and on to the spinal cord and brain. The virus then spreads from the brain to the salivary glands and other organs. In reservoirs, infection of the salivary glands produces large volumes of virus in the saliva that, in turn, promotes opportunities for continued virus transmission. Infected animals can transmit rabies virus not only while clinically ill, but also for a number of days prior to onset of symptoms. Incubation periods are variable in all species. The majority of cases develop clinical disease 20-60 days after infection, although prolonged periods over 100 days have been reported in both animals and humans.

Morbidity (illness) periods in most species are typically short, lasting only a few days to about two weeks. Studies have shown that some animals can survive natural infection and antibodies to rabies virus have been isolated from the blood of asymptomatic raccoons captured during urban epizootics in Florida.

C. Legislative Authority

1. Chapter 381, Florida Statutes (F.S.), “Public Health”: authorizes the Florida Department of Health to “.... administer and enforce laws and rules relating to sanitation, control of communicable diseases, illness and hazards to health among humans and from animals to humans, and the general health of the people of the state.” Records maintained as a result of animal bite investigations are confidential and made public only when necessary to public health (381.0031 (4), F.S.).
2. Chapter 64D-3, (64D-3.040 (12)) Florida Administrative Code, “Procedures for Control of Specific Communicable Diseases”: details general Department of Health policies and procedures related to rabies control including, but not limited to the following: 1) requiring that animal bites to humans by a potentially rabid animal be reportable to the county health officer, 2) establishing authority for quarantine, outlining quarantine requirements and specifying conditions for the transportation and removal of quarantined persons and animals, and 3) outlining procedures for preventing rabies in humans, managing animals involved in bite incidents and declaring area-wide quarantines.
3. Chapter 474.203(5)(a), F.S., “Veterinary Medical Practice”: states that “.... only a veterinarian may immunize or treat an animal for diseases which are communicable to humans and which are of public health significance.”

4. Chapter 828.30, F.S., “Cruelty to Animals”: requires that all dogs, cats and ferrets shall be vaccinated by a licensed veterinarian against rabies with a United States Government - approved vaccine. The cost of the vaccine shall be borne by the animal’s owner. Thereafter, the interval between vaccinations shall conform to the vaccine manufacturer’s directions.” It also provides for exemptions, defines requirements for veterinarians to report essential information to animal control agencies and defines penalties for violation of the law.
5. Chapter 585, F.S., “Animal Industry”: requires that the Division of Animal Industry is authorized to...establish, maintain, and enforce quarantine areas within the state, or the entire state...to protect animals in the state.
6. Chapter 372, F.S., “Wildlife” and Chapter 68 A, FAC, “Florida Wildlife”: outlines the basic authority and responsibility relative to wildlife.
7. Most counties and some municipalities conduct rabies control programs under the auspices of animal control ordinances that may have more strict requirements than state statutes.

D. Florida Department of Health (DOH) Responsibilities

The effectiveness of the rabies control program is dependent upon the coordinated efforts of several official agencies in collaboration with allied organizations, institutions and associations. Specific responsibilities of the Florida Department of Health (DOH) represent official policies and procedures. Those presented for other agencies and allied providers only represent suggested activities that might appropriately augment any collaborative community rabies control initiative.

1. County Health Departments (CHDs)

Contact: local county health departments

Statutorily (Chapter 381, F.S. and Chapter 64D-3, FAC), the County Health Officer has primary responsibility for the management of human exposures to rabid or suspect rabid animals and control of animal rabies including quarantine. CHDs may elect to engage in memoranda of agreement with other agencies to transfer certain responsibilities and activities. Collaborating agencies may include animal control, the Fish and Wildlife Conservation Commission, sheriff’s offices, the local veterinary community, the Department of Environmental Protection and other CHDs.

- Conduct a thorough epidemiological investigation in every instance where a laboratory report indicates a positive case of rabies to elicit all possible persons or animals exposed, especially when more than one person or animal involved. Make appropriate treatment recommendations, and when necessary, consult with the DOH HQ. Maintain proper records as required.
- Ensure that local rabies control ordinances are established and updated as appropriate.
- Investigate rabies exposure incidents.
- Collect and maintain confidentiality of animal bite reports and related investigation notes.
- Report all cases in which a person receives or is recommended to receive PEP via Merlin (or other acceptable method) to the Bureau of Epidemiology.
- Report all monkey bites via Merlin (or other acceptable method) to the Bureau of Epidemiology.

- Segregate, quarantine and destroy domestic and wild animals having or suspected of having rabies.
- Facilitate human rabies PEP vaccinations for those in need.
- Arrange for specimen collection and expedited transportation of specimens to the state laboratory system for analysis.
- Continually assess rabies trends, and when appropriate, declare a community “Alert” or “Quarantine,” and conduct a public information campaign.
- Inform FDACS of cases involving quarantine of unvaccinated livestock in a timely manner (see 3-7).
- In cooperation with other parties as necessary, assure that confined animals are kept in isolation in safe, sanitary, and humane conditions.
- As appropriate, assist with preexposure vaccination of those at high risk of rabies exposure.

In some counties, the County Health Officer has delegated responsibility for carrying out certain portions of this responsibility (such as collection of animal bite reports, investigation of bite incidents and confinement of biting dogs and cats) to local animal control or other appropriate agencies through the development of local ordinances and intergovernmental agreements (see Attachment 1-F). In others, funding priorities have caused certain less critical rabies control activities to be discontinued.

2. State Health Office

Contact: (850) 245-4250

- Develop appropriate regulations and procedures and update standards for statewide rabies control activities.
- Provide technical assistance (such as advice regarding post-exposure prophylaxis, animal quarantine, risk assessment, and animal testing) to CHDs.
- Approve rabies quarantines.
- Assist in coordination of interstate activities for the follow-up of animal bite and suspected rabies cases.
- Collect and collate data to monitor and evaluate program's effectiveness in preventing human rabies and cost of inappropriate post-exposure treatment.
- Submit reports to the CDC on the number of animal rabies cases identified statewide and provide periodic rabies reports and information to CHDs.
- Issue press releases and maintain internet websites with information related to rabies, rabies quarantine, location of outbreaks, and rabies incidents of public interest.

Serve as the liaison for: 1) other state agencies for the implementation of cooperative programs; 2) other states for the exchange of information and follow-up of animal bite incidents and rabies; and 3) other countries (especially those in the Caribbean, Central and South America, through the Pan American Health Organization and the World Health Organization), for the exchange of information and follow-up of animal bite incidents and rabies.

- Inform FDACS of cases involving domestic animals in a timely manner.
- Convene annual meeting of the Florida Rabies Advisory Committee to update state compendium.

3. Bureau of Laboratory Services, DOH

Contact: branch laboratory, see page 2-10 for more information

The state laboratories are the sole source of rabies diagnostic testing in Florida.

- Examine brain specimens by use of the fluorescent rabies antibody (FRA) technique (the CDC standard rabies diagnostic technique). Conduct monoclonal antibody testing on positive terrestrial mammals to identify rabies variants in the state.
- Report to CHDs and DOH Division of Environmental Health immediately by fax, e-mail or phone any domestic animal tested for rabies found positive by the above-mentioned examinations.
- As confirmation, provide a follow-up report within one working day to CHDs and to the Bureau of Epidemiology via Merlin or other acceptable method for any animal found to be rabid.
- Report to Division of Environmental Health on a monthly basis, the total number and species of all specimens examined (positive and negative).

4. Drugs, Devices and Cosmetics Program, DOH

Contact: (850) 922-9036

- Order, stock, and ship human vaccine and human rabies immune globulin (HRIG) to CHDs/Rabies Vaccine Distribution Centers on request within one working day of the request.
- Monitor stock for inventory control and dating.
- Store and ship as per manufacturer's guidelines.
- Obtain payment for vaccine and HRIG from CHDs
- Prepare and disseminate advisories to CHDs and all other Rabies Vaccine Distribution Centers regarding the availability or recall of rabies pharmaceuticals.

E. Responsibilities of Other Agencies and Contributions by Allied Providers

1. Florida Animal Control Agencies and Florida Animal Control Association (FACA)

Contact: 866-303-3222

Disparate levels of funding, coupled with a lack of statewide statutory mandates, create unique situations for each county. However, activities for local animal control include, but are not limited to: 1) coordination of licensure programs; 2) enforcement of vaccination requirements; 3) initiation of home confinement, and 4) provision of confinement for animals for which home confinement is not suitable. Larger units may be involved in oral vaccine programs or low cost veterinary services. In all cases, the county, in concert with the local veterinary community and the CHD share a joint responsibility for dissemination of accurate and timely rabies information. In quarantine situations, counties may assist in the establishment of vaccine clinics as part of an overall epizootic situation.

FACA has established uniform standards for personnel, training, and facilities. These standards should be adopted by animal control agencies. Local (city/county) animal control offices maintain regular liaison with the DOH's Division of Environmental Health for the purpose of coordinating and unifying statewide prevention and control efforts and disseminating information related to rabies. This is achieved through periodic meetings with members of the Association, local

meetings with concerned groups, correspondence and telephone calls. By arrangement with the local CHD, Animal Control Units may be responsible for:

- Collecting and managing information relating to animal bite reports through interagency agreement with CHDs (see Attachment 1-F). All information collected on these reports is confidential, exempt from the provisions of s.119.07(1), F.S (381.0031, F.S.).
- Capture/confinement of domestic animals and, in some areas, the capture and euthanasia of rabies vector species involved in potential exposure incidents or as deemed necessary by the animal control authority.
- Enforcing area quarantine, including euthanizing rabies vector species, established by the local CHD.
- Advising the local CHD of individual home confinement and the release date.
- Assisting or providing decapitation services for laboratory analysis.

2. Florida Fish and Wildlife Conservation Commission (FWC)

Contact: (850) 488-6253

The FWC's authority and responsibilities are derived from the Florida Constitution (Article IV, Section 9), state statutes and executive orders of the Governor. The majority of the state statutes that pertain to the FWC are found in Chapter 372, F.S. The mission of the FWC is "managing fish and wildlife resources for their long-term well-being and the benefit of people." The agency's authority over the regulation of wildlife includes taking for recreational and commercial uses, as well as possession of wildlife for exhibition, sale or personal use. FWC regulations ban people from intentionally feeding raccoons, bears, foxes and sandhill cranes. Violators can be charged with a second-degree misdemeanor, punishable by a \$500 fine and 60 days in jail.

The FWC regulates the wildlife industry and has specialized investigators to perform inspections of zoos, circuses, importers, exporters, venomous snake dealers, alligator farms, pet shops and exotic bird dealers. Inspectors seize illegally possessed wildlife, recapture captive wild animals that have escaped from zoos and private animal keepers, and investigate wildlife possession to ensure appropriate permits have been acquired. Other FWC personnel that may become involved with rabies/bite issues include law enforcement officers and wildlife biologists.

This agency provides a number of wildlife-related services including:

- Response to requests from the CHD to assist in the seizure of captive wildlife for rabies examinations. The FWC becomes involved when such wildlife has bitten or scratched individuals (other than the immediate family) and the owner/possessor refuses to surrender it to health authorities. Most common wildlife, such as raccoons and skunks, may only be possessed under permit from the FWC. Permit requirements specify that wildlife must be held safely and in a manner that does not pose a safety threat to non-family members. **All permits for species at high risk for rabies as specified by the Compendium for Rabies Prevention and Control in Florida, 2008 (page 4-4) include a warning to pet owners that the animal must be tested for rabies if it bites a person** (Attachment 1-D).
- Assistance with the destruction of rabies vector wildlife in limited situations. The FWC will attempt to respond when such wildlife is acting in an aggressive manner and has attacked, or

presents an immediate physical threat to citizens. (The agency cannot respond to reports of the mere presence of rabies vector wildlife in neighborhoods during rabies alerts or otherwise.)

- Assistance with management of outbreak/epidemic control by disseminating rabies-related information to persons permitted to possess or handle wildlife. Information could include prohibitions, proscriptions and/or sanctions that may be imposed by CHDs (i.e., translocation issues, transport of wildlife to rehabilitators, prohibition of feeding wildlife).
- Assistance with the dissemination of rabies-related information to hunters, trappers, nuisance animal control agents, zoos, game farms, hunting preserves and fox/coyote enclosure owners.
- Limited technical assistance to cooperators regarding wildlife capture and handling methods and techniques.
- Assistance in providing locations of wildlife permit holders licensed by the FWC in the various counties.

3. Department of Agriculture and Consumer Services (FDACS), Animal Industry

Contact: (850) 410-0900

This agency cooperates in the confinement and disposition of farm animals suspected of, or exposed to, rabies. FDACS also requires that dogs and cats imported into the state be accompanied by a health certificate stating that the dog or cat is free from symptoms of communicable disease, and did not originate within an area under quarantine for rabies (see 5C-3.009, FAC). The Department is responsible for overall assistance and management of disease issues of livestock (including horses) and show/zoo animals. Responsibilities include:

- Management of livestock in quarantine-delineated areas.
- Enforcement of quarantine, as needed.
- Approval of biologicals (including rabies vaccine) for animals
- Management of disease issues for show animals and zoo populations.
- Establishment of restrictions of importing animals known to have rabies into the state.

4. Department of Environmental Protection (DEP), Division of Recreations and Parks

Contact: (850) 245-3029

Within the department, the Division of Recreation and Parks (Florida State Parks), the office of Coastal and Aquatic Managed Areas (state aquatic preserves and National Estuarine Research Reserves), and the Office of Greenways and Trails (state trails and the Cross Florida Greenway) are all responsible for controlling populations of rabies vectors (e.g., raccoons, foxes and feral cats) in public use areas, particularly during epizootics, to reduce the risk of exposure to visitors.

Note: *County and city parks and recreation officials are expected to follow suit, especially during quarantine situations in high use areas.*

DEP discourages the feeding of wildlife and also provides information to the public regarding avoidance of animal bites, encourages visitors to report bite incidents to rangers and reports rabies outbreaks and animal bite incidents to the appropriate CHDs.

5. Florida Veterinary Medical Association (FVMA), Florida Medical Association (FMA) and Florida Osteopathic Medical Association (FOMA)

Contact: FVMA (800) 992-3862, FMA (800) 762-0233, FOMA (850) 878-7364.

The FVMA maintains liaison with the DOH's Division of Environmental Health for dissemination of information concerning rabies guidelines through its publications. Veterinarians are responsible for reporting potentially rabid animals or noting trends in their respective communities. Further, veterinarians play the primary role in maintaining a high level of vaccinated pets. In rabies quarantine situations, the private community through their local association may assist in the provision of vaccine clinics.

The FMA and FOMA can assist by educating hospital emergency rooms and primary care physicians/clinics to report suspected human exposures to rabies and provide appropriate post-exposure prophylaxis.

6. Local Law Enforcement (includes: highway patrol and county sheriffs' offices)

Contact: local agency

When required, state and local law enforcement agencies will provide assistance to the County Health Officer as needed to fulfill the rabies control requirements detailed in Chapter 64D-3, FAC. Police dogs that bite people are exempted from confinement provided that they have current rabies vaccination that was administered by a licensed veterinarian (767.16, F.S.).

7. The Centers for Disease Control and Prevention (CDC)

Contact: (404) 639-1050

As a branch of the US Public Health Service, this federal agency maintains liaison with the DOH for the disposition of dogs arriving in Florida from foreign countries, provides current information about rabies in foreign countries and other states, coordinates consultations with health care providers, veterinarians and the general public regarding appropriate pre- and post-exposure immunization procedures and other prevention and control measures, and collects stray animal case incident data for national reporting system. Technical assistance includes: consultation and assistance with difficult situations; lab testing for suspected human rabies cases; and conducting monoclonal antibody testing for rabies virus variants to characterize epizootics.

8. U.S. Department of Agriculture (USDA)

Contact: (352) 333-3120

This federal agency licenses animal rabies vaccine and cooperates in the confinement and disposition (slaughter or destruction) of farm animals with suspected or confirmed exposure to rabies. USDA, APHIS, Wildlife Services coordinate the national ORV program.

9. U.S. Department of Interior (Fish and Wildlife Service, Park Service, Forest Service)

Contact: (202) 208-3100

These federal agencies manage multiple use resources, including wildlife, in concert with or separate from the Florida Fish and Wildlife Conservation Commission. Regulations apply to minimize risk of exposure by potentially rabid wildlife in campgrounds and other high-traffic public use areas.

10. Humane Society Organizations

Contact: local organization

While the mission of humane organizations is to prevent cruelty to animals, these are important groups involved with community rabies control. Some municipal animal shelters are operated by local

humane society chapters. These shelters may be responsible for housing dogs or cats for rabies observation when potential human exposures occur. These humane societies may also provide animal control services via contract thereby playing an integral role in enforcement activities associated with rabies vaccinations, animal bite investigations and confinements. They also contribute to the control of stray dog and cat populations. In this regard, shelter policies must conform to state and local rules and regulations related to rabies prevention and control.

11. World Health Organization (WHO) and Pan American Health Organization (PAHO)

Contact: WHO <http://www.who.int/rabies/en/>

PAHO (202) 974-3000; <http://www.paho.org/English/HCP/HCV/ZNS/rabia.htm>

These international health agencies provide reciprocal assistance in the surveillance, confinement and recommendations/guidelines for follow-up of animals involved in bites to humans. The World Health Organization has been collecting rabies data electronically on a yearly basis through "Rabnet", an interactive information system able to generate interactive maps and graphs using human and animal rabies data.

Attachment 1-A

Definitions

Attachment 1-B

Rabies Contacts

Attachment 1-C

State Rabies-Related Statutes

Attachment 1-D

Rabies and Wildlife Pets Warning Statement

Attachment 1-E

What You Should Know About Rabies

Attachment 1-F

Model County Health Department/Animal Control Memorandum of Agreement

Definitions

The following list is not intended to be all-inclusive. It is, however, a short list of acronyms or terms likely to be used in this document and other publications on rabies.

- **ACIP** - Advisory Committee Immunization Practices
- **BOL**-Bureau of Laboratories (DOH)
- **CDC** - Centers for Disease Control and Prevention
- **CHD** - County Health Department
- **Class I Wildlife** – Animals that should not be owned as personal pets.
- **Class II Wildlife** – Animals considered being a real or potential threat to human safety.
- **FDACS** – Florida Department of Agriculture and Consumer Services
- **DEP** – Department of Environmental Protection
- **DEH**-Department of Environmental Health
- **DOH** - Florida Department of Health
- **Excitatory phase** - Often called "furious" rabies where the animal displays classic aggression
- **FAC** – Florida Administrative Code
- **FRA** - Fluorescent Rabies Antibody test - The most common diagnostic tool for rabies analysis; 98% accuracy rate.
- **F.S.** – Florida Statute
- **FSIS**- Food Safety Inspection Service of USDA
- **FWC**- Fish and Wildlife Conservation Commission
- **HDCV** - Human diploid cell vaccine, Imovax™
- **Home confinement** - An immunized dog, cat or ferret may be placed under confinement on the owner's premises as determined by the CHD director/administrator or designee
- **HRIG** - Human rabies immune globulin, Immogam™
- **Hyperesthesia** - Extreme sensitivity to touch or other sensory stimuli
- **Morbidity period** - The time from onset of clinical signs until death
- **MAB** -- monoclonal antibody
- **Neurotropic** - Having an affinity for the nervous system
- **Off-label** - the use of a prescription drug to treat a disease or condition for which the drug has not been approved by the US Food and Drug Administration
- **ORV** – Oral rabies vaccine
- **Paralytic phase** - Often called "dumb" rabies
- **PEP**-Rabies Post-exposure prophylaxis
- **PCEC** – Purified chick embryo culture vaccine, RabAvert™
- **Photophobia** - Fear of light
- **Pica** - Perverted appetite (e.g., eating fecal material, rocks, sticks)
- **Prodrome** - The time *prior* to onset of symptoms when the animal is infectious without showing overt signs/symptoms of rabies
- **Provoked exposure/attack** - Any incident where the animal has bitten or scratched due to fear, feeding, maternal territoriality, or defense of family members
- **RFFIT** - Rapid focus fluorescent inhibition test

- **RVDC** – Rabies Vaccine Distribution Centers (see attachment 4-B)
- **Temporal** - Time
- **USDA** – **United States Department of Agriculture**

Rabies Contacts

Human or Animal Exposure Consultations:

Dr. Carina Blackmore, Florida Department of Health, DEH (850) 245-4732
Dr. Danielle Stanek, Florida Department of Health, DEH (850) 245-4117

Diagnostic Rabies Testing:

Florida Department of Health, Bureau of Laboratories (see page 2-10)

Reporting Wildlife Permitting Violations and Injured Wildlife

Florida Fish and Wildlife Conservation Commission Wildlife Alert Hotline 1-888-404-3922 or #FWC on some cellular phones

To request assistance in the seizure of wildlife in bite situations, call Captain Linda Harrison in Tallahassee at (850) 488-6253. On weekends, contact these personnel through the Wildlife Alert Hotline.

Intrastate Livestock Movement and State Regulation Consultations (incl. Pet Health Certificates):

Florida Department of Agriculture and Consumer Services
Samuel Lamb, DVM (850) 410-0950

Requirements for Shipping Pets on Airlines:

USDA, Voice response service (800) 545-8732

Reporting Stray and Nuisance Animal Problems:

Contact county animal control agency

Reporting Abused or Neglected Animals

Contact local humane society or animal control agency

Other Contacts

Florida Veterinary Medical Association	(800) 992-3862
Florida Osteopathic Medical Association	(850) 878-7364
UF/College of Veterinary Medicine	(352) 392-4700
National Animal Poison Control Center (fee charged for service)	(800) 548-2423
Florida Medical Association	(800) 762-0233

Public Health

381.0011 Duties and powers of the Department of Health.--It is the duty of the Department of Health to:

- (1) Assess the public health status and needs of the state through statewide data collection and other appropriate means, with special attention to future needs that may result from population growth, technological advancements, new societal priorities, or other changes.
- (2) Formulate general policies affecting the public health of the state.
- (3) Develop a comprehensive public health plan that addresses all aspects of the public health mission and establishes health status objectives to direct the use of public health resources with an emphasis on prevention.
- (4) Administer and enforce laws and rules relating to sanitation, control of communicable diseases, illnesses and hazards to health among humans and from animals to humans, and the general health of the people of the state.
- (5) Cooperate with and accept assistance from federal, state, and local officials for the prevention and suppression of communicable and other diseases, illnesses, injuries, and hazards to human health.
- (6) Declare, enforce, modify, and abolish quarantine as the circumstances indicate. Any health regulation that restricts travel or trade within the state may not be adopted or enforced in this state except by authority of the department.
- (7) Provide for a thorough investigation and study of the incidence, causes, modes of propagation and transmission, and means of prevention, control, and cure of diseases, illnesses, and hazards to human health.
- (8) Provide for the dissemination of information to the public relative to the prevention, control, and cure of diseases, illnesses, and hazards to human health. The department shall conduct a workshop before issuing any health alert or advisory relating to food-borne illness or communicable disease in public lodging or food service establishments in order to inform persons, trade associations, and businesses of the risk to public health and to seek the input of affected persons, trade associations, and businesses on the best methods of informing and protecting the public, except in an emergency, in which case the workshop must be held within 14 days after the issuance of the emergency alert or advisory.
- (9) Act as registrar of vital statistics.
- (10) Cooperate with and assist federal health officials in enforcing public health laws and regulations.
- (11) Cooperate with other departments, local officials, and private boards and organizations for the improvement and preservation of the public health.
- (12) Cooperate with other departments, local officials, and private organizations in developing and implementing a statewide injury control program.
- (13) Adopt, repeal, and amend rules consistent with law. This subsection does not authorize the department to require a permit or license unless such requirement is specifically provided by law.
- (14) Perform any other duties prescribed by law.

381.0012 Enforcement authority.--

- (1) The department may commence and maintain all proper and necessary actions and proceedings to enforce the rules adopted pursuant to this chapter and may defend all actions and proceedings involving the department's powers and duties.
- (2) The department may apply for an injunction to the proper circuit court, and the judge of that court upon hearing and for cause shown may grant a temporary or permanent injunction, or both, restraining any person from violating or continuing to violate any of the provisions of this chapter or from failing or refusing to comply with the requirements of this chapter. A permanent injunction may be issued without bond. However, a temporary injunction may not be issued without bond except after a hearing of which the respondent has been given not less than 7 days' prior notice. A temporary injunction may not be issued without bond which limits or prevents operations of an industrial, manufacturing, or processing plant, unless at the hearing, it is shown by clear, certain, and convincing evidence that irreparable injury will result to the public from the failure to issue the temporary injunction. If a temporary injunction or restraining order is improperly or erroneously granted, the state is liable in damages and to the extent provided for in chapter 768.
- (3) The department may commence and maintain all proper and necessary actions and proceedings to compel the performance of any act specifically required of any person, officer, or board by any law of this state relating to public health.
- (4) The department may appear before any magistrate empowered to issue warrants in criminal cases and request the issuance of a warrant. The magistrate shall issue a warrant directed to any sheriff, deputy, or police officer to assist in any way to carry out the purpose and intent of this chapter.
- (5) It shall be the duty of every state and county attorney, sheriff, police officer, and other appropriate city and county officials upon request to assist the department or any of its agents in enforcing the state health laws and the rules adopted under this chapter.

381.0031 Report of diseases of public health significance to department.--

- (3) Reports required by this section must be in accordance with methods specified by rule of the department.
- (4) Information submitted in reports required by this section is confidential, exempt from the provisions of s. 119.07(1), and is to be made public only when necessary to public health. A report so submitted is not a violation of the confidential relationship between practitioner and patient.

381.006 Environmental health.--The department shall conduct an environmental health program as part of fulfilling the state's public health mission. The purpose of this program is to detect and prevent disease caused by natural and manmade factors in the environment. The environmental health program shall include, but not be limited to:

- (9) A function to control diseases transmitted from animals to humans, including the segregation, confinement, and destruction of domestic pets and wild animals having or suspected of having such diseases.

Veterinary Medical Practice: 474.203 Exemptions.--This chapter shall not apply to:

(4) Any person, or the person's regular employee, administering to the ills or injuries of her or his own animals, including, but not limited to, castration, spaying, and dehorning of herd animals, unless title has been transferred or employment provided for the purpose of circumventing this law. This exemption shall not apply to out-of-state veterinarians practicing temporarily in the state. However, only a veterinarian may immunize or treat an animal for diseases which are communicable to humans and which are of public health significance.

Cruelty to Animals: 828.30 Rabies vaccination of dogs, cats and ferrets--

(1) All dogs, cats and ferrets 4 months of age or older must be vaccinated by a licensed veterinarian against rabies with a United States Government-approved vaccine. The cost of vaccination must be borne by the animal's owner. Thereafter, the interval between vaccinations shall conform to the vaccine manufacturer's directions. The cost of vaccination must be borne by the animal's owner. Evidence of circulating rabies virus neutralizing antibodies shall not be used as a substitute for current vaccination in managing rabies exposure or determining the need for booster vaccinations.

(2) A dog, cat or ferret is exempt from vaccination against rabies if a licensed veterinarian has examined the animal and has certified in writing that at the time vaccination would endanger the animal's health because of its age, infirmity, disability, illness, or other medical considerations. An exempt animal must be vaccinated against rabies as soon as its health permits.

(3) Upon vaccination against rabies, the licensed veterinarian shall provide the animal's owner and the animal control authority with a rabies vaccination certificate (see Attachment 3-B) which must contain at least the following information:

- (a) The license number of the administering veterinarian.
- (b) The name and address of the veterinarian and the name, address and phone number of the owner.
- (c) The date of vaccination.
- (d) The expiration date of the vaccination.
- (e) The species, age, sex, color, breed, weight, and name of the animal vaccinated.
- (f) The rabies vaccine manufacturer.
- (g) The vaccine lot number.
- (h) The type and brand of vaccine used.
- (i) The signature or signature stamp of the licensed veterinarian.
- (j) The rabies tag number.
- (k) The microchip number.

(4) Violation of this section is a civil infraction, punishable as provided in s. 828.27(2).

(5) This section does not prohibit or limit municipalities or counties from enacting requirements similar to or more stringent than the provisions of this section for the implementation and enforcement of rabies-control ordinances.

Animal Industry: 585.145 Control of animal diseases.--

- (1) The department shall take such measures as may be necessary and proper for the control, suppression, eradication, and prevention of the spread of contagious, infectious, and communicable disease and to protect animals in the state. The department shall also quarantine such animals as it shall find, or have reason to believe, to be infected with or exposed to any such disease.
- (2) No animal shall be imported into the state, moved within the state, or the ownership thereof transferred within the state without the owner, broker, or transferor first obtaining such health tests, official certificates of veterinary inspection, or other certificates and documents as shall be required by rules adopted by the department. Evidence of compliance with this subsection shall accompany the owner or agent having jurisdiction of such animals imported, moved intrastate, or to which ownership is being transferred. However, unless an emergency is declared, the department may not require Florida residents to carry evidence of compliance in intrastate travel for privately owned domestic canines or domestic felines which are not offered for sale. The department may provide by rule specific exceptions to this subsection upon finding that certain importations, intrastate movements, or transfers pose no threat to affected industries in Florida.
- (3) A person who forges, counterfeits, simulates or alters, or who knowingly possesses, uses, presents or utters, any forged, counterfeited, altered or simulated official certificate of veterinary inspection or any other document relating to animal health requirements or substitutes, represents, or tenders an official certificate of veterinary inspection or any other document relating to animal health requirements of one animal for another animal commits a felony of the third degree, punishable as provided in s. 775.082, s. 775.083, or s. 775.084.

585.15 Dangerous transmissible disease or pest a public nuisance.--The department may declare by rule that a certain pest or disease of animals is a public nuisance. When a pest or disease is thus determined to be dangerous, transmissible, or threatening to an agricultural interest of the state, it shall be known as a "reportable disease." Each reportable disease shall be included by rule on the department's dangerous transmissible disease list. When necessary because of the possible impact of an animal disease on public health, the department may consult with the Department of Health regarding an animal disease that is transmissible to humans.

372.07 Police powers of commission and its agents.--

- (1) The Fish and Wildlife Conservation Commission, the director and the director's assistants designated by her or him, and each wildlife officer are constituted peace officers with the power to make arrests for violations of the laws of this state when committed in the presence of the officer or when committed on lands under the supervision and management of the commission. The general laws applicable to arrests by peace officers of this state shall also be applicable to said director, assistants, and wildlife officers. Such persons may enter upon any land or waters of the state for performance of their lawful duties and may take with them any necessary equipment, and such entry shall not constitute a trespass.
- (2) Said officers shall have power and authority to enforce throughout the state all laws relating to game, non-game birds, freshwater fish, and fur-bearing animals and all rules and regulations of the Fish and Wildlife Conservation Commission relating to wild animal life and freshwater aquatic life,

and in connection with said laws, rules, and regulations, in the enforcement thereof and in the performance of their duties thereunder, to:

- (a) Go upon all premises, posted or otherwise;
- (b) Execute warrants and search warrants for the violation of said laws;
- (c) Serve subpoenas issued for the examination, investigation, and trial of all offenses against said laws;
- (d) Carry firearms or other weapons, concealed or otherwise, in the performance of their duties;
- (e) Arrest upon probable cause without warrant any person found in the act of violating any of the provisions of said laws or, in pursuit immediately following such violations, to examine any person, boat, conveyance, vehicle, game bag, game coat, or other receptacle for wild animal life or freshwater aquatic life, or any camp, tent, cabin, or roster, in the presence of any person stopping at or belonging to such camp, tent, cabin, or roster, when said officer has reason to believe, and has exhibited her or his authority and stated to the suspected person in charge the officer's reason for believing, that any of the aforesaid laws have been violated at such camp;
- (f) Secure and execute search warrants and in pursuance thereof to enter any building, enclosure, or car and to break open, when found necessary, any apartment, chest, locker, box, trunk, crate, basket, bag, package, or container and examine the contents thereof;
- (g) Seize and take possession of all wild animal life or freshwater aquatic life taken or in possession or under control of, or shipped or about to be shipped by, any person at any time in any manner contrary to said laws.

(3) It is unlawful for any person to resist an arrest authorized by this section or in any manner to interfere, either by abetting, assisting such resistance, or otherwise interfering with said director, assistants, or wildlife officers while engaged in the performance of the duties imposed upon them by law or regulation of the Fish and Wildlife Conservation Commission.

Rabies and Wildlife Pets

In the interest of public health and safety, Florida Statutes 381 and Florida Administrative Code 64D-3 require that all persons with knowledge of human exposure to a suspect rabid animal report the incident to the county health department. Certain species kept as pets are considered suspect rabid animals. Permittees keeping species at high risk of transmitting rabies involved in bite/scratch exposure incidents must be prepared to surrender the animal to county health department or animal control authorities for euthanasia and rabies testing upon demand.

Of all the high-risk species, the raccoon is the most important wildlife rabies host in Florida. During the past one-half century at one time or another, cases of rabies in these animals have been reported from every county. Currently, the entire state is considered to be at risk for rabies. All raccoons, even those kept as personal pets, regardless of their origin or vaccination status, are considered at high risk for rabies.

Whenever wildlife pets such as raccoon bites, scratches or otherwise exposes a person to saliva, there is the possibility that the animal could be infected with rabies virus. Research has shown that raccoons can shed rabies virus in their saliva without showing any signs or symptoms of the disease.¹ In order to define whether the person involved in the incident was exposed to a rabid animal, it will be necessary to euthanize the animal and test its brain for the presence of rabies virus.

¹ Burrige MJ, Sawyer LA, Bigler WJ. Rabies in Florida. HRS, 1986.

WHAT YOU SHOULD KNOW ABOUT RABIES

Florida Department of Health

What is rabies?

Rabies is a deadly viral disease that can be prevented but not cured. The virus attacks the nerves and brain tissue of warm-blooded animals including people.

How is it spread?

When an animal is sick with rabies, the virus is shed in the saliva and can be passed to another animal or a person, usually through a bite. Transmission may also occur if this saliva or the animal's nervous tissue enters open wounds, the mouth, nose or eyes of another animal or person.

What does a rabid animal look like?

Animals with rabies may show strange behavior – they can be aggressive, attacking for no apparent reason. Some animals can act very tame (especially wild animals). They may not be able to eat, drink, or swallow. They may drool because they cannot swallow their saliva. They may stagger or become paralyzed. Eventually they will die.

What do I do if an animal bites me?

1. Immediately scrub the wound with lots of soap and running water for five to ten minutes.
2. Try to get a complete description of the animal and determine where it is so that it can be picked up by Animal Control for confinement or rabies testing.
3. Go to your family doctor or the nearest emergency room.
4. Call your County Health Department or Animal Control Agency promptly with the animal's description and location of the animal. The animal will either be confined for ten days (if it is a dog, cat or ferret) or be tested for rabies.
5. If you kill the animal, be careful not to damage the head and avoid further contact with the animal even when it is dead.

What do I do to protect myself, my family and my pets from rabies?

1. Have your veterinarian vaccinate all of your dogs, cats, and ferrets against rabies and make sure you follow your veterinarian's instructions for revaccination. Horses should also be vaccinated against rabies.
2. Avoid contact with wild or stray animals.
3. Never feed wild or stray animals -- avoid attracting them with outdoor food sources (like uncovered trash). Feed your pets indoors.
4. Do not allow your pets to run free. Follow leash laws by keeping pets and livestock secured on your property.
5. If your animal is attacked by a wild, stray or unvaccinated animal, DO NOT examine your pet for injuries without wearing gloves. Wash your pet with soap and water to remove saliva from the attacking animal. Do not let your animal come into contact with other animals or people until the situation can be dealt with by Animal Control or the County Health Department.

Model Memorandum of Agreement for Rabies Control Activities

For the mutual benefit of the parties involved, this memorandum of agreement is between the _____ County Health Department and the _____ (animal control agency) in the interest of protecting the health and safety of the population of _____ County and consolidating the county rabies control program.

The _____ County Health Department agrees to:

1. Provide medical consultation regarding anti-rabies treatment for victims.
2. Perform surveillance of post-exposure prophylaxis use and report to the State Health Office.
3. Provide the pre-exposure and post-exposure vaccinations for employees of _____ (animal control agency).
4. Notify victims of the rabies test results of submitted animal specimens.
5. Release animals at the end of the confinement period and notify all parties.
6. Provide assistance in a court of law, when needed, with the enforcement of rabies control regulations.
7. Provide technical assistance regarding animal status determinations.
8. Provide rabies guidebooks, legislative material and other rabies control documents as appropriate.

The _____ (animal control agency) agrees to:

1. Assume responsibility for the _____ County animal rabies control program as expressed in Chapter 64D-3 of the Florida Administrative Code and in the *Rabies Control and Prevention in Florida, 2008* guidebook. Duties related to those responsibilities include:
 - a) Search for and attempt to locate animals involved in bite attack once reported to the agency by victims, health care providers or by the _____ County Health Department.
 - b) Confine animals for rabies as appropriate. Or verify that animals held at home are healthy at the end of the observation period.
 - c) Observe animals under confinement for signs of rabies.
 - d) Remove or contract for the removal of animal heads for rabies testing as appropriate.
 - e) Submit animal specimens to the Florida DOH branch laboratory for rabies testing.
2. Provide epidemic control measures in accordance with the _____ County Health Department as outlined in the *2008 Rabies Control and Prevention in Florida* guidebook and authorized by FS 381.
3. Inform the _____ County Health Department when actions in a court of law are needed to enforce rabies regulations in the interest of involving both parties to the memorandum in such actions.
4. Promptly notify the _____ County Health Department when any of the following occurs:
 - a) The death of an animal under confinement.
 - b) The escape of an animal under confinement.
5. Refer all medical inquiries regarding antirabies treatment to the _____ County Health Department.
6. Submit Animal Bite Reports to the _____ County Health Department on a _____ basis.
7. Honor FS 381 provisions relative to the confidentiality of animal bite patient records.

Memorandum on rabies control page 2

This agreement shall be reviewed annually

Signed _____ County Health Department

Director (animal control)

Date: _____

Date: _____

please check with your local legal personnel

CHAPTER 2

RABIES IN ANIMALS

The State Board of Health Laboratory first documented animal rabies in Florida in 1905. During the first quarter of the 20th century, rabies in dogs was a major problem. When a reliable vaccine became available in the 1940s, cases in dogs and cats decreased dramatically. Since 1960, only sporadic canine cases have been reported, averaging 2.5 per year. Still, since the late 1980s, the number of cases in cats has been increasing while the trend in dogs has remained the same. Cats were not included in many of the rabies vaccination and animal control ordinances of the 1940s, but attention is now being focused on including them in prevention programs. A state law enacted in 1994 requires that dogs and cats be vaccinated against rabies. In 1998, the legislation was modified to require ferret vaccination.

Among wildlife, raccoons, bats and foxes are the animals most frequently diagnosed with rabies in Florida (rabies vector species). The first reported case of rabies in raccoons occurred in 1947 in Brevard County. The widespread distribution of this species, its ability to thrive near high-density human populations, its gregarious behavior and the lack of consistently recognizable signs of disease in the raccoon make it a constant public health hazard. Rabies in insectivorous bats in the United States was first recognized in 1953 in a yellow bat from Hillsborough County. Signs of the disease in this species may not be visible and apparently healthy bats may harbor the virus for long periods of time. In the 1950s, outbreaks of fox rabies in the panhandle were common, but in the 1960s, cases in foxes declined in this area. Since then, only sporadic cases in foxes associated with “spillover” during raccoon epizootics have been reported. However, since 1993, cases of rabies in gray foxes increased throughout the state and on average now account for approximately 15% of rabies cases.

In 2007, there were 131 confirmed cases of animal rabies reported in Merlin compared to 176 in 2006, 201 in 2005, 205 cases reported in 2004, 188 cases reported during 2003, 181 cases reported during 2002, and 158 reported during 2001. This was the lowest number of overall rabies cases reported since 1990-1992. As seen in 1990-1992 (avg 99 cases/yr; 20 yr avg 187), the past year was also associated with a steep decrease in the number of rabid raccoons (1990-1992 avg 65 cases/yr.; 2007, 66 cases; 20 yr avg., 125 cases) Raccoons are the major rabies reservoir for Florida. Reports from Florida Fish and Wildlife Conservation Commission indicate an ongoing distemper epidemic in wild raccoon populations across the state which is suspected to have played a role in the significant decrease (30% below the 20 year average) in overall cases. Rabid animals were identified in 38 counties, and one county reported 10 or more cases. The majority of cases were among wild animals, especially raccoons (N=66, 50%), foxes (N=20, 15%) and bats (N=19, 15%). One rabid horse was recorded this year, as well as 4 rabid bobcats, 4 otters and 2 skunks. Since 1988, the number of rabies cases in cats continues to outnumber dogs. In 2007, 14 rabid cats and 1 rabid dog were reported. No beavers or cattle were found rabid this year.

In July 1998, the BOL-Jacksonville laboratory began monoclonal antibody (MAB) testing of rabies positive specimens from terrestrial animals. The Centers for Disease Control and Prevention (CDC) laboratory continues to conduct MAB tests on positive Florida bats. MAB tests identify the strain of rabies virus, an important tool in describing the epidemiology of rabies. MAB testing confirms that the dominant rabies virus line in Florida is the raccoon strain.

A. Clinical signs

Rabid animals exhibit certain clinical signs that are typical of rabies, with variations peculiar to carnivores, ruminants and bats. This chapter presents information regarding the animal species that elicit most rabies-associated questions. Persons requiring more detailed information on these and other species are referred to “Rabies in Florida” (Burrige, Sawyer, and Bigler, 1986). Due to a number of factors including exposure dose, virus strain and host immunity, incubation periods may occasionally extend beyond ranges provided in this chapter.

Signs: The signs described below for a series of species are what have been observed in a large number of animals. It is extremely rare to observe all signs in a single, infected animal. Any clinical suspicion of rabies must be confirmed by laboratory examination

1. Dogs

- Virus excretion can begin 4 days before onset of illness.
- The incubation period (time from infection to clinical signs) for dogs ranges from 9 to 182 days, with most cases showing clinical disease (morbidity) within 21 to 56 days.
- The morbidity period (time from onset of clinical signs to death) is usually 1 to 7 days.
 - The “prodromal phase” of the morbidity period is generally 2 to 3 days’ duration. The dog may exhibit a subtle change in temperament with a slight rise in temperature, dilation of pupils and a sluggish corneal reflex.
 - The “excitatory phase” of the morbidity period is 1 to 7 days’ duration. The dog becomes increasingly irritable, restless or nervous. Photophobia (avoids light), hyperesthesia (increased sensitivity to stimulation), and pica (eats unusual items) may be present. At this time, the dog is very dangerous because of its tendency to bite anything that is encountered.
 - Signs of the impending “paralytic phase” soon become apparent with a change in bark (due to paralysis of laryngeal muscles) and difficulty in swallowing (due to spasms and eventual paralysis of pharyngeal muscles), leading to drooling of saliva. Toward the end of this phase, convulsive seizures and muscular incoordination develop, as well as a “far-off” look in the eyes. The paralytic phase of the morbidity period is usually from 1 to 7 days. Most dogs have a predominant excitatory phase (“furious rabies”) but some will seemingly progress rapidly into the paralytic phase (“dumb rabies”). Paralysis rapidly becomes generalized, and the animal slips into a coma and soon dies from respiratory arrest.

Note: Because there is no readily available test to determine if a dog is the product of a wolf cross, owners who represent their animals as “part wolf” will be subjected to managing the animal differently than dogs. No information is available on the incubation and morbidity periods of rabies in wolf-dog crosses.

2. Cats

- Virus excretion can begin 4 days before onset of illness.

- The incubation period for cats typically ranges from 9 to 51 days, with most cases showing clinical disease within 14 to 21 days.
- The morbidity period is from 1 to 8 days.
 - The “prodromal phase” of the morbidity period is 1-day duration. Low-grade fever and a pronounced change in behavior characterize this phase; the cat may also become unusually affectionate or withdrawn.
 - The “excitatory phase” of the morbidity period is 2 to 4 days’ duration. It may begin with increased accumulation of saliva, slight incoordination or muscular tremors, often accompanied by nervousness, aggressiveness, and irritability. At this time the cat may be particularly dangerous, often attempting to bite and scratch anything encountered.
 - The “paralytic phase” of the morbidity period is 3 to 4 days’ duration. Difficulty in swallowing develops, causing the animal to drool saliva; convulsions may occur at this point. The cat develops ascending and generalized paralysis; coma and death soon follow.

3. Raccoons

- The incubation period ranges from 10 to 107 days (average: 21 days).
- The morbidity period is usually 1-13 days. The most common type of abnormal behavior observed in raccoons is aggressiveness. Other clinical abnormalities noted in rabid raccoons include incoordination leading to an inability to walk or unusual behavior such as wandering aimlessly in daylight, and showing no fear of dogs or humans. Although many raccoons die of rabies, serologic testing of healthy raccoons indicates some develop immunity to the virus and survive the infection.
- It is possible raccoons, as other animals, shed virus before developing symptoms of the disease. On several occasions, rabies virus has been isolated from the brain and salivary glands of normal acting free-roaming raccoons trapped during urban outbreaks (Burrige, Sawyer, and Bigler, 1986).

4. Bats

- The incubation period ranges from 16 to 209 days.
- The morbidity period is usually 4 to 17 days. Infected bats may die from rabies with or without evidence of neurologic disease (i.e., may show no signs of illness at all before death).
 - Behavioral changes associated with rabies differ markedly between colonial and non-colonial species of bats. Solitary non-colonial species typically become furious and may attack without provocation, whereas most colonial species, especially the highly colonial free-tailed bats, do not usually become violent.

- While bats commonly transmit rabies virus by biting, the bite wounds may be small and difficult to recognize. Airborne transmission of rabies virus has occurred in caves heavily populated by infected bats.

5. Foxes and Coyotes

- Foxes are extremely sensitive to rabies virus and the incubation period in both gray and red foxes generally ranges from 9 to 109 days.
- The morbidity period in foxes is usually 1 to 15 days. The behavior of rabid foxes usually conforms to either a pattern of aggression or confusion and their normal caution toward humans is lost. The persistence and success of the attack of an aggressive fox is determined by its condition, since in many cases the animal is too weak or uncoordinated to launch an effective attack. The fox that exhibits confusion as a predominant sign bites people and other animals only when approached by them.
- No information is available on the incubation and morbidity periods of rabies in Florida coyotes. In 1994, an outbreak of rabies in foxhunting dogs was reported from Alachua County². These animals were diagnosed with the coyote strain of rabies, presumably from coyotes illegally translocated from South Texas. Since then, no other rabid animals were reported with this rabies strain in Florida.

6. Ferrets, Skunks and Otters

The family of *Mustelidae* includes skunks, otters, minks, weasels and ferrets. In Florida, wild skunks and otters become involved in outbreaks of raccoon rabies as incidental hosts and vectors. Mustelids in general are considered to be highly susceptible to, and capable of, transmitting rabies if infected.

Ferrets sold as pets in the United States are derived from European stock, which have been domesticated for centuries and selectively bred for productivity and behavior traits. The popularity of the ferret as a personal pet has led to increased biting incidents. This is a cause of concern because owners in some circumstances allow animals to either escape or free range in their yards or neighborhoods. As a result of their exposure to wildlife, several have been diagnosed with rabies in the United States with the latest from Brevard County, Florida in 1996. The CDC concluded a series of infection experiments using several strains of rabies virus to evaluate incubation periods, viral shedding and transmission in the domestic ferret.³ Based upon the results of this research and the availability of an approved vaccine, it is recommended that ferrets be managed in the same way that dogs and cats are managed.

- Virus excretion can begin 2 days before onset of illness.
- The incubation period for ferrets ranges from 10 to 96 days.

² CDC. Translocation of coyote rabies – Florida, 1994. MMWR 1995; 44(31):580-581,587.

³ Niezgoda M, Briggs DJ, Shaddock J, Rupprecht CE. Viral excretion in domestic ferrets (*Mustela putorius furo*) inoculated with a raccoon rabies isolate. Am J Vet Res 1998 Dec;59(12):1629-32

- The mean morbidity period for ferrets ranges 1 to 10 days. Clinical signs included ataxia, lethargy, fever, paresis, and aggression.
- The incubation period for skunks ranges from 12 to 177 days. CDC⁴.
- The morbidity period for skunks is usually from 1 to 18 days. Anorexia is one of the most reliable indicators of the onset of clinical rabies in this species. The virus does not infect the scent glands of skunks and, consequently, rabies is not transmitted via their musk spray. Rabid skunks often become extremely aggressive, reacting violently to external stimuli such as sound or movement. During such reactions, skunks will bite and hold on to their victims tenaciously. Paralysis and coma commonly follow these furious signs before death. A small proportion of rabid skunks will show neither furious nor paralytic signs of rabies, but may be just found dead.
- No information is available on the incubation or morbidity periods for rabies in Florida otters.

7. Horses and Mules

- The incubation period is generally short although periods up to six weeks have been recorded.
- The morbidity period is usually 5 to 8 days.
 - “Prodromal” signs of the morbidity period include low-grade fever, behavioral changes, and rubbing or biting at the site of exposure.
 - Rabid horses usually show a marked “excitatory phase” lasting from one to four days. They become restless, grind their teeth, foam at the mouth, whinny as if in great pain, strain at the bowels, and show signs of severe colic. They may lash out with incredible fury at any perceived threat or restraint and may exhibit an increase in sexual excitement. In some horses, the excitatory phase may be absent or very transient. These animals often exhibit a paralytic clinical syndrome akin to dumb rabies in dogs and very similar to that seen in arboviral equine encephalitis.
 - The “paralytic phase” of the morbidity period is 1 to 4 days. As paralysis develops, rabid horses fall down repeatedly, finally remaining down and thrashing their legs prior to death.

NOTE: It is highly recommended that horses be immunized by a licensed veterinarian against rabies annually with an approved vaccine (see Attachment 3-A), both for the protection of the animal and to allow free movement of the horse into Florida. If a horse is unvaccinated and exposed to a rabid animal while out-of-state, it must complete the required 6-month quarantine before it is allowed transport into Florida.

8. Rodents

• ⁴ Human rabies -- Alabama, Tennessee, and Texas, 1994. MMWR 1995; 44:269-72.

- Rabies is uncommon in most rodents although they are susceptible to the disease. The response of rodents to rabies virus has been investigated in five species and it was found that the majority (55-100%) of animals inoculated with the virus died of rabies, with incubation periods ranging from 10-86 days. Rodents rarely survive attacks from rabid animals. Rabies has been demonstrated in pet rabbits and small rodents. It is important not to let pet rodents outdoors without supervision or the protection of a double cage.
- The clinical signs of rabies were markedly different between squirrels and the other rodents. About half of the squirrels died without demonstrable clinical illness. The other half died after exhibiting signs of furious rabies for approximately one day. In contrast, the rats and mice exhibited progressive ascending paralysis of 3-6 days duration without any signs of aggressive behavior.

Prior to 1938, five cases of rabies had been reported in rodents in Florida. From 1957 through 1983, 17,487 squirrels, rats, and mice were examined for rabies in Florida; only one was found to be rabid. The positive case was a flying squirrel collected from Pinellas County in 1961. During the five-year period 1978-82, only 35 cases of rabies were diagnosed in rodents in the United States. The species affected were woodchucks (24 cases), muskrats (5 cases), squirrels (4 cases), and rats (2 cases). In 2001, the first rabid beaver was reported in Florida. Rabies is very uncommon disease in pet rodents. However, it is important to avoid contact between pet rodents and wildlife. In 2004, raccoon-variant rabies was found in pet rabbits (7 cases) and a guinea pig in New York State, all rodents had contacts with raccoons while caged outdoors.⁵

NOTE: It is important to always consider that noticeable signs of rabies (i.e., a morbidity period) in wild animals may be lacking. Following the general rule that all warm-blooded animals are potentially susceptible to the disease should lead to due consideration of rabies in all such cases. Hence, the need for examination of the animal and/or administration of post-exposure treatment to the victim should be considered in every single case.

B. Preparing, Packing, and Shipping Specimens for Rabies Examination

- **DO NOT SHOOT ANIMALS IN THE HEAD OR DESTROY THE BRAIN OF ANIMALS THAT BITE/EXPOSE PEOPLE**
- **DO NOT DISPOSE OF ANIMALS THAT BITE/EXPOSE PEOPLE UNTIL A RABIES ASSESSMENT IS MADE**

1. General Public Health Testing Policy. - A rise in cases of rabies among dogs, cats, raccoons, foxes and horses since 1994 has stimulated public interest and prompted improved rabies control efforts in many counties. As a result, an increased number of suspect rabid animals are being submitted for rabies examination. The following information is provided to clarify the criteria used by the DOH Bureau of Laboratory Services to charge fees for rabies examinations.

⁵ Eidson M, Matthews SD, Willsey AL, Cherry B, Rudd RJ, Trimarchi CV. Rabies virus infection in a pet guinea pig and seven pet rabbits. J Am Vet Med Assoc. 2005 Sep 15; 227(6):932-5, 918.

The Florida Department of Health has had a long-standing policy of **discouraging rabies testing of animals that pose no risk to an individual or the public at large**. DOH Bureau of Laboratories charges a fee of \$80 to examine animals at “low risk” for rabies infection (squirrels, rats, mice, guinea pigs, hamsters, gerbils, rabbits, etc.). Naturally occurring rabies among rodents and rabbits is extremely rare. Also cage-reared animals of these species purchased at pet stores generally pose no risk to individuals bitten during feeding or handling, if they have always been housed indoors. The few rodent cases that have been reported nationally were in free-ranging wild or recently captured animals indigenous to the United States or in pet rodents with a known exposure history to high-risk rabies vectors. Requests for fee waivers involving unusual or unique situations with suspect rabid animals should be discussed with the Division of Environmental Health before the specimen is submitted.

Animal to Human Exposure: The DOH Bureau of Laboratories does not charge for examination of “high-risk” animals, e.g., raccoons, bats, bobcats, skunks, foxes, feral cats, etc. that have bitten or otherwise exposed (scratches contaminated with saliva, etc.) people to rabies. Whenever possible, pet dogs, cats, and ferrets that expose people should be confined and observed for 10 days. However, when unwanted pets or strays are involved in exposures and they are unsuitable for observation at an animal control facility or veterinary clinic they may be euthanized and their heads submitted for examination without charge.

NOTE: If there is a possibility that a person or pet has had contact with a bat, capture the bat, carefully avoiding direct contact with it and without damaging its head. To capture the bat, close windows, the room and closet doors, turn on dim light if room is dark and wait for the bat to land. While wearing gloves, cover the bat with a coffee can or similar container. Slide a piece of cardboard under the can trapping the bat. Tape the cardboard tightly to the can. Immediately contact your animal control to assist in arranging for testing. Rabies PEP is expensive and not without side effects. If the bat escapes, anti-rabies treatment may be recommended if the bat had close contact with an unattended child or a sleeping or impaired person. Most bats are healthy and contribute to the environment in many ways particularly by consuming insect pests. Unnecessary killing of bats is not humane, environmentally sound or a permanent solution to the problem.

Animal to Animal Exposure: As a general rule, bats, bobcats, foxes, raccoons and feral cats that have attacked or been in contact with pet dogs and cats or domesticated livestock are tested free of charge. This approach expedites appropriate post-exposure management of the exposed animal. (i.e., release, euthanasia or observation and vaccination). Public health officials recommend euthanizing unvaccinated dogs, cats, ferrets and livestock exposed to a suspect rabid animal or any wild carnivorous mammal or bat not available for testing. *Animals euthanized immediately after a rabid animal exposure should NOT be submitted for rabies examination.* If the owner is unwilling to do this, the exposed animal should be kept under close observation for 6 months, with dogs, cats, and ferrets vaccinated one month before release. Exposed animals that are currently vaccinated should be revaccinated immediately and observed for 45 days. Alternatively, if available, dogs or cats who bite other domestic pets or livestock may be observed for 10 days for signs of rabies. If the animal remains healthy no further action is necessary. Animals that develop signs consistent with rabies while being held in confinement should be humanely euthanized and tested for rabies.

Animals should be euthanized consistent with the “2000 Report of the AVMA Panel on Euthanasia” (<http://www.avma.org/resources/euthanasia.pdf>).

Rapid submission of specimens for laboratory analysis: With the predominance of high temperature and high humidity in Florida, many specimens are lost to test due to delays in submission. In all instances where the circumstances of the biting incident or the behavior of the biting animal indicate the probability of rabies infection, the animal bite investigator should make provisions for the humane sacrifice of the animal and proper shipment of the appropriate specimen to the *nearest* DOH Branch Laboratory for examination (see Attachment 2-C). *County health departments can enlist the assistance of an appropriate qualified, pre-vaccinated person to decapitate suspect animals. The Department of Agriculture and Consumer Services, Diagnostic Laboratories in Kissimmee or Live Oak can assist the counties with large animal brain removal. Please call prior to shipping Kissimmee (407) 846-5200 or Live Oak (386) 330-5700.*

THE SUBMITTOR MUST CALL THE LABORATORY PRIOR TO SUBMITTING SPECIMENS FOR RABIES TESTING.

NOTE: Examination of brain tissue is necessary to diagnose cases of animal rabies and enable proper medical treatment of persons exposed. Currently, there are no conclusive antemortem diagnostics available.

- The current standard for confirmation of animal rabies is the fluorescent rabies antibody (FRA) test. Smears from four (4) areas of the brain tissue are air dried, fixed in acetone (≥ 4 hours), stained, washed, dried and read with a fluorescent microscope. The laboratory will report results as positive or negative. Unsatisfactory specimens (e.g., due to cellular degradation, or insufficient material -- such as lack of brainstem) will be reported as unsatisfactory.

NOTE: An unsatisfactory laboratory result should be treated as if the animal were positive.

- DOH BOL will process specimens from suspected rabid animals using FRA procedures within 24 hours (Monday - Friday) or 48 hours (Saturday - Sunday) if human exposure has occurred.
- Emergency testing service is also available in special situations with specimens arriving by 9:00 a.m., reported out by 5:00 p.m.

The Department of Health Laboratories will telephone all positive and unsatisfactory results to the number given on the submission form. The laboratories will mail hard copies of all results to the appropriate county health departments and submit the positive results via Merlin to the Department of Health Bureau of Epidemiology by the next business day. The laboratories will also fax reports for rabies positive domestic animals to the Division of Environmental Health (DEH). In addition, they will send an e-mail notification for rabies positive domestic animals other than dogs cats to DEH personnel for domestic animal cases diagnosed after-hours, on weekends or on holidays. DEH personnel will forward reports and notifications to the FDACS central office upon receipt. Parties interested in learning results may call the laboratory as arranged during the pre-submission telephone call.

2. Instructions for Preparing, Packing, and Shipping Specimens for Rabies Examination

Animals should be euthanized consistent with the “2000 Report of the AVMA Panel on Euthanasia” (<http://www.avma.org/resources/euthanasia.pdf>).

NOTE: You must call the laboratory in advance of shipping the specimen, notified of the waybill number and the expected hour of arrival of the specimen. If the specimen is shipped on a Friday, mark the area for Saturday delivery on the shipping label and provide weekend contact information.

a. Specimen: *Staff assigned to decapitate animals should have received rabies pre-exposure prophylaxis and be trained to use universal precautions.* To insure an adequate specimen, the CHD or designee must send:

- The whole body of bats (in order to identify the species). Counties may send the whole body of small rodents or any animal no larger than a squirrel.
- Only the head of dogs, cats, ferrets, raccoons, skunks, rabbits, and similarly sized animals. **The skin should not be removed from the head or the head mutilated in any way.**
- Only the brain and brainstem of large animals or animals with horns (cows, horses, pigs over 50 pounds, goats etc.) removed from the cranial vault by a veterinarian or other experienced persons who can protect themselves from tissue and aerosol exposure. The FDACS Diagnostic Laboratory may assist in selected cases in the removal of brains from large animals.

NOTE: Specimens may be submitted in instances where the animal was buried, or where trauma occurred to the animal's head; however, the validity of the test may be compromised.

Safe handling of rabies specimens

- Rubber gloves (2 pairs of disposable gloves or stainless steel mesh gloves) and protective clothing as well as face and eye protection should be worn while the head is being removed and packaged.
- Sever the head between the foramen magnum and the atlas. Local veterinarians can assist in this removal. Do not use mechanized saws.
- Allow fluids and blood to drain from the head. Keep as clean as possible and place the head in a double plastic bag for transport to the laboratory.
- Cutting surfaces and instruments should be thoroughly cleaned with detergent and water and disinfected. Gloves should also be cleaned and disinfected or discarded following use.

b. Specimen Storage: Until the specimen is ready to be packaged and shipped to the laboratory, it should be refrigerated and only frozen where no alternative method is available for cold storage. Without refrigeration, the brain deteriorates very rapidly and frozen specimens must be allowed to thaw before examination thus causing delayed test results. Frozen tissues can be tested using the fluorescent rabies antibody test regardless of the length of time stored in this manner.

NOTE: Spray specimens with a flea and tick killer prior to packaging and submission to the lab.

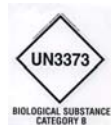
c. Packaging: Specimens must be placed in two heavy plastic bags and packed in a watertight container. This inner container should be placed in a larger leak-proof outer container (Styrofoam) and

the space between packed with freeze packs, cold cans, etc. Dry ice should not be used since freezing may occur. Each shipping container shall not contain more than one animal head of moderate to large size. For small mammals such as bats, more than one specimen may be enclosed in the container, but each animal specimen must be double-sealed with tape inside a zip-lock plastic bag and clearly identified as to its distinct character, species, and exposed individual or animal. These instructions are also on the back of the rabies test form HRS Form 959 (Attachment 2-A). **Under no conditions should an animal head be placed in a mixed shipment with human clinical specimens or potable and environmental water samples.**

d. Forms Required: An animal history form (Attachment 2-A) must be completed and entered into Merlin. The hard copy should be placed in a zip-lock bag and attached securely to the plastic-wrapped animal specimen in the shipping container.

NOTE: To ensure rapid turnaround of all results, please enter the animal test request into Merlin. The laboratory reports out positive and negative results in Merlin daily.

e. Shipping: The CHD is responsible for assuring that specimens associated with human and animal rabies exposure are appropriately submitted to the laboratory. Specimens submitted for rabies testing are considered diagnostic specimens. A 2” x 2” UN3373 Biological Substance Category B label should be placed on the outside of the box (can be hand-drawn).



Courier service (Pony Express, Airborne, FedEx, e.g.) is the best method for workday and emergency delivery to ensure minimum delay in transport. **DO NOT use a bus service.**

f. Emergencies: DOH laboratories will, upon request, perform emergency examinations on weekends. Generally, an emergency is one in which there is an unprovoked bite by a high risk animal, other feral animal, or unimmunized dog or cat that is showing signs of rabies. A bite by a rodent, lagomorph, or healthy dog or cat is not ordinarily considered an emergency. If special circumstances warrant such emergency examination, the CHD director/administrator should call first. For after hours and weekend rabies emergencies, contact the closest laboratory.

3. Listing of Florida Department of Health Bureau of Laboratories

BOL-Jacksonville

1217 Pearl Street
Jacksonville, Florida 32202
Lab Phone: (904) 791-1540
Fax: (904) 791-1542

BOL-Pensacola

50 W. Maxwell St.
Pensacola, Florida 32501
Phone: (850) 595-8895

Weekend Emergency Contacts

Valerie Mock (904) 268-1076

Pam Colarusso (904) 924-9252

Patti Jones or
Bill Nakashima
(850) 777-0984

Fax: (850) 595-6380

Leah Gillis, Director
(850) 777-0982

BOL-Tampa

Virology Department -- Rabies
3602 Spectrum Boulevard

Beeper: (813) 363-0714
Tampa, FL 33612.

Phone: (813) 974-4052 or (813) 974-8556
Main: (813) 974-8300
Fax: (813) 974-7969 or (813) 974-3034

BOL-West Palm Beach

Bureau of Laboratories
P.O. Box 3738
Lantana, Florida 33465
Phone: (561) 540-1170
Fax: (561) 540-1172

Mary Cook (561) 968-5787 or
Cell: (561) 436-5179
Dr. Roberta Lopez (561) 588-9518 or
Cell: (561) 309-3655

BOL-Miami

1325 N.W. 14th Avenue
Miami, Florida 33125
Phone: (305) 324-2432
Fax: (305) 324-2429

Mark Diamante (954) 989-5216
Cell: (305) 409-9926
Dr Peter Shih (305) 818-2400
Cell: (305) 409-9924
Pager (800) 429-2307

NOTE: DOH Laboratories are the only laboratories to test for rabies in Florida. See Attachment 2-C for laboratory catchment areas.

Attachment 2-A
Laboratory Submission Form

Attachment 2-B
2007 Animal Rabies Data

Attachment 2-C
Laboratory Catchments Areas

RABIES TEST FORM

LABORATORY USE ONLY

Submitting Source: _____ Date Received _____ Condition: _____
 _____ Specimen No.: _____ Branch: _____

Telephone No. Weekday: _____
 Weekend: _____

RESULTS

Send Report To: _____ FRA Test: _____
 _____ Date Reported: _____

RABIES
 HRS Form 959, Oct 95
 (Replaces Oct 85 edition which may be used)

STATE OF FLORIDA
 DEPARTMENT OF HEALTH AND REHABILITATIVE SERVICES
 OFFICE OF LABORATORY SERVICES

(Fold line for mailing and filing prposes)

ANIMAL HISTORY

Kind of Animal: _____ Stray Pet) Color: _____ Breed: _____
 Symptoms: _____ Animal Killed Died Date: _____
 Animal Inoculated Against Rabies: Yes No) Date: _____
 Owner: _____ Address: _____ Telephone: () _____
 Exposure: Human Animal (Date: _____
 Name: _____ Type of Exposure: _____
 Address: _____
 Telephone: _____

INSTRUCTIONS ON BACK

DIRECTIONS FOR SUBMITTAL OF ANIMAL HEADS

- (1) The animal head should be shipped or hand carried to the laboratory as soon as possible for a satisfactory examination. **DO NOT FREEZE HEAD.**
- (2) Wrap the animal head in two plastic bags or in one bag inside a water-tight container. Knot the bag(s) or use twist-tie to close. Place the wrapped head into a leak proof shipping cooler. Add frozen cold packs sufficient to maintain refrigeration temperature.
- (3) Complete Rabies form test and place in a water-tight bag. Attach bag to corresponding animal head in cooler.
- (4) Please call the laboratory to advise the expected time of arrival, mode of shipment, and waybill number.
- (5) All positive reports will be phoned to the health department. Weekend telephone numbers must be entered on the Rabies Test Form.

Jacksonville Central Laboratory

1217 Pearl Street
Jacksonville, Florida 32202
Lab Phone: (904) 791-1540

Fax: (904) 791-1542

Pensacola Branch Laboratory

50 W. Maxwell St.

Pensacola, Florida 32501
Phone: (850) 595-8895

Fax: (850) 595-6380

Tampa Branch Laboratory

Virology Department -- Rabies
3602 Spectrum Boulevard
Tampa, FL 33612.
Phone: (813) 974-4052 or (813) 974-8556
Main: (813) 974-8300
Fax: (813) 974-7969 or (813) 974-3034

West Palm Beach Branch Laboratory

Bureau of Laboratories
P.O. Box 3738
Lantana, Florida 33462
Phone: (561) 540-1170
SunCom: 256-1170
Fax: (561) 540-1172

Miami Branch Laboratory

1325 N.W. 14th Avenue
Miami, Florida 33125
Phone: (305) 324-2432

Fax: (305) 324-2429

Weekend Emergency Contacts

Valerie Mock (904) 268-1076

Pam Colarusso (904) 924-9252

Leah Gillis, Director
Patti Jones or
Bill Nakashima
(850) 777-0984

Beeper: (813) 363-0714

Weekend pager 813-883-6208

Mary Cook (561) 968-5787 or
Cell: (561) 436-5179
Dr. Roberta Lopez (561) 588-9518 or
(561) 309--3655

Mark Diamante (954) 989-5216
Cell: (305) 409-9926
Dr Peter Shih (305) 818-2400
Cell: (305) 409-9924
Pager (800) 429-2307

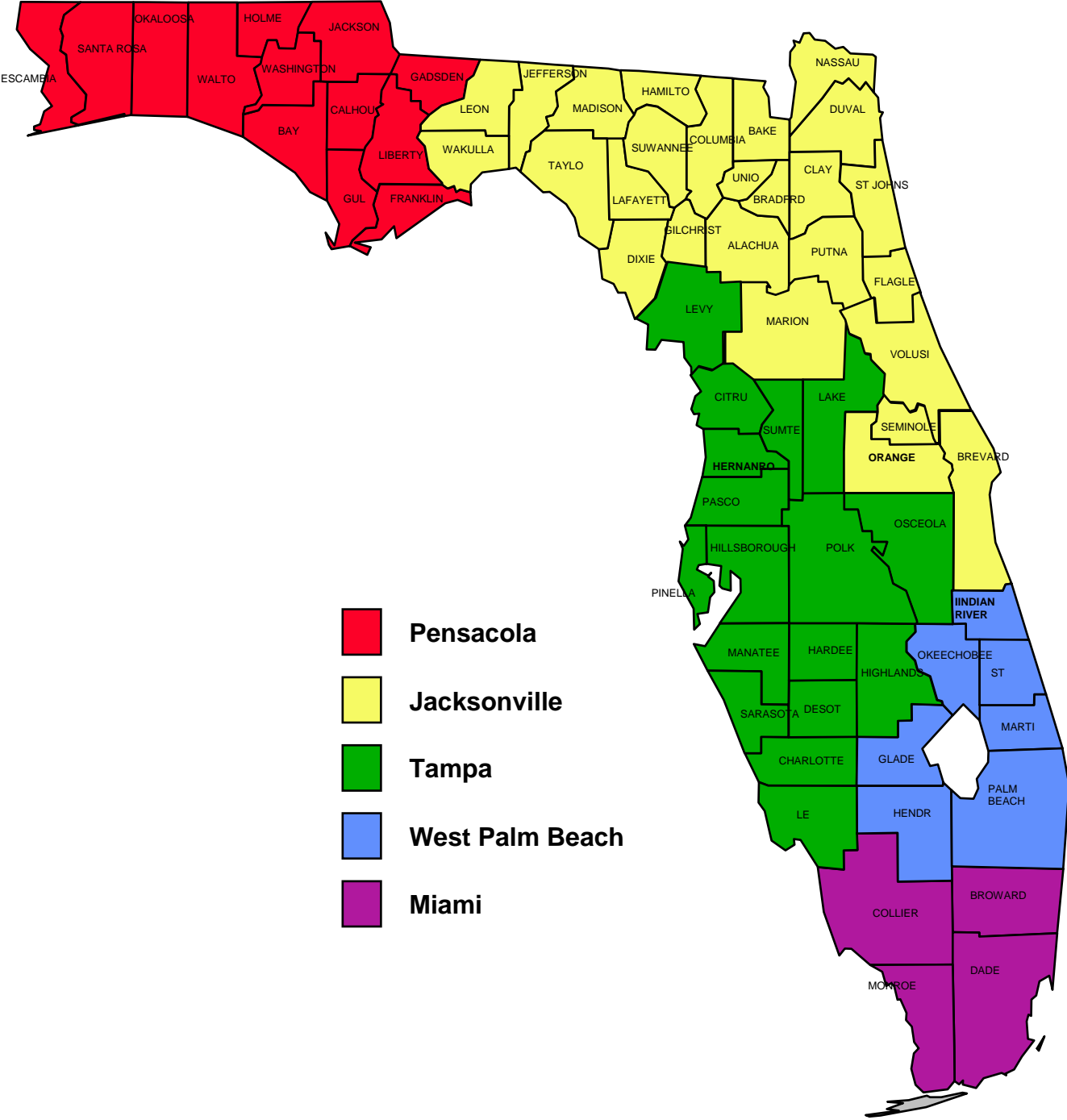
Attachment 2-B

Rabies confirmed animals reported in 2007 by species and county

CODE	NAME	Bat	Beaver	Bobcat	Cat	Cow	Dog	Fox	Horse	Otter	Raccoon	Skunk	Tot
1	ALACHUA			1				2			3	1	7
2	BAKER										1		1
3	BAY										2		2
4	BRADFORD												
5	BREVARD	1			2					1	3		7
6	BROWARD												
7	CALHOUN										1		1
8	CHARLOTTE												
9	CITRUS										1		1
10	CLAY												
11	COLLIER												
12	COLUMBIA	1						2			2		5
13	DADE												
14	DESOTO												
15	DIXIE										2		2
16	DUVAL	1			2								3
17	ESCAMBIA							1			1		2
18	FLAGLER							1					1
19	FRANKLIN												
20	GADSDEN							1					1
21	GILCHRIST				1						2		3
22	GLADES												
23	GULF												
24	HAMILTON	1											1
25	HARDEE												
26	HENDRY												
27	HERNANDO				1			1			3		5
28	HIGHLANDS												
29	HILLSBOROUGH	2			1						2		5
30	HOLMES										2		2
31	INDIAN RIVER				1					1	1		3
32	JACKSON										2		2
33	JEFFERSON												
34	LAFAYETTE												
35	LAKE				1			1			1		3
36	LEE												
37	LEON							2			9		11
38	LEVY												
39	LIBERTY										1		1
40	MADISON												
41	MANATEE	2								1	2		5
42	MARION							2			3	1	6

CODE	NAME	Bat	Beaver	Bobcat	Cat	Cow	Dog	Fox	Horse	Otter	Raccoon	Skunk	Tot
43	MARTIN				1						2		3
44	MONROE												
45	NASSAU	1											1
46	OKALOOSA												
47	OKEECHOBEE												
48	ORANGE	3						1			1		5
49	OSCEOLA							1	1				2
50	PALM BEACH							2			1		3
51	PASCO			1							2		3
52	PINELLAS	1											1
53	POLK	2		1							3		5
54	PUTNAM							1			2		3
55	ST. JOHNS			1							1		2
56	ST. LUCIE												
57	SANTA ROSA												
58	SARASOTA	1											1
59	SEMINOLE	2			1			1			4		8
60	SUMTER				1					1			2
61	SUWANNEE						1	1					2
62	TAYLOR												
63	UNION												
64	VOLUSIA				2						5		7
65	WAKULLA												
66	WALTON												
67	WASHINGTON												
	State Total	18	0	4	14	0	1	20	1	4	64	2	128

Rabies Bureau of Laboratories Submission Regions



CHAPTER 3

ANIMAL RABIES EXPOSURE

A. Definition of rabies exposure

A rabies exposure is considered any bite, scratch, or other situation in which saliva or nervous tissue of a potentially rabid animal enters an open or fresh wound, or comes in contact with mucous membranes by entering the eye, mouth or nose of another animal.

B. Animal vaccination

1. Vaccines: There are currently 20 parenteral animal rabies vaccines licensed by the U.S. Department of Agriculture (USDA) for use in dogs, cats, sheep, cattle, horses and/or ferrets. Some are approved for dogs or cats for a multi-year immunity period and others for only a 1-year period. All dogs and cats should be revaccinated 12 months after initial vaccination (regardless of the length of immunity period of the initial vaccine). Thereafter, the interval between vaccinations will conform to the manufacturer's directions, either one year or multiple years except for instances involving post-exposure treatment of rabies. More frequent use of these vaccines is considered "off label" and may be injurious to the animal. Peak rabies antibody titers are reached within 28 days of the primary vaccination. An animal is considered currently vaccinated if it has received its' primary vaccination in accordance with the guidelines of this Compendium at least 28 days prior to the rabies exposure incident. Because a rapid anamnestic response is expected, an animal is considered currently vaccinated immediately after a booster vaccination.

For a list of USDA-approved vaccines refer to the NASPHV Compendium of Animal Rabies Control 2008 (Attachment 3-A). The recommended NASPHV rabies vaccination certificate can be found in attachment 3-B.

Note: Wolves and wolf-dog hybrids, and wild cats (lions, pumas, bobcats etc.) and wild cat/housecat hybrids are not recommended as pets. However, if owned, the animals must be properly permitted through the FWC. Because of the possible protective effect of vaccination, veterinarians are encouraged to vaccinate these animals against rabies providing: 1) the owner signs a statement recognizing the current "off-label" use of the vaccine; and 2) the owner understands that the animal will be euthanized and tested for rabies should it bite or expose a person or be exposed to a rabid animal.

Animals NOT meeting the definition of "currently vaccinated" include:

- dog, cat, ferret, horse, cattle or sheep whose first vaccination was given less than one month before exposure
- dog, cat, ferret, horse, cattle or sheep whose previous vaccination expired
- dog or cat that was given an initial vaccination and not boosted one year later
- dog, cat, ferret, horse, cattle or sheep vaccinated by anyone other than a licensed veterinarian
- any wild animal, or wild and domestic animal hybrids

NOTE: Titers are NOT acceptable in lieu of revaccination

Zoo-keepers may elect to vaccinate valuable zoo animals against rabies. It should be noted that this is “off-label” use of the vaccine. Should a vaccinated zoo animal bite a person it may have to be tested for rabies.

Oral vaccination for wildlife is available under limited circumstances to control epidemics. See Chapter 5 for more information.

2. Serologic Confirmation of Antibody Titer: Rabies antibody titers for dogs, cats or ferrets may be obtained via serologic testing with the rapid fluorescent focus inhibition test (RFFIT) examination (see page 4-2 for a list of laboratories). **Evidence of circulating rabies virus neutralizing antibodies must not be used as a substitute for current vaccination in managing rabies exposure or determining the need for booster vaccinations.**

3. Animal Post-exposure Prophylaxis (PEP): Appropriately vaccinated dogs, cats, ferrets, horses, cattle and sheep which have been exposed to known or suspect rabid animals should be given a booster vaccination upon entering the 45-day quarantine period.

Unvaccinated dogs, cats, ferrets, horses, cattle or sheep exposed to a rabid animal should be euthanized. Alternatively, if the owner desires to keep the animal, the animal must be placed in strict isolation for 180 days at the owner’s expense in a facility approved by the CHD or designee. The animal should be vaccinated upon entry into quarantine or 30 days before being released from quarantine to comply with pre-exposure vaccination recommendations.

Findings from a study conducted by Hanlon et al⁶ suggested that post-exposure prophylactic rabies vaccination (PEP) may be effective in protecting an animal exposed to rabies. The use of PEP will not preclude the need for a 6-month quarantine. Veterinarians administering animal PEP should obtain informed consent of the owner and are requested to submit a PEP Data Collection Form (Attachment 3-E).

NOTE: If PEP is given to a previously unvaccinated animal, veterinarians are urged to complete the Animal PEP Data Sheet and obtain the owner’s informed consent (see Attachment 3-E).

C. Types of confinement

The word confinement has been used to describe different rabies control activities. To clarify, please note the following:

- **Isolation and Observation Periods:** Dogs, cats and ferrets that bite or otherwise exposure a person to rabies can be held for observation for 10 days. Horses can be held for a 14-day observation period.
- **Animal Quarantine:** Dogs, cats, ferrets, horses, cattle and sheep may be maintained in confinement and observed when they are exposed to rabies by other animals.

⁶ Hanlon CA, Niezgodka M, Rupprecht CE. Post-exposure prophylaxis for prevention of rabies in dogs. Am J Vet Res 2002; 63:1096-110.

Area Quarantine: During outbreak situations, CHDs may issue an area quarantine to decrease human exposure to rabid animals, increase pet vaccination rates and restrict the movement of animals (confining all dogs, cats and captive wild mammals to their owners' premises). Confinement should be by fence or cage, inside the living quarters or related buildings or on a leash under control of a responsible person.

1. Isolation and Observation Periods -- Suspect Rabid Animal Exposes A Person: (Attachment 4-C)
When the report of an animal biting a human is received, the investigating officer should make contact with the owner and the victim as soon as possible. Initial contact with the animal owner and the victim by telephone should be sufficient unless circumstances warrant a field visit. The officer should also obtain and verify documentation of current veterinarian-administered rabies vaccination. (*See Attachment 4-A for the Animal Bite Report Form.*)

a. 10-Day Isolation and Observation Period for Dogs, Cats or Ferrets: Dogs, cats and ferrets involved in biting incidents of humans, regardless of their vaccination status should be captured alive, if possible, and isolated for a period of 10 days. The observation period is to begin from the time of the bite for a 10-day period, not 10 days from the time of capture. If confinement of the animal is not possible or practical, the animal can be euthanized and its brain submitted for laboratory examination.

Observation is of value because the length of time that virus may be excreted in the saliva prior to onset of signs can be predicted. It is known that dogs, cats and ferrets may excrete virus only a few days prior to onset of signs. The observation period is longer to allow for a wide safety margin. If the animal is alive after 10 days from the exposure, it was not shedding rabies in the saliva during the exposure. Conversely, if the animal exhibits signs of rabies, it should be euthanized and the head submitted for rabies testing.

NOTE:

- *In most cases, wolves, wolf-dog hybrids and exotic cat hybrids will be euthanized and tested for rabies should they bite or otherwise expose a person.*
- *Rabies vaccine should not be administered to the dog, cat, or ferret during the observation period because this would necessitate other people being exposed to the animal. Side effects from the vaccine administration can also be confused with rabies signs and animals may be euthanized and tested unnecessarily as a result. The 10-day period is not altered should the animal be inadvertently vaccinated, however.*

Vaccinated Animals - If the animal is “currently vaccinated,” it may be isolated and observed at home provided: 1) the investigating officer certifies the adequacy of the isolation site; 2) the owner signs a confinement responsibility statement; 3) there is no record of noncompliance with animal control regulations, and 4) a second site visit is conducted by the investigating officer on day 10 to release confinement (Attachment 3-C). The animal owner should be informed that termination of isolation may, in extenuating circumstances, require examination of the animal by a licensed veterinarian prior to release, and that cost for the examination will be borne by owner. It is the owner's responsibility to immediately report any unusual behavior indicative of rabies in the animal, or the death of the animal during the isolation period. If possible, the victim should be encouraged to monitor and report violations of home confinement. When the animal is not isolated at home, it should be held in an approved facility. CHD staff must immediately notify the exposed individual if the animal develops rabies.

Unvaccinated Animals - If the animal is unvaccinated, the 10-day observation should be in a city or county animal shelter having recognized isolation procedures or at a licensed veterinary clinic at the owner's expense. Any abnormal behavior or sign of rabies must be reported immediately to the investigating officer (signs of rabies in animals are included in Chapter 2). The animal may be isolated and observed at home at the discretion of the CHDs or their designees. **The animal must be vaccinated against rabies at the owner's expense by a licensed veterinarian following termination of the observation period.**

Termination of Observation Period - Animals can be released from the observation period status only upon approval of the CHD director/administrator or designee. The investigating officer will notify the exposed individual and the animal owner, and complete the Animal Bite Report.

b. Livestock: When livestock (cattle, sheep, food or pot-bellied pigs, etc.) other than horses are involved in a biting incident or other possible exposure of an individual to rabies, they should be evaluated on an individual basis at the discretion of the CHD director/administrator to determine the need for laboratory examination. Pot bellied pigs occupy a unique niche within any consideration of livestock exposure. While some meet the definition of conventional (i.e. pen-reared) livestock, others have low risk exposure no different than indoor pets. For bites by these animals, careful evaluation of all the circumstances surrounding the incident should be considered against the relative risk of rabies.

Animals exhibiting unusual behavior should be euthanized and tested for rabies. Under special circumstances, asymptomatic biting animals can be confined and observed for a period of 14 days. Typically, rabid livestock show signs and symptoms very quickly. Therefore, confinement to their owner's premises may be appropriate in most circumstances.

Several incidents involving horses biting humans have led to the development of the following DOH policy for isolation and observation of horses. The recommended 14-day observation period is based on current understanding of the pathology of rabies in animals and reflects standard practices of states that have large numbers of horses, including Kentucky and Maryland.

If a horse that bites a human is (1) exhibiting altered behavior or (2) if the horse has no owner or (3) the owner is not interested in preserving the animal's life, the horse should be humanely destroyed and its brain submitted for laboratory examination. A valuable animal, regardless of vaccination status, may be spared by placing it under observation for 14 days from the date of the bite. If the CHD determines that the owner is unwilling or unable to comply with the requirements for placing the animal under observation, the horse should be destroyed in a humane manner and its brain submitted for rabies examination.

- The horse should be isolated on the owner's premises, in a stable or securely fenced pasture that is isolated from humans and other animals and that has been inspected and approved by the CHD or designee.
- The horse should remain under the control of the owner or of a responsible individual designated by the owner, who will stay on the premises or visit daily during the 14 days to observe the horse.

- During the observation period, the horse should be under the supervision of a licensed veterinarian. At the owner's expense, the veterinarian should examine the horse at least at the beginning and at the end of the observation period and certify in writing to the CHD that the animal is free of signs of rabies upon release from observation.
- If, at any time during the observation period, the owner or designee notices unusual behavior in the horse, the veterinarian should be notified immediately. If the veterinarian determines that the horse is showing signs of rabies, the CHD should be notified and the horse immediately destroyed and its brain submitted for rabies examination.
- If the horse under observation is sacrificed and tests positive for rabies upon examination or the CHD loses contact with the horse before the end of the observation period, the individual(s) bitten should immediately begin rabies post-exposure prophylaxis.
- Unimmunized horses placed under observation should be vaccinated upon release.

c. Wildlife: The time that rabies virus may be excreted in the saliva of wild carnivores (i.e., raccoons, foxes, and skunks) and bats is not known.

Free-roaming: The investigating officer should make contact with the exposed individual immediately and, if the species is appropriate for rabies risk, attempt to locate the animal for testing. If the animal cannot be located, the person exposed should be notified within 24 hours and informed about their risk of exposure to rabies, their options regarding post-exposure prophylaxis, and advised to consult a physician promptly. Captured animals that have bitten or exposed a human shall be disposed of immediately in a manner such that the intact brain can be submitted to the nearest state laboratory for examination for rabies.

Personal Pets: The DOH opposes keeping wild animals as pets. The commercial sale of high-risk species, such as raccoons, foxes, bats, skunks, or bobcats, as pets, should be discouraged. At the time of permitting, FWC will provide rabies risk information to the pet owner indicating that any bite incident will require euthanizing and testing the animal <http://myfwc.com/permits/>. CHDs should also notify FWC when people are bitten by pet wildlife or exotic animals to allow for investigation of the exposure.

In cases where a high-risk species is involved, such as bobcats, foxes, raccoons, otters, bats, skunks, feral dogs or feral cats, the recommendation is to sacrifice the animal, regardless of how or where the animal was obtained, and its vaccination status. In cases where sacrifice is recommended, the animal can be spared if the victim: 1) opts to take the antirabies treatment; or 2) refuses treatment and signs an informed consent form stating that they understand the potential consequences of this choice and release the CHD and animal owner from responsibility in the event rabies occurs.

Wildlife in Licensed Zoos/Tourist Attractions: Captive wild mammals such as those kept in licensed zoos or tourist attractions that bite or potentially expose a human to rabies must be evaluated individually with regard to confinement or examination in accordance with the history of possible exposure to rabies and the relative risk as a species.

2. Animal Quarantine -- Animal exposes another animal (Attachment 3-G)

When domestic animals are exposed to known or suspected rabid animals, the owner of the domestic animal shall be required to either: 1) euthanize the exposed animal; or 2) confine the exposed animal until the suspect animal is tested negative or the appropriate quarantine period (victim) or isolation period (if the biting animal is a domestic dog, cat, ferret or livestock) is ended. If the suspect animal is not located, the domestic animal shall be quarantined according to the provisions below based on the vaccination status of the animal victim. Wild, high-risk species (raccoon, fox, skunk, bat and bobcat) that cannot be located for testing after having contacted a domestic animal should be considered rabid for quarantine purposes. If the biting animal is totally unknown, the veterinarian should counsel the owner on signs, symptoms, and incubation period of rabies. A veterinarian should be consulted if symptoms occur.

ANIMAL EXPOSES A VACCINATED ANIMAL

Dog, Cat, Ferret, Horse, Cow or Sheep: "Currently vaccinated" means vaccinated by a licensed veterinarian with a USDA-approved rabies vaccine appropriate for the species of one- or three-years duration of immunity, with the date of the animal's exposure to rabies being before the one-, three or four-year period (whichever is applicable) has elapsed. Currently vaccinated animals exposed to a known or suspected rabid animal shall be revaccinated immediately by a licensed veterinarian and quarantined for 45 days in a place approved by the CHD director/administrator or designee (or euthanized if the pet owner elects). Dogs shall be leashed and muzzled when taken outdoors, or restricted by fencing from exposure to others and pets of others. Cats and ferrets must be maintained indoors. Any illness must be evaluated by a licensed veterinarian on premise and, if considered possibly rabid, reported immediately to the rabies investigative authority (Attachment 3-H).

Home Quarantine. An immunized dog, cat or ferret may be placed under quarantine for 45 days on the owner's premises as determined by the CHD director/administrator or designee. It is the owner's responsibility to produce documentation of current rabies vaccination by a licensed veterinarian. **In the absence of proof, the animal should be considered unvaccinated. Owner-administered vaccinations are not acceptable as valid.** The owner should be advised of the report, quarantine requirement, and procedures to be followed during quarantine. The owner should be sent a letter with a Home Confinement Agreement Form (Attachment 3-C) and a Rabies Fact Sheet (Attachment 1-E). If the signed agreement is not received by the agency within seventy-two (72) hours, a home visit should be made.

Farm Animals: Currently vaccinated livestock should be confined in isolation from other animals and observed for a period of 45 days.

ANIMAL EXPOSES AN UNVACCINATED ANIMAL

Unvaccinated Dog, Cat or Ferret: Any dog, cat, or ferret not currently vaccinated that is exposed to a known or suspected rabid animal shall be euthanized or, if the owner desires, placed under rabies quarantine for six months (at the owner's expense) in a place approved by the CHD director/administrator with isolation from other animals and reduced contact with people. The animal

should be vaccinated upon entry into isolation or 30 days before being released from quarantine to comply with pre-exposure vaccination recommendations.

NOTE: A study by Hanlon et al suggested that post-exposure prophylactic rabies vaccination (PEP) may be effective in protecting an animal exposed to rabies. The use of PEP will not preclude the need for a 6-month quarantine. Veterinarians administering animal PEP should obtain informed consent of the owner and are requested to submit a PEP Data Collection Form (Attachment 3-E).

At a minimum, CHD staff or animal control officers should inspect the animal on a weekly basis for eight weeks, then monthly, unless the animal exhibits signs or symptoms of rabies. Place of quarantine may include the owner's home if facilities are approved by the CHD or designee (Attachment 3-D) and owner cooperation is such that secondary exposures off the premises are unlikely. If the dog, cat, or ferret is killed or dies within the quarantine period and there is a potential for human exposure, the head must be detached from the body without mutilation, properly cooled, and forwarded to the closest DOH laboratory for rabies examination.

Unvaccinated Farm Animals: Livestock known to have been bitten by rabid animals should be euthanized or slaughtered within 7 days. If the owner is unwilling to have this done and if approved by the CHD director/administrator, the animal must be kept away from other animals and under very close observation for six months. During this time, it may not be slaughtered, no milk may be consumed or sold, no semen may be collected, and proper handling procedures must be outlined and followed to minimize potential human exposure. (In all instances, FDACS staff must be informed. See Attachment 1-B for telephone numbers).

NOTE: Unvaccinated horses exposed to a known or suspect rabid animal out-of-state must complete the 180-day quarantine prior to (re)entering Florida.

The following are recommendations to livestock owners and carcass processors:

- If slaughtered within 7 days of being bitten and providing that the exposed area inclusive of musculature and other tissues is discarded, remaining meat may be eaten without risk of infection. USDA Food Safety and Inspection Services (FSIS) meat inspectors may reject for slaughter any animal that has been exposed to rabies within the past eight months and should be consulted to determine whether animals slaughtered within 7 days of being exposed to a rabid animal, or following 6 months of observation are acceptable for slaughter. Euthanized animals not acceptable for slaughter should be buried or incinerated at the direction of the CHD and DEP. Persons who slaughter, skin or otherwise process suspect rabid animals should use appropriate barrier protection and work with care to prevent possible exposure from the wound areas.
- No tissues or secretions from a clinically rabid animal should be used for human or animal consumption. If consumption of rabid animals occurred, the CHD should be notified. However, because pasteurization temperatures will inactivate rabies virus, inadvertently drinking pasteurized milk or eating completely cooked meat does not constitute a rabies exposure. A veterinarian should remove the head or brain for rabies testing. In counties where a veterinarian is unavailable, the rabies authority should have a staff member trained in safe decapitation procedures. If at all

possible, the individual must be previously immunized, and wear mask, gown, gloves, and eye protection.

Wild Animals: Any wild mammal species bitten by a known rabid animal should be sacrificed, if capture is possible. In the case of zoos or controlled attractions, the rabies authority may permit certain endangered animal(s) to be quarantined for a period of six months in a manner and place approved by the rabies authority in lieu of sacrifice. In all instances, the FWC will be informed about the circumstances of the disposition and their assistance requested if necessary.

3. Area Quarantine

During outbreak situations, CHDs may issue an area quarantine to decrease human exposure to rabid animals, increase pet vaccination rates and restrict the movement of animals. Increased levels of rabies in a community require the notification of the citizens in the affected area. There are two distinct levels of area notification: 1) rabies alert; and 2) rabies quarantine. Both should be utilized judiciously to prevent lack of suitable public response due to overuse of the terms. A local rabies control network (health department personnel, animal control officers, veterinarians, FWC officers, and animal shelter staff) established prior to the onset of problems would assist with the coordination of later interventions.

Note: For more information, refer to Chapter 5, Section C.

D. Confidentiality

Information contained in a notifiable disease report made from a health care provider to the Department of Health is confidential per F.S. 381.0031 and can only be released to animal control officers and other agencies when necessary to public health. The statute limits both the type of information shared and the number of people in receipt of the records. Confidential information should only be given to persons who need it to complete the public health response. For example, to ensure that the animal bite is investigated appropriately the identity of the victim may have to be released to animal control officers, when the victim is needed to identify the biting animal. If the animal can be classified as a dangerous dog (F.S. 767.11) it may also be necessary to share details about the attack such as wound site and the severity of the injury.

Attachment 3-A

NASPHV list of animal vaccines

Attachment 3-B

NASPHV rabies vaccination certificate

Attachment 3-C

**Letters/Home confinement form
(English, Spanish, and Haitian Creole)**

Attachment 3-D

FWC Cage Specifications

Attachment 3-E

**Informed Consent for Animal PEP
Animal PEP Data Collection Sheet
(English, Spanish, and Haitian Creole)**

Attachment 3-F

FWC Permit License for Keeping Wildlife as Pets

Attachment 3-G

Management of Animal Patients Exposed to Rabid Animals

Attachment 3-H

Agreement for Confinement at a Veterinary Facility

Part III: Rabies Vaccines Licensed and Marketed in the U.S., 2008

Product Name	Produced by	Marketed by	For Use In	Dosage	Age at Primary Vaccination ^a	Booster Recommended	Route of Inoculation
A) MONOVALENT (Inactivated)							
RABVAC 1	Fort Dodge Animal Health License No. 112	Fort Dodge Animal Health	Dogs Cats	1 ml 1 ml	3 months 3 months	Annually Annually	IM or SC IM or SC
RABVAC 3	Fort Dodge Animal Health License No. 112	Fort Dodge Animal Health	Dogs Cats Horses	1 ml 1 ml 2 ml	3 months 3 months 3 months	1 year later & triennially 1 year later & triennially Annually	IM or SC IM or SC IM
RABVAC 3 TF	Fort Dodge Animal Health License No. 112	Fort Dodge Animal Health	Dogs Cats Horses	1 ml 1 ml 2 ml	3 months 3 months 3 months	1 year later & triennially 1 year later & triennially Annually	IM or SC IM or SC IM
DEFENSOR 1	Pfizer, Incorporated License No. 189	Pfizer, Incorporated	Dogs Cats	1 ml 1 ml	3 months ^b 3 months	Annually Annually	IM ^c or SC ^d SC
DEFENSOR 3	Pfizer, Incorporated License No. 189	Pfizer, Incorporated	Dogs Cats Sheep Cattle	1 ml 1 ml 2 ml 2 ml	3 months 3 months 3 months 3 months	1 year later & triennially 1 year later & triennially Annually Annually	IM or SC SC IM IM
RABDOMUN	Pfizer, Incorporated License No. 189	Schering-Plough	Dogs Cats Sheep Cattle	1 ml 1 ml 2 ml 2 ml	3 months 3 months 3 months 3 months	1 year later & triennially 1 year later & triennially Annually Annually	IM or SC SC IM IM
RABDOMUN 1	Pfizer, Incorporated License No. 189	Schering-Plough	Dogs Cats	1 ml 1 ml	3 months 3 months	Annually Annually	IM or SC SC
CONTINUUM RABIES	Intervet, Incorporated License No. 286	Intervet, Incorporated	Dogs Cats	1 ml 1 ml	3 months 3 months	1 year later & triennially 1 year later & quadrennially	SC SC
PRORAB-1	Intervet, Incorporated License No. 286	Intervet, Incorporated	Dogs Cats Sheep	1 ml 1 ml 2 ml	3 months 3 months 3 months	Annually Annually Annually	IM or SC IM or SC IM
IMRAB 1	Merial, Incorporated License No. 298	Merial, Incorporated	Dogs Cats	1 ml 1 ml	3 months 3 months	Annually Annually	SC SC
IMRAB 1 TF	Merial, Incorporated License No. 298	Merial, Incorporated	Dogs Cats	1 ml 1 ml	3 months 3 months	Annually Annually	SC SC
IMRAB 3	Merial, Incorporated License No. 298	Merial, Incorporated	Dogs Cats Sheep Cattle Horses Ferrets	1 ml 1 ml 2 ml 2 ml 2 ml 1 ml	3 months 3 months 3 months 3 months 3 months 3 months	1 year later & triennially 1 year later & triennially 1 year later & triennially Annually Annually Annually	IM or SC IM or SC IM or SC IM or SC IM or SC SC

IMRAB 3 TF	Merial, Incorporated License No. 298	Merial, Incorporated	Dogs Cats Ferrets	1 ml 1 ml 1 ml	3 months 3 months 3 months	1 year later & triennially 1 year later & triennially Annually	IM or SC IM or SC SC
IMRAB Large Animal	Merial, Incorporated License No. 298	Merial, Incorporated	Cattle Horses Sheep	2 ml 2 ml 2 ml	3 months 3 months 3 months	Annually Annually 1 year later & triennially	IM or SC IM or SC IM or SC
B) MONOVALENT (Rabies glycoprotein, live canary pox vector)							
PUREVAX Feline Rabies	Merial, Incorporated License No. 298	Merial, Incorporated	Cats	1ml	8 weeks	Annually	SC
C) COMBINATION (Inactivated rabies)							
CONTINUUM DAP-R	Intervet, Incorporated License No. 286	Intervet, Incorporated	Dogs	1 ml	3 months	1 year later & triennially	SC
CONTINUUM Feline HCP-R	Intervet, Incorporated License No. 286	Intervet, Incorporated	Cats	1 ml	3 months	1 year later & quadrennially ^e	SC
Equine POTOMAVAC + IMRAB	Merial, Incorporated License No. 298	Merial, Incorporated	Horses	1 ml	3 months	Annually	IM
D) COMBINATION (Rabies glycoprotein, live canary pox vector)							
PUREVAX Feline 3/ Rabies	Merial, Incorporated License No. 298	Merial, Incorporated	Cats	1ml	8 weeks	Annually	SC
PUREVAX Feline 4/ Rabies	Merial, Incorporated License No. 298	Merial, Incorporated	Cats	1ml	8 weeks	Annually	SC
E) ORAL (Rabies glycoprotein, live vaccinia vector) - RESTRICTED TO USE IN STATE AND FEDERAL RABIES CONTROL PROGRAMS							
RABORAL V-RG	Merial, Incorporated License No. 298	Merial, Incorporated	Raccoons Coyotes	N/A	N/A	As determined by local authorities	Oral

- a. Minimum age (or older) and revaccinated one year later.
- b. One month = 28 days
- c. Intramuscularly
- d. Subcutaneously

Attachment 3-B

RABIES VACCINATION CERTIFICATE
NASPHV FORM 51 (revised 2007)

Owner's Name & Address Print Clearly			RABIES TAG #	
			MICROCHIP #	
LAST	FIRST	M.I.	TELEPHONE #	
NO. STREET			CITY	STATE ZIP
SPECIES Dog <input type="checkbox"/> Cat <input type="checkbox"/> Ferret <input type="checkbox"/> Other: <input type="checkbox"/> _____ <small>(specify)</small>	AGE Months <input type="checkbox"/> Years <input type="checkbox"/>	SIZE Under 20 lbs. <input type="checkbox"/> 20 - 50 lbs. <input type="checkbox"/> Over 50 lbs. <input type="checkbox"/>	PREDOMINANT BREED _____	PREDOMINANT COLORS/MARKINGS _____ _____
	SEX <input type="checkbox"/> Male <input type="checkbox"/> Female <input type="checkbox"/> Neutered	ANIMAL NAME _____		
Animal Control License <input type="checkbox"/> 1 Yr <input type="checkbox"/> 3 Yr <input type="checkbox"/> Other _____				
DATE VACCINATED _____ Month / Day / Year	Product Name: _____ Manufacturer: <input type="text"/> <input type="text"/> <input type="text"/> <small>(First 3 letters)</small>		Veterinarian's Name: _____	
NEXT VACCINATION DUE BY: _____ Month / Day / Year	<input type="checkbox"/> 1 Yr USDA Licensed Vaccine <input type="checkbox"/> 3 Yr USDA Licensed Vaccine <input type="checkbox"/> 4 Yr USDA Licensed Vaccine <input type="checkbox"/> Initial dose <input type="checkbox"/> Booster dose Vaccine Serial (lot) Number _____		License Number: _____ Veterinarian's Signature _____ Address: _____ _____ _____	

Model letter to victim (English)

_____ County Health Department

(Date)

(Name)

(Address)

(City, State, Zip)

Dear _____:

Our agency has conducted an investigation in response to a report that you were exposed to a known or suspected rabid animal. The results of the investigation are as follows:

____ 1) We located the animal and it is under confinement. We will advise you of the health status of the animal upon completion of confinement.

____ 2) We located the animal and it is being tested for rabies. We will advise you of laboratory results within 72 hours.

____ 3) We were unable to locate the animal for confinement or testing. We recommend that you discuss this incident with your physician to determine the need for rabies post-exposure treatment. If you do not have access to a physician, call _____ County Health Department for assistance.

____ 4) _____

Please call us at _____ if you have any additional questions or wish information about rabies.

Sincerely,

Model letter to victim (Spanish)

Departamento de Salud del condado de _____

(Fecha)

(Nombre)

(Dirección)

(Ciudad, Estado, Código postal)

Estimado/a _____:

Nuestra agencia ha llevado a cabo una investigación en respuesta a un informe que indica que usted ha estado expuesto a un animal que, según se sabe o se sospecha, tiene rabia. Los resultados de la investigación son los siguientes:

____ 1) Hemos ubicado al animal y se encuentra en cuarentena. Le informaremos acerca del estado de salud del animal cuando finalice la cuarentena.

____ 2) Hemos ubicado al animal y se le están realizando los análisis para detectar rabia. Le informaremos acerca de los resultados de laboratorio en el término de 72 horas.

____ 3) No hemos podido ubicar al animal para ponerlo en cuarentena ni para realizarle los análisis correspondientes. Le recomendamos que hable sobre este incidente con su médico para determinar si es necesario que reciba tratamiento post-exposición a la rabia. Si no tiene acceso a un médico, llame al Departamento de Salud del condado de _____ para obtener asistencia.

____ 4) _____

Llámenos al _____ si tiene alguna otra pregunta o desea obtener información sobre la rabia.

Atentamente,

Model letter to victim (Haitian Creole)

Depatman Sante Konte _____

(Dat)

(Non)

(Adrès)

(Vil, eta, kòd postal)

Chè _____ :

Biwo nou mennen yon ankèt akòz yon rapò ki endike ou te fè kontak ak yon bèt yo konnen oswa yo sispèk ki anraje. Men rezilta ankèt la:

_____ 1) Nou te jwenn bèt la epi li nan izòlman kounye a. N ap fè w konnen eta sante bèt la lè li sòti nan izòlman.

_____ 2) Nou te jwenn bèt la epi nou fè tès laraj pou li. N ap fè w konnen rezilta laboratwa a nan 72 èdtan.

_____ 3) Nou pa t anmezi pou jwenn bèt la pou izole li oswa pou teste li. Nou te rekòmande pou w diskite ensidan sa a avèk doktè ou pou detèmine bezwen pou tretman. Si w pa ka jwenn yon doktè, rele Depatman Sante Konte _____ pou jwenn asistans.

_____ 4) _____

Tanpri rele nou nan nimewo _____ si w gen lòt kesyon oswa si w bezwen enfòmasyon sou maladi laraj.

Sensèman,

Model letter to animal owner (English)

_____ County Health Department

(Date)

(Name)

(Address)

(City, State, Zip)

Dear _____:

We received a report on _____ at _____ AM/PM that your pet, a

_____, _____, named _____,
(sex) (color) (breed)

was involved in a bite or other exposure on _____.
(date)

Chapter 64D-3, Florida Administrative Code, requires dogs, cats and ferrets involved in such incidents to be confined for 10 days. If the investigating officer determines that home confinement is acceptable in this instance and the requirements of the Home Confinement Agreement are met, the animal may be confined at your home during the observation period.

We have attached a Rabies Home Confinement Agreement. This Agreement must be read, confinement access indicated, signed and signature witnessed, and the top copy returned to this department within twenty-four hours. Failure to comply with this requirement will result in the denial of home confinement.

We appreciate your cooperation in this matter. Please contact us at _____ if you have any questions.

Sincerely,

Model letter to animal owner (Spanish)

Departamento de Salud del Condado de _____

(Fecha)

(Nombre)

(Dirección)

(Ciudad, Estado, Código postal)

Estimado/a _____:

El día _____ a las _____ a.m/p.m., recibimos un informe que indica que su mascota, un

_____, _____, _____, llamado _____,
(raza) (sexo) (color)

estuvo involucrado en un hecho en el que se produjo una mordedura u otro tipo de exposición el

_____.
(fecha)

El Capítulo 64D-3 del Código Administrativo de Florida (Florida Administrative Code) exige que los perros, gatos y hurones involucrados en dichos incidentes permanezcan en cuarentena durante 10 días. Si el funcionario a cargo de la investigación determina que la cuarentena domiciliaria es aceptable en esta instancia y se cumplen los requisitos del Acuerdo de Cuarentena Domiciliaria, el animal podrá permanecer encerrado en su casa durante el período de observación.

Hemos adjuntado un Acuerdo de Cuarentena Domiciliaria por Rabia. Debe leer este acuerdo, indicar quién tendrá acceso a la propiedad durante el período de cuarentena, firmarlo ante testigos y enviar la primera copia a este departamento en el término de veinticuatro horas. En caso de incumplimiento de estos requisitos, se denegará la cuarentena domiciliaria.

Agradecemos su cooperación en este incidente. Comuníquese con nosotros al _____ si tiene alguna pregunta.

Atentamente,

Model letter to animal owner (Haitian Creole)

Depatman Sante Konte _____

(Dat)

(Non)

(Adrès)

(Vil, eta, kòd postal)

Chè _____:

Nou te resevwa yon rapò nan dat _____ a _____ AM/PM. Rapò a endike bèt ou gen lakay ou a,

_____, _____, _____, ki rele _____,
(sèks) (koulè) (ras)

te fè pati yon ensidan mòde oswa te nan lòt kontak nan dat _____.
(dat)

Chapit 64D-3 Kòd Administratif Eta Florid mande pou chen, chat, ak firè ki gen pou wè ak ensidan konsa izole pandan 10 jou. Si ofisyè ki mennen ankèt la detèmine izòlman nan kay akseptab nan ka sa a epi obligasyon pou Home Quarantine Agreement (Angajman pou Izòlman Lakay) satisfè, bèt la ka izole lakay ou pandan peryòd obsèvasyon an.

Nou mete dokiman Rabies Home Quarantine Agreement (Angajman pou Izòlman Lakay akòz Maladi Laraj) nan lèt sa a. Ou dwe li Angajman sa a, endike aksè pou izòlman, pou ou menm ak temwen siyen Angajman an, epi pou ou voye orijinal la tounen nan departman sa a nan 24 èdtan. Si w pa konfòme w avèk obligasyon sa a, sa ap lakòz yo pa kite w izole bèt la lakay ou.

Nou apresye kolaborasyon ou nan zafè sa a. Tanpri kontakte nou nan nimewo _____ si w ta gen nenpòt kesyon.

Sensèman,

RABIES PROGRAM HOME CONFINEMENT AGREEMENT

Owners of animals involved in bites/exposures are required to isolate their animal(s) for rabies observations for a minimum of ten (10) days. The County Health Department/Animal Control may authorize home confinement for certain animals when the following criteria are met and the investigating officer concurs that it is in the best interest to all parties and the public’s health to do so. The officer may, however, require stricter confinement requirements.

I, _____, understand and agree to the following conditions and requirements:

- 1. My animal is currently vaccinated with a rabies vaccine administered by a licensed veterinarian. Proof is attached.
- 2. The animal will be isolated from other animals and will have minimal contact with people.
- 3. The animal will be leashed and under control of a person competent to restrain the animal when outside for exercise or relief, and shall not be allowed to leave my property except to receive emergency veterinary care. In such case, the veterinarian will be advised of the confinement.
- 4. Check as appropriate:
 - ___ a) County Health Department/Animal Control may have access to my property at all reasonable times to monitor the health status of the animal throughout the confinement period.
 - ___ b) The victim and/or their designee may have access to my property, once a day at a reasonable time, to monitor the health status of the animal throughout the confinement period.
- 5. If the animal becomes sick, exhibits abnormal behavior, or dies during the confinement period, I will notify the (County Health Department/Animal Control) immediately. If the animal dies, I will surrender the body for rabies testing.
- 6. I understand that confinement is from _____ through _____.
(mm/dd/yy) (mm/dd/yy)
- 7. I fully understand and agree that a breach of any of the restrictions and conditions imposed for the confinement period will subject the animal to be immediately placed in a kennel or veterinary hospital at my expense, and that I may be liable for any penalties prescribed by law. If necessary, a veterinarian-administered examination may be required. I agree to pay all costs.
- 8. I understand and agree to the above conditions and restrictions and further agree to indemnify and hold harmless _____ County, The Department of Health, the Board of County Commissioners, and their agents or employees, against all claims, liabilities, or suits of any nature whatsoever arising out of, because of, or due to the confinement of my animal at my home, including, but not limited to, costs and reasonable attorney’s fees, and that if any of them are called upon to make any payments arising out of any action against them by virtue of this instrument, then I shall further indemnify and make them whole for any such sums expended.

Under penalties of perjury, I declare that I have read the foregoing and the facts stated in it are true.

Owner’s signature _____ Date _____

Please Print: Name _____ Phone No. _____

Address _____

[Spanish]

ACUERDO DE CUARENTENA DOMICILIARIA DEL PROGRAMA CONTRA LA RABIA

Los dueños de animales involucrados en mordeduras/exposiciones deben poner a su(s) animal(es) en cuarentena para que permanezca(n) en observación en relación con la rabia durante un mínimo de diez (10) días. El Departamento de Salud/Control de Animales del Condado puede autorizar la cuarentena domiciliaria para determinados animales cuando se cumplan los siguientes criterios y el funcionario a cargo de la investigación considere que al proceder de esta manera se están protegiendo los intereses de todas las partes y la salud del público. Sin embargo, el funcionario podrá exigir requisitos de cuarentena más estrictos.

Yo, _____, comprendo y acepto las siguientes condiciones y requisitos:

1. Mi animal está vacunado actualmente con una vacuna antirrábica administrada por un veterinario con licencia. Se adjunta el comprobante correspondiente.
2. El animal permanecerá aislado de otros animales y tendrá un contacto mínimo con las personas.
3. Se le colocará una correa al animal y permanecerá bajo el control de una persona competente para sujetarlo cuando salga a hacer ejercicio o a hacer sus necesidades, y no se permitirá que abandone mi propiedad excepto para recibir atención veterinaria de emergencia. En dicho caso, se le informará al veterinario acerca de la cuarentena.
4. Marque según corresponda:
 - ___ a) El Departamento de Salud/Control de Animales del Condado puede tener acceso a mi propiedad en cualquier momento razonable, para monitorizar el estado de salud del animal durante todo el período de cuarentena.
 - ___ b) La víctima o la persona que esta designe podrán tener acceso a mi propiedad, una vez por día en un momento razonable, para monitorizar el estado de salud del animal durante todo el período de cuarentena.
5. Si el animal se enferma, muestra un comportamiento anormal o muere durante el período de cuarentena, notificaré de inmediato al (Departamento de Salud/Control de Animales del Condado). Si el animal muere, entregaré el cuerpo para que se le realicen análisis para detectar rabia.
6. Comprendo que la cuarentena se extiende desde el _____ hasta el _____.
(mm/dd/aa) (mm/dd/aa)
7. Comprendo plenamente y acepto que el incumplimiento de cualquiera de las restricciones y condiciones impuestas para el período de cuarentena derivará en el traslado inmediato del animal a una perrera o a un hospital veterinario, cuyos gastos correrán por mi cuenta, y que es posible que yo sea responsable por cualquier sanción establecida por ley. Si es necesario, se podrá exigir un examen realizado por un veterinario. Acepto pagar todos los costos.
8. Comprendo y acepto las condiciones y restricciones mencionadas anteriormente; asimismo, acepto indemnizar y mantener indemnes al condado de _____, el Departamento de Salud, la Junta de Comisionados del Condado y sus agentes o empleados por toda reclamación, responsabilidad o demanda de cualquier naturaleza que surja como consecuencia de tener a mi animal en cuarentena en mi casa, incluidos a modo de ejemplo, los costos y honorarios razonables del abogado; y si cualquiera de ellos debiera realizar algún pago como consecuencia de cualquier acción iniciada en su contra en virtud de este instrumento, deberé indemnizarles y restituirles todas las sumas desembolsadas.

Bajo pena de perjurio, declaro que he leído lo que antecede y que los datos consignados son verdaderos.

Firma del dueño _____ Fecha _____

Escriba en letra de imprenta: Nombre _____ Núm. de teléfono _____

Dirección _____

[Haitian Creole]

ANGAJMAN POU IZÒLMAN LAKAY NAN PWOGRAM ANTIRABIK

Tout moun ki gen bèt epi bèt la mòde yo oswa bèt la ka mòde yo gen obligasyon pou izole bèt la (yo) pou obsèvasyon maladi laraj pandan yon minimòm dis (10) jou. Depatman Sante Konte a/Kontwòl Bèt ka otorize izòlman lakay pou sèten bèt lè kondisyon sa yo satisfè ak lè ofisye k ap mennen ankèt la detèmine sa ap pi bon pou sante tout pati yo ak sante piblik la pou fè sa. Men tou, ofisye a ka egziye pou izòlman an fèt pi sevè.

Mwen menm, _____, mwen konprann epi mwen aksepte kondisyon ak obligasyon sa yo:

9. Bèt mwen an vaksinen avèk yon vaksen antirabik. Se yon veterinè lisansye ki ba li vaksen an. Mwen atache prèv la.
10. Bèt la ap izole bèt de lòt bèt epi l ap pran minimòm kontak avèk moun.
11. Bèt la dwe mare ak yon kòd epi anba kontwòl yon moun konpetan pou metrize bèt la lè li deyò pou egzèsis oswa soulajman, epi bèt la pa dwe kite kay la sof lè pou li resevwa swen ijans veterinè. Nan ka konsa, veterinè a ap resevwa avi pou izòlman an.
12. Tcheke sa ki apwopriye a:
 - ___ a) Depatman Sante Konte/Kontwòl Bèt ka gen aksè lakay mwen nan moman ki rezonab pou kontwòle eta sante bèt la pandan tout peryòd izòlman an.
 - ___ b) Viktim nan ak/oswa moun li deziyen ka gen aksè lakay mwen, yon fwa pa jou nan yon moman rezonab, pou kontwòle eta sante bèt la pandan tout peryòd izòlman an.
13. Si bèt la vin malad, montre konpòtman ki pa nòmal, oswa mouri pandan peryòd izòlman an, m ap fè (Depatman Sante Konte a/Kontwòl Bèt) konnen sa imedyatman. Si bèt la mouri, m ap remèt kadav la pou tès depistaj laraj.
14. Mwen rekonèt izòlman se nan dat ant _____ ak _____.
(mwa/jou/ane) (mwa/jou/ane)
15. Mwen rekonèt epi mwen aksepte yon mankman nan nenpòt restriksyon ak kondisyon ki enpoze pou peryòd izòlman an ka fè yo mete bèt la imedyatman nan yon nich oswa nan yon lopital veterinè epi depans yo ap sou kont mwen, epitou mwen ka responsab pou nenpòt sanksyon lalwa prevwa. Si se nesèsè, yo ka egziye yon egzamen pou yon veterinè fè. Mwen aksepte pou peye tout frè yo.
16. Mwen rekonèt epi mwen aksepte kondisyon ak restriksyon ki anwo yo epitou mwen dakò pou mwen pwoteje ak rekonèt inosans Konte _____, Depatman Sante, Konsèy Manm Komisyon Konte a, ak ajan oswa anplwaye li yo, kont tout reklamasyon, responsablite, oswa nenpòt kalite pwosè ki rive sou, poutèt, oswa akòz izòlman bèt mwen lakay mwen, avèk tou, men pa sèlman, depans ak frè rezonab avoka, epi si yo rele nenpòt ladan yo pou fè nenpòt peman ki dwe fèt sou nenpòt aksyon kont yo selon dokiman sa a, kidonk, mwen dwe konpanse yo epi garanti yo pou tout kantite lajan ki depanse.

Ap genyen konsekans si mwen bay manti, mwen deklare mwen li tout sa ki endike anwo a epi enfòmasyon mwen bay ladan li se enfòmasyon ki vrè.

Siyati pwopriyete _____ Dat _____

Tanpri ekri ak lèt majiskil: Non _____ Nimewo telefòn: _____

Adrès _____

FWC Construction Requirements for Wild Canids (wolves, coyotes)

1. Outdoor facilities: Construction material shall consist of not less than 11 ½ gauge chain link or equivalent. The cage shall be not less than 10 feet by 8 feet by 6 feet high and shall be covered at the top to prevent escape.
2. Indoor facilities: Potential escape routes shall be equipped with wire or grating not less than 11 ½ gauge wire or equivalent.
3. All cages shall be well braced and securely anchored at ground level to prevent escape by digging and shall utilize metal clamps, ties or braces of equivalent strength as that prescribed for cage construction.
4. Cages shall be equipped with a safety entrance. A safety entrance is defined as any protected, secure area that can be entered by a keeper that prevents animal escape and safeguards the keeper, or any device that can be activated by a keeper that includes a double-door mechanism, interconnecting cages, a lock-down area, or other devices specifically approved. Safety entrances shall be constructed of materials that are of equivalent strength as that prescribed for cage construction.
5. A fence sufficient to deter entry by the public, which shall be a minimum of five feet in height, shall be present around the premises where the animal is kept. The fence may enclose the cage only, however, it must be at least six feet away to insure the public or visitors cannot come into contact with the animal.

[Model Informed Consent and PEP Sheet – English]

Informed Consent and Animal Rabies PEP Sheets

INFORMED CONSENT FOR VACCINATION AND QUARANTINE OF UNVACCINATED DOGS, CATS, FERRETS, HORSES OR CATTLE EXPOSED TO A KNOWN RABID ANIMAL

I, _____, have been advised that my _____ has been exposed to a known rabid animal. I have been advised that pursuant to Florida Administrative Code that my _____ will be quarantined for a period of one hundred eighty (180) days. The date of this quarantine shall commence at ___:___ (A.M./P.M.) on _____, 200_ and end at ___:___ (A.M./P.M.) on _____, 200_.

As part of the quarantine and in an attempt to prevent my previously unvaccinated animal from becoming ill with rabies, I hereby consent to the off-label use of rabies vaccine. This shall consist of HRIG and a series of six (6) vaccinations, to be given on days 0, 3, 7, 14, 21 or 28 and one (1) month prior to the termination of the quarantine. These vaccinations will be given by a licensed Florida Veterinarian. Copies of the vaccinations will be provided to appropriate parties upon request.

I fully understand and acknowledge that this treatment does not guarantee protection against rabies. If the animal becomes ill during the quarantine period, it may be euthanized (killed) at that time. The acceptance of this protocol does not alter any aspect of the quarantine of my animal. No contact is allowed to the animal other than by those identified to be entrusted to the care of the animal.

If the animal is quarantined on my premises, there shall be absolutely no contact with anyone outside those providing care for the animal. If anyone is bitten/scratched by the animal during the quarantine, the animal shall be euthanized immediately and the head submitted for rabies testing.

I have read and understand these conditions. I have had the opportunity to ask questions and have them answered to my satisfaction. Under penalties of perjury, I declare that I have read the foregoing and the facts stated in it are true.

SIGNED: _____

PRINT NAME: _____

ADDRESS: _____

TELEPHONE NUMBER: _____

DATE: _____

WITNESS: _____

[Model Informed Consent and PEP Sheet – Spanish]

Consentimiento informado y hojas sobre profilaxis post-exposición (post-exposure prophylaxis, PEP) a la rabia transmitida por animales

CONSENTIMIENTO INFORMADO PARA LA VACUNACIÓN Y CUARENTENA DE PERROS, GATOS, HURONES, CABALLOS O GANADO NO VACUNADOS QUE HAN ESTADO EXPUESTOS A UN ANIMAL QUE, SEGÚN SE SABE, TIENE RABIA

Yo, _____, he sido informado que mi _____ ha estado expuesto a un animal que, según se sabe, tiene rabia. Se me ha informado que, conforme al Código Administrativo de Florida (Florida Administrative Code), mi _____ permanecerá en cuarentena durante un período de ciento ochenta (180) días. El período de esta cuarentena comenzará a las __:__ (a.m./p.m.), el _____ de 200_ y finalizará a las __:__ (a.m./p.m.) el _____ de 200_.

Como parte de la cuarentena y en un esfuerzo por prevenir que mi animal no vacunado previamente se enferme de rabia, por el presente presto mi consentimiento para el uso extraoficial de vacunas antirrábicas. Esto consistirá en el uso de inmunoglobulina humana antirrábica (Human Rabies Immune Globulin, HRIG) y una serie de seis (6) vacunas, que se administrarán en los días 0, 3, 7, 14, 21 ó 28 y un (1) mes antes de que termine la cuarentena. Un veterinario con licencia de Florida administrará estas vacunas. Se proporcionarán copias de las vacunas a las partes correspondientes que lo soliciten.

Comprendo plenamente y reconozco que este tratamiento no garantiza protección contra la rabia. Si el animal se enferma durante el período de cuarentena, es posible que se le someta a eutanasia (que le maten) en ese momento. La aceptación de este protocolo no altera ningún aspecto de la cuarentena de mi animal. No se permite ningún contacto con el animal, excepto a aquellas personas identificadas para encargarse del cuidado del animal.

Si el animal permanece en cuarentena en mi establecimiento, ninguna persona podrá estar en contacto con dicho animal, salvo aquellas personas que se encargan del cuidado del animal. Si el animal muerde/rasguña a alguien durante la cuarentena, se le someterá inmediatamente a eutanasia, y su cabeza se enviará para que se realicen análisis de detección de rabia.

He leído y comprendo estas condiciones. He tenido la oportunidad de hacer preguntas y me las han respondido a mi entera satisfacción. Bajo pena de perjurio, declaro que he leído lo que antecede y que los datos consignados son verdaderos.

FIRMA: _____

NOMBRE, EN LETRA DE IMPRENTA: _____

DIRECCIÓN: _____

NÚMERO DE TELÉFONO: _____

Fecha _____

Testigo _____

Fòm Konsantman Reflechi ak PPE (Pwofilaksi Apre Ekspozisyon) pou Bèt ki Gen Laraj

FÒM KONSANTMAN REFLECHI POU VAKSINASYON AK IZÒLMAN CHEN, CHAT, FIRÈ, CHEVAL OSWA BÈF KI PA PRAN VAKSEN EPI KI FÈ KONTAK AK YON BÈT ANRAJE ENKONI

Mwen, _____, resevwa avi ki endike _____ mwen te fè kontak ak yon bèt anraje enkoni. Mwen resevwa avi ki endike, selon Kòd Administratif eta Florid _____ mwen ap izole pandan yon peryòd san katreven (180) jou. Dat izòlman an dwe kòmanse a __:__ (A.M./P.M.) nan dat _____, 200_ pou l fini a __:__ (A.M./P.M.) nan dat _____, 200_.

Etandone izòlman an ak yon efò pou pa kite bèt mwen ki potko pran vaksen vin anraje, mwen aksepte pou itilize vaksen antirabik la san konsidere enstwiksyon yo. Sa ap gen ladan li HRIG ak yon seri sis (6) vaksen pou bèt la pran nan jou 0, 3, 7, 14, 21 oswa 28 ak yon (1) mwa anvan izòlman an fini. Se yon Veterinè eta Florid lisansye k ap bay vaksen sa yo. Y ap bay moun ki apwopriye kopi vaksen yo depi yo fè demann pou sa.

Mwen byen konprann ak rekonèt tretman sa a pa garanti pwoteksyon kont laraj. Si bèt la vin malad pandan peryòd izòlman an, li ka etanize (tiye li) nan moman an. Akseptasyon pwotokòl sa a pa chanje okenn aspè izòlman bèt mwen. Yo p ap kite moun pran kontak ak bèt la sof moun ki idantifye pou yo konfyè yo swen bèt la.

Si bèt la izole nan lokal mwen, li pa dwe pran oken kontak avèk moun ki pa la pou pran swen li. Si bèt la mòde oswa grafouyen yon moun pandan li izole a, bèt la dwe etanize imedyatman epi pou mwen bay tèt li pou yo fè tès laraj.

Mwen li epi konprann kondisyon sa yo. Mwen te gen opòtinite pou poze kesyon epi mwen te satisfè avèk repons mwen te jwenn yo. Ap genyen konsekans si mwen bay manti, mwen deklare mwen li tout sa ki endike anwo a epi enfòmasyon mwen bay ladan li se enfòmasyon ki vrè.

SIYE: _____

NON AN MAJISKIL: _____

ADRÈS: _____

NIMEWO TELEFÒN: _____

Dat _____

Temwen _____

Animal Rabies PEP Data Collection Sheet

Note: These data will be helpful in setting future policy. Please complete this form for each animal begun on PEP and fax to Dr. Carina Blackmore at (850) 922-8473, or mail to 4052 Bald Cypress Way, BIN A-8, Tallahassee, FL 32399-1710. For questions, please call (850) 245-4299.

Veterinarian providing PEP (please print): _____

Telephone: _____ County: _____

Type of animal: ___ dog ___ cat ___ ferret ___ horse Age of animal: _____

Previously vaccinated against rabies? ___ Y ___ N ___ Unk

If yes, when? _____ By whom? _____

Exposure/Quarantine began on (date): _____

PEP Treatment used:

	Date	Manufacturer of vaccine	Name of Vaccine	HRIG given?	
1 st vaccine					
2 nd vaccine					
3 rd vaccine					
4 th vaccine					
5 th vaccine					
HRIG					
Other					

* One booster vaccination should be administered immediately to previously vaccinated animals. HRIG is NOT recommended.

RETURN ALL COPIES
ALL INCOMPLETE APPLICATIONS WILL BE RETURNED

Florida Fish and Wildlife Conservation Commission

P.O. Box 6150, Tallahassee, FL 32314-6150
(850) 488-6253
Application for

PPL - LICENSE TO POSSESS WILDLIFE FOR PERSONAL USE.....\$140.00

New Applicant _____

Applicant Name _____ Email _____
 Address _____
 Mailing Address _____ City _____ State _____ Zip _____
 Facility Address _____ City _____ State _____ Zip _____
 County Of Facility _____ Business Phone (_____) - _____

INVENTORY PAGE (New and renewal applicants must complete this section).

I currently possess the following classes of wildlife: Class I _____ Class II _____ **MUST PROVIDE INVENTORY ON PAGE 3**
 I plan to possess the following class of wildlife: _____ Class II _____

ZONING STATEMENT & DOCUMENTATION OF EXPERIENCE

____ Notarized zoning statement regarding construction of facility **attached** **SEE INSTRUCTIONS ON BACK OF PAGE 3**
 ____ Documentation of experience and 2 reference letters **attached**
 ____ Would like to take exam (Class II applicants only)
 Property is owned by applicant? YES ____ NO ____ Property is leased by applicant? YES ____ NO ____ Number of Acres _____
 If property is leased, a copy of the lease agreement must be attached.

I certify that the information provided is true and correct. I agree to adhere to the provisions of Chapter 372, Florida Statutes, and the rules and regulations of the Commission pertaining to the possession of wildlife. I understand that my wildlife facilities are subject to inspection by Commission personnel as required by Florida Administrative Code.

Applicant Name (Please Print) _____ Home Phone (_____) _____ Applicant Signature _____ / _____ /
 Date _____

Date of Birth _____ Social Security # _____ Height _____ Weight _____ Hair _____ Sex _____ Race _____

FOR COMMISSION USE ONLY

Class I _____ Class II _____
 Approved _____ Date _____
 Denied _____ Date _____
 Reason _____

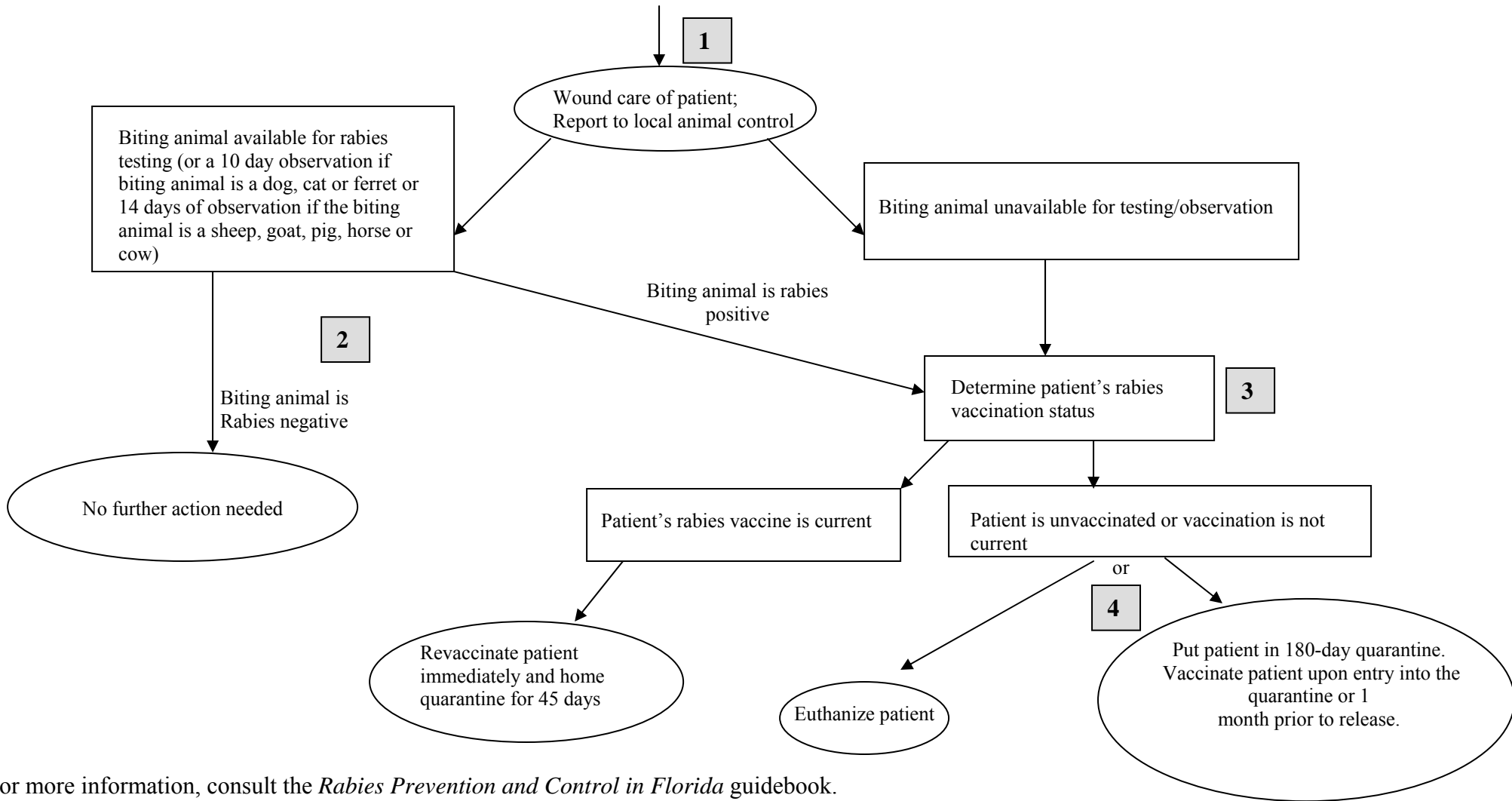
Revised 06/03

VALID FOR 12 MONTHS

Management of Animal Patients Exposed to Known or Potentially Rabid Animals; Public Health Guidelines for Florida Veterinarians



Patient (dog, cat, ferret, horse, cattle or sheep) bitten by (or otherwise exposed to) second potentially rabid animal (“biting animal”)



3-28

For more information, consult the *Rabies Prevention and Control in Florida* guidebook.

<http://www.doh.state.fl.us/environment/community/arboviral/Zoonoses/RabiesguideUpdated.pdf>

or call the State Public Health Veterinarian at (850) 245-4732

Management of Animal Patients Exposed to Known or Potentially Rabid Animals; Public Health Guidelines for Florida Veterinarians

- 1 Note: Some counties do not have an animal control program. Others may only have limited animal control services and may not be able to assist you with receiving animal-to-animal bite reports. Contact your local animal control staff or Fish and Wildlife Conservation Commission staff to assist in capturing the “biting” animal if appropriate. No definitive observation periods exist for mammals other than dogs, cats and ferrets. Livestock, if apparently healthy, may be confined and observed for clinical signs compatible with rabies at the discretion of the County Health Department.
- 2 For guidelines in shipping samples to Department of Health Laboratories for rabies testing, consult the *Rabies Prevention and Control in Florida* guidebook.
- 3 The duration of immunity is determined by the rabies vaccine used, either one year or multiple years. Place and details of quarantine are determined by the county health department or animal control designee.
- 4 For unvaccinated animals, if quarantine is selected over euthanasia, the animal must, under most circumstances, be kept in strict confinement at a veterinary clinic or animal control facility. Home quarantine is at the discretion of the county health department.

For more information, consult the *Rabies Prevention and Control in Florida* guidebook.

<http://www.doh.state.fl.us/environment/community/arboviral/Zoonoses/RabiesguideUpdated.pdf>



[MODEL]
AGREEMENT FOR CONFINEMENT AT A VETERINARY FACILITY

Unvaccinated animals involved in bites/exposure to a person(s) must be confined at the owner's expense for a ten (10) day observation period at either ___ County Animal Control, hereinafter Animal Control, or in a licensed veterinary facility. If the owner elects to utilize the services of a veterinarian, **that veterinarian must complete this agreement and forward it to Animal Control.**

- 1) The following animal: Species _____ Breed _____ Name _____ belonging to (Owner) _____, at (Address) _____, (Phone) _____ must be quarantined **beginning** on _____ and **ending** on _____. **The animal must not be released prior to the end of the confinement period. However, if Animal Control notifies the undersigned veterinarian, his/her agent, or employee that the animal has caused severe injury or death to a human, the animal shall be immediately surrendered to Animal Services for completion of quarantine and investigation.**
- 2) If the animal becomes sick, exhibits abnormal behavior, or dies during the confinement period, Animal Services will be notified immediately at (xxx) xxx-xxxx. If the animal dies, the animal's body will be surrendered to Animal Services for rabies testing.
- 3) The animal must be isolated from other animals and will have minimal contact with people.
- 4) The animal shall not be allowed to leave the property and must be in a securely fenced area when outside its kennel. The animal will be leashed and muzzled and under the control of a person competent to restrain the animal when outside for exercise or relief.
- 5) **If not currently vaccinated, the animal must be vaccinated against rabies by the veterinarian at the time of its official release from confinement and not before.**
- 6) Animal Control/County Health Department officials may have access to the animal during normal business hours.
- 7) I understand and agree to the above conditions and restrictions and further agree to indemnify and hold harmless Animal Control, the ___ County Health Department, the Board of County Commissioners, ___ County, and their agents or employees against all claims, liabilities, or suits of any nature whatsoever arising out of, because of, or due to the quarantine of the animal, including but not limited to, costs and reasonable attorney's fees, and if any of them are called to make payments arising out of any action against them by virtue of this instrument, then I shall further indemnify and make them whole for any such sums expended.

Under penalties of perjury, I declare that I have read the foregoing and the facts stated in it are true.

Veterinarians
Signature _____ Date _____

Please Print:
Name _____ Phone No. _____

Address _____

CHAPTER 4

HUMAN RABIES EXPOSURE

Human rabies is a rare disease in the United States, with 50 cases being reported since 1990. A total of forty were determined to be naturally acquired cases of rabies diagnosed in the United States. Thirty (92.5%) samples tested from these cases were associated with bat variants, many involving the variant associated with the silver-haired bat (*Lasionycteris noctivagans*)⁷. Four fatal rabies infections occurred as a result of organ transplantations (liver, kidney and blood vessel) in 2004. The donor was later found to be infected with rabies⁸. The first human case to survive symptomatic rabies without PEP treatment was also reported in 2004. A fourteen year old girl survived symptomatic rabies acquired from a bat bite⁹. The first human case of raccoon rabies was diagnosed in Virginia in 2003¹⁰. In Florida, 76 cases of human rabies have been reported between 1881 and 2007. Most of these were in children exposed to rabid dogs and cats. The last indigenous case in the state was in 1948; a 35-year-old man from Tampa refused treatment after being bitten by his neighbor's dog. The most recent human cases reported in Florida during 1994, 1996 and 2004 were in adult males who were bitten by dogs in either Haiti (1994, 2004) or Mexico (1996)¹¹.

Rabies post-exposure prophylaxis (PEP) is not uncommon. It is estimated that in Florida at least 1,300 rabies post-exposure treatments are administered annually for a rate of 8 per 100,000 population. PEP treatment can be avoided if the animal is available for observation (i.e., dogs, cats, ferrets or livestock), or for animal rabies testing and the test is negative. Further, attending physicians should understand what constitutes a potential exposure (for example, merely petting a rabid animal is not an exposure). **Each county health department should assure that all health care providers within their jurisdiction have 24-hour access to knowledgeable consultation.** When necessary the Florida Department of Health can also provide necessary expertise, if unique questions arise regarding rabies post-exposure treatment.

NOTE: Currently two rabies vaccines are available for people and can be used interchangeably if necessary. RabAvert is a chicken embryo cell culture vaccine (PCEC) produced by Chiron, and Imovax is a human diploid cell culture vaccine (HDCV) produced by Connaught. RabAvert is not recommended for people with allergies to eggs. Both vaccines can be ordered and administered by any licensed physician in the State. The Department of Health Bureau of Pharmacy (850-922-9036) can help supply the ordering information to local pharmacies if needed.

MMWR Recommendation and Reports for Human Rabies Prevention -- United States, 1999

⁷ CDC.---Alberta, Canada, 2007. MMWR. 2008;57(08):197-200.

⁸ CDC. Update: investigation of rabies infection in organ donor and transplant recipients---Alabama, Arkansas, Oklahoma, and Texas, 2004. MMWR 2204; 53:615-6.

⁹ Willoughby RE, Tieves KS, Hoffman GM, Ghanayem NS, Amlie-Lefond CM, Schwabe MJ, Chusid MJ, Rupprecht CE. Survival after treatment of rabies with induction of coma. N Engl J Med 2005; 352:2508-14.

¹⁰ CDC. First human death associated with raccoon rabies - - Virginia, 2003. MMWR 2003; 52(45); 1102-1103.

¹¹ CDC. Human rabies --- Florida, 2004. MMWR 2005;54(31):767-69.

is available at the following website: <http://www.cdc.gov/mmwr/preview/mmwrhtml/00056176.htm>

A. Primary or Pre-exposure Immunization

When available rabies pre-exposure vaccine is recommended for: 1) all persons at occupational risk for infection with rabies virus either by aerosol, injection or animal exposure; and 2) persons traveling extensively in foreign countries where rabies is endemic. High-risk groups include veterinarians, veterinary students, veterinary hospital employees, animal control officers, wildlife workers, wildlife rehabilitators and animal handlers in zoological parks and exhibits. People involved in disaster animal response should consider being pre-immunized based on expected frequency of animal contact. Persons most at risk for accidental infection work with live rabies virus in diagnostic and research laboratories and in vaccine facilities.

1. Human Rabies Vaccine Pre-exposure vaccination consists of **three** 1.0 ml injections of vaccine given intramuscularly (IM), one injection on day 0, one on day 7, and one on either day 21 or 28. Injections are given into the lateral aspect of the upper arm over the deltoid.

2. Serologic Examination/Booster Doses of Vaccine. Once immunized, serologic titers should be checked at a frequency dependant upon risk group as designated below. **Titers less than 1:5 serum dilution on the Rapid Fluorescent Focus Inhibition Test (RFFIT) indicate the need for an IM booster vaccination.**

Frequent risk - people who are at frequent risk of exposure to rabid animals either through their employment (e.g., workers in rabies diagnostic laboratories, animal control officers, veterinarians and staff, and wildlife workers handling wild animal reservoirs of rabies) or through their activities (e.g., spelunkers and members of wildlife rescue organizations) should determine their antibody titer every two years.

Infrequent risk - persons who are at infrequent risk of exposure to rabid animals (e.g., travelers who received pre-exposure prophylaxis) do not require serologic assessment of antibody titer.

3. Serologic Testing using the Rapid Fluorescent Focus Inhibition Test (RFFIT)

The following laboratories may be contacted to perform rabies antibody testing:

Susan Moore
Veterinary Medical Center
Kansas State University
Manhattan, Kansas 66506
(785) 532-4483
email: rabies@vet.ksu.edu

Screen \$30, endpoint \$35 as of 4/08
Send 2 mls of serum, packed in ice
in overnight or second day delivery

Mary Yager
Atlanta Health Associates
309 Pirkle Ferry Road, Suite D300
Cumming, GA 30040
(770) 205-9091 or (800) 717-5612
FAX (770) 205-9021

Screen \$30 as of 4/08
endpoint \$40, \$45 for animal sera
Send 2 mls of sera

Krystyna Minc
Dept. of Pathobiology, Virology Lab
261 Greene Hall
College of Veterinary Medicine
Auburn, AL 36849-5519
(334) 844-2659

Endpoint \$30 as of 4/08
ANIMAL SERA ONLY
Send 1 ml (or at least .5 cc)
of serum in cold packs
with accompanying vaccination history
www.vetmed.auburn.edu/index.pl/virology

B. Exposure Definitions

Rabies is transmitted by introducing the virus into open cuts or wounds in skin or via mucous membranes. The likelihood of rabies infection varies with the nature and extent of exposure. Human exposure to rabies virus warrants evaluation for possible antirabies treatment.

NOTE: Petting or handling a rabid animal, contact with blood, urine or feces of a rabid animal, ingestion of pasteurized milk or well-cooked meat from a rabid animal or accidental inoculation with vaccines currently licensed for use in animals does not constitute rabies exposure.

1. **Bite Exposure:** Any penetration of the skin by the teeth of a known rabid animal necessitates prompt post-exposure treatment.

Note: In recent years bats have been increasingly implicated as wildlife vectors capable of transmitting rabies to humans. It is most important to carefully evaluate the circumstances of every incident that involves a bat in close proximity to a person, since bites from bats may be very small and not easily recognized. This is particularly important in cases where interviews with young children or persons with limited recall may not reveal a minor or undetectable injury inflicted by a bat bite. As a general rule, in situations where a bat is physically present and the possibility of a bite exposure or mucous membrane contact is reasonably certain, post-exposure prophylaxis should be given unless capture and testing of the bat has excluded rabies.

2. **Nonbite Exposures:** Terrestrial animals rarely transmit rabies through nonbite exposure. Contamination of scratches, abrasions, open wounds or mucous membranes with saliva or other potentially infectious material (i.e., nervous tissue or cerebrospinal fluid) from a rabid animal must be considered an exposure to the rabies virus. On rare occasions human rabies has been acquired by inhalation of airborne virus. Such exposure occurred in two specific environments, namely, in laboratories working with live rabies virus and in caves with millions of bats.

Rabies virus is known to have been transmitted between humans on eight separate occasions by corneal transplants (twice in Thailand, twice in India, twice in Iran, once in the United States and once

in France)¹². In 2004, seven patients acquired rabies from organ transplantations. Four U.S. residents became infected from kidney, liver and arterial blood vessel tissues and three German residents succumbed of rabies after lung, kidney and pancreas transplantations.^{13, 14, 15} These are the only documented cases of rabies due to human-to-human transmission, and they occurred in patients who received organs transplanted from persons who died of rabies undiagnosed at the time of death.

C. Risk Assessment and Investigation

When evaluating the circumstances surrounding a bite or other exposure, consideration should be given to the following: 1) the behavior, health and other characteristics of the biting animal; 2) vaccination status; 3) type of encounter; i.e., provoked or unprovoked; and 4) current status or disposition of the animal. (Refer to Attachment 4-C, Decision Tree for Management of Possible Rabies Exposure.)

1. Animal Behavior, Health and Characteristics - Any animal, wild, domestic, caged or feral that shows signs of rabies typical to that species should be considered possibly rabid. Most free-ranging wild animals, not otherwise conditioned by artificial feeding, instinctively avoid humans. Those that approach people or their pets and attack should also be considered possibly rabid. For instance, any squirrel that, unprovoked, lunges at a person, bites them and runs off should be suspected of being rabid, even though most rodents are not considered to be at high risk for infection. All high risk species should be considered highly suspect regardless of their health or behavior status, as these animals have been shown to sometimes have virus in their saliva for a week or more before becoming ill, and because of their high positivity for rabies and/or lack of reliable signs of the disease.

High Risk Animals: Any exposure inflicted by a raccoon, bat, skunk, coyote, fox, otter or bobcat, or by a stray dog, cat or ferret should be considered as high risk for rabies infection in Florida. Ferrets have, in recent years, emerged as animals not only capable of inflicting severe bites but also as suitable rabies vectors. Any wild animal in this group should be considered highly suspect regardless of its health or behavior status, as these animals have been shown sometimes to have virus in their saliva for a week or more before becoming ill.

Moderate Risk Animals: Exposures inflicted by such species as unvaccinated dogs, cats or ferrets maintained as pets should be considered to be moderate risk for rabies infection in Florida.

Low Risk Animals: Exposures inflicted by pet rats, mice, hamsters, guinea pigs, hedgehogs, domestic rabbits, armadillos, wild rodents, caged monkeys, and immunized dogs, cats, and ferrets are considered to be very low risk for rabies infection and seldom require antirabies treatment of the exposed

¹² CDC. Human-to-human transmission of rabies via a corneal transplant -- France. MMWR 1980;29:25-6

¹³ CDC. Investigation of rabies infections in organ donor and transplant recipients---Alabama, Arkansas, Oklahoma, Texas. MMWR 2004;26:586-89.

¹⁴ Srinivasan, A., et al. Transmission of rabies virus from an organ donor to four transplant recipients. N Engl J Med 2003;352(11):1103-11

¹⁵ Hellenbrand, W., C. Meyer, G. Rasch, I. Steffens, A. Ammons. Cases of rabies in Germany following organ transplantation. 2005;10(2):52-3.

individual. Exposure to opossums or farm animals while feeding or handling should be individually evaluated and seldom require antirabies treatment.

Note: Prompt reporting and consultation is recommended of all exposures involving “Old World monkeys” due to possible transmission of life-threatening Herpes simiae B virus.

2. Animal Vaccination Status - Vaccinations of dogs, cats, livestock and ferrets play an important role in protecting not only the animal from rabies but also by reducing the risk of human exposure to infection if the animal is involved in a biting incident. It is important to document that vaccinations for rabies are current (within the advertised duration of the vaccine, one-, three or four years) and veterinarian-administered. Vaccination status is important in biting dogs, cats and ferrets because they can usually be isolated and observed for 10 days at the home of the owner, while animals determined to be unvaccinated are confined to a secure public facility or veterinary clinic.

Note: Vaccination status will not alter the decision-making process when wolf-dogs, zoo animals and pet wildlife are involved in rabies exposure incidents.

3. Type of Encounter - Provoked exposures are ones in which it was a natural reaction of the animal to bite. Such circumstances might include, in the cases of domestic dogs and cats: 1) threatening or injuring the animal or the pet owner(s); 2) handling or removing the animal's food; 3) disturbing the animal while eating; 4) invading the animal's living space; 5) restraining or handling sick or injured animals; 6) disturbing the animal's offspring; and/or 7) startling a sleeping animal. Under these circumstances treatment is usually not recommended because the biting animal can be quarantined for 10 days. However, bites by feral or unidentified cats and dogs that are not available for either quarantine or testing usually require treatment.

Unprovoked bites are those which are initiated for no apparent reason; i.e., the behavior cannot be explained by any of the circumstances listed above or ones similar to them. Unprovoked bites are usually considered to be suspicious of rabies, although it may be "in character" for some ill-tempered animals to bite for no apparent reason. A history of the animal's usual behavior patterns should be obtained if possible. Any bite from a high-risk species, whether provoked or unprovoked, should be considered a rabies exposure unless proven otherwise by laboratory testing of the animal. While, in most instances bites by squirrels and other wild rodents are associated with provocation by feeding and do not require treatment, bites resulting from unprovoked attacks would require treatment if the animal escaped.

4. Status or Disposition of the Animal - At the present time, only dogs, cats, ferrets and livestock can be isolated and observed to determine their rabies status after exposing a person to rabies. Animals killed during attacks, euthanized or dying after capture should be tested as soon as possible so decisions regarding treatment of the exposed individual is not delayed any longer than necessary. Animals frozen are usually suitable for testing, although results may be delayed and therefore freezing is not recommended. Those buried more than a few days or preserved in formalin may not be suitable for testing. Consultation with the DOH Central Laboratory in Jacksonville prior to submission can help resolve issues related to specimen quality and expected test results.

D. Post-exposure prophylaxis (PEP)

The essential components of rabies post-exposure prophylaxis (PEP) are local treatment of wounds and treatment with vaccine in previously immunized persons, and HRIG and vaccine in nonimmunized persons (Attachment 4-C). When a rabies exposure has occurred, PEP is indicated regardless of the length of delay, provided the clinical signs of rabies are not present. If a person refuses PEP, County Health Departments are recommended to have the bite victim sign a PEP refusal letter (Attachment 4-D). PEP, in general, should be considered as an urgent matter rather than an emergency.¹⁶ If the animal involved is available in a case being considered for PEP, the initiation of treatment can wait until laboratory testing has confirmed the animal was rabid.

Note: *Rabies biologicals are NOT limited to distribution from the health department. The biological may be drop shipped overnight from the manufacturer to private health care providers.*

1. Local Wound Treatment - Immediate and thorough washing of all wounds with soap and water is perhaps the most effective initial measure for preventing rabies. Local treatment should include a thorough cleansing and debridement followed by swabbing and irrigation of the wound with copious amounts of soap and water or even water alone. Tetanus prophylaxis and measures to control bacterial infection should be given as indicated. Suturing should depend upon cosmetic factors and the possibility of bacterial infection.
2. Treatment of Previously Immunized People - **HRIG should not be administered to a person who was previously vaccinated against rabies with HDCV or PCEC.** However, that person should receive two IM doses (1.0 ml each) of vaccine, one immediately and one on day three. On rare occasions, when immune status is not known and a titer is required, it is best to wait for test results before administering a full primary post-exposure antirabies treatment, including HRIG.
3. Treatment of People Not Previously Immunized - Post-exposure antirabies treatment of individuals not previously immunized should always include both passively administered antibody (HRIG) and vaccine. The combination of globulin and vaccine is recommended for both bite exposures and nonbite exposures, regardless of the interval between exposure and treatment.^{17, 18, 19, 20, 21} The sooner treatment is begun after exposure, the better unless the animal is available for testing/ observation as appropriate.

HRIG is administered only once at the beginning of antirabies prophylaxis to provide immediate antibodies until the patient responds to vaccination. The recommended dose of HRIG is 20 IU/kg or approximately 9 IU/lb body weight. No more than the recommended dose of HRIG should be given as it can partially suppress vaccine response. If anatomically feasible, the full dose of HRIG

¹⁶ CDC. Human Rabies Prevention-United States, 1999, (ACIP). MMWR. January 8, 1999. Vol. 48/RR-1.

¹⁷ Warrell, M.J., D.A. Warrell. Rabies and other lyssavirus diseases. Lancet. 2004; 363:959-69.

¹⁸ Bleck, T.P. Rabies. 2005. In: Guerrant RL, Walker DH, Weller PF, editors. Tropical infectious diseases: principles, pathogenesis, and practice. 2nd ed. Elsevier/Elsevier/Churchill Livingstone, Philadelphia. p.839-851.

¹⁹ McQuiston, J.H., J.E. Childs. 1999. Rabies exposure and clinical disease in humans. In:

Merial's *Rabies: Guidelines for Medical Professionals*. Trenton, NJ, Veterinary Learning Systems. p.27-35.

²⁰ Fishbein, D.B. Rabies in humans. 1991. In: Baer, G.M. (Ed.), *The Natural History of Rabies*, second ed. CRC Press, Boca Raton, pp. 519-549 519-549.

²¹ Rupprecht, C.E., Gibbons, R.V. Prophylaxis against rabies. N Eng J Med 351;25;26262635.

should be thoroughly infiltrated in the area around and into the wounds. Any remaining volume should be administered IM at an anatomical site distant from vaccine administration. Also, RIG should not be administered in the same syringe as vaccine. Because RIG might partially suppress active production of antibody, no more than the recommended dose should be given.

Note: If HRIG was not given when the first vaccination was begun, it can be given through the seventh day after the first dose of vaccine was given. From about the eighth day on, HRIG is unnecessary since an antibody response to the vaccine is presumed to have occurred.

Vaccine is administered at a recommended dose of 1.0 ml IM in the deltoid area on days 0, 3, 7, 14 and 28. Vaccine may be administered in the anterolateral aspect of the thigh in children. The gluteal area should never be used due to reduced production of antibody. Every effort should be made to keep the administration of the first three doses of vaccine on a strict schedule (even through the weekend). Appointments for the latter two doses (days 14 and 28) can vary up to a few days. At this point, the person being treated should be developing a substantial antibody response to the early doses of vaccine. However, any interruption of the treatment schedule by more than a week could require starting the series over again *without the administration of HRIG*. Once initiated, PEP may be discontinued if the exposing animal tests negative for rabies or is released from the 10-day observation period.

Precautions - Corticosteroids and immunosuppressive agents should not be administered during post-exposure therapy unless essential for the treatment of other conditions. These drugs can interfere with the development of active immunity and thus predispose the patient to developing rabies. When post-exposure treatment is given to persons with immunosuppressive illness or to persons receiving immunosuppressive therapy, it is especially important that their sera be tested for rabies antibody by RFFIT to ensure that adequate responses have developed.

Note: Pregnancy is not a contraindication to post-exposure prophylaxis because of the fatal consequences of inadequately treated rabies exposure and (limited) data indicating that fetal abnormalities have not been associated with rabies (killed virus) vaccine. If there is a substantial risk of exposure to rabies, pre-exposure prophylaxis is also indicated during pregnancy.

Adverse Reactions - Vaccine can cause local reactions such as pain, erythema and swelling or itching at the injection site and mild systemic reactions, such as headache, nausea, abdominal pain, muscle aches and dizziness. To counteract the unlikely occurrence of an allergic or anaphylactic reaction, it is advisable to have antihistamines and epinephrine readily available during treatment, especially with patients having a history of hypersensitivity. The vaccine RabAvert is not recommended for people with allergies to eggs.

An "immune complex-like" reaction may occur in persons receiving booster doses of vaccine. The illness, characterized by onset 2-21 days post-booster, presents with generalized urticaria and may also include arthralgia, arthritis, angioedema, nausea, vomiting, fever and malaise. In no such cases were the illnesses life-threatening. Preliminary data suggest this "immune complex-like" illness may occur in up to 6% of persons receiving primary immunization. Additional experience with this vaccine is needed to define more clearly the risk of these adverse reactions. If the adverse reaction is unusually severe medical consultation should be sought. If a person's work involves continuous or frequent risk exposures, necessitating routine vaccinations, a possible career change must be considered.

Once initiated, rabies prophylaxis should not be interrupted or discontinued because of local or mild systemic adverse reactions to rabies vaccine. Usually such reactions can be successfully managed with nonsteroidal anti-inflammatory, antipyretic, and antihistaminic agents (aspirin and/or Benadryl, for example). When a person with a history of atopy or hypersensitivity to rabies vaccine must be given subsequent doses, antihistamines may be given before, during or after treatment; epinephrine and life support equipment should always be readily available to counteract anaphylactic reactions, and the person should be carefully observed immediately after immunization for 20 minutes.

Central Pharmacy at (850) 922-9036

All serious systemic meningeal, neuromuscular or anaphylactic reactions to a rabies vaccine should be immediately reported to the DOH, Bureau of Epidemiology at any time night or day: (850) 245-4401.

- If Florida Department of Health staff determines that an incident does not warrant dispensing Florida Department of Health rabies biologicals, but the bite victim still wants to take the post-exposure treatment, the patient's physician may directly contact the manufacturer for rabies biologicals.
- Access to rabies biologicals is not restricted to use by or through DOH. Private providers may contact the manufacturers directly for product.
- If a person refuses PEP, it is recommended that a refusal letter be signed by that person (Attachment 4-D).

E. Rabies Post-Exposure Prophylaxis Costs

Refer to Rabies Prevention and Control, 2008 Chapter 1D. Most health insurance policies will cover the cost of PEP

Indigent Patient Programs

Both rabies vaccine manufacturers have patient assistance programs that provide medications to uninsured or underinsured patients. Sanofi Pasteur's Indigent Patient Program (providing Imogam® Rabies-HT and Imovax® Rabies) is administered through the National Organization for Rare Disorders (NORD). Information can be obtained by contacting NORD at 1-877-798-8716 or by emailing nnadiq@rarediseases.org to obtain an application. The RabAvert® Patient Assistance Program is managed through Rx for Hope and can be accessed at 1-800-244-7668 or at www.rabavert.com* on the "How to Order" page.

F. Diagnosis of Clinical Rabies in Humans

Rabies in humans affects multiple organ systems and most characteristically presents as a viral encephalitis. With few exceptions, clinical illness with this disease results in death. Fortunately, humans are relatively resistant to the development of clinical disease following rabies infection. The likelihood that a person will develop rabies depends upon a variety of factors including the amount

virus inoculated, the location of inoculation, the number of nerve endings at the site of the exposure and the timing and procedures used for the administration of PEP.

Signs of Clinical Illness*

Clinical illness is divided into five stages: incubation period, prodrome, acute neurologic stage, coma, and recovery or death. The incubation period can be as short as 9 days or as long as a year or more after exposure, with most cases occurring 20-90 days after exposure. The initial symptoms noted during the prodrome are usually nonspecific and consist of malaise, fatigue, headache, anorexia and fever. About one-half of the patients complain of pain or numbness at the site of the exposure. Other symptoms include cough, chills, sore throat, abdominal pain, nausea, vomiting or diarrhea. Apprehension, anxiety, agitation, irritability, nervousness, insomnia or depression sometimes also occurs to suggest neurologic involvement. Following the prodromal period that usually lasts 2-10 days, the first definite signs of neurologic involvement appear. These include hyperactivity, disorientation, hallucinations, seizures, bizarre behavior, or paralysis that can last from hours to days. Coma occurs 4-10 days after the onset of symptoms and may last for hours or months before death depending upon the intensity and duration of supportive care.

In the United States almost all patients are admitted to a hospital an average of 4.4 days after the onset of symptoms and the admitting diagnosis is rabies in less than 1/3 of patients. Other admitting diagnoses include viral encephalitis, polio, Guillain-Barré syndrome, cerebrovascular accident, brain tumor, tetanus, psychosis, phenothiazine toxicity, myocardial infarction, pneumonia and a variety of other diseases.

- *Excerpted from Bernard, K.W., "Clinical Rabies in Man" in Rabies Concepts for Professionals ed. Winkler WG and published by Merieux Institute, Inc. 1984.*

Clinical Specimens for Antemortem Diagnosis

NOTE: Physicians attending possible human rabies cases originating in Florida must contact the DOH, Division of Environmental Health (850) 245-4299 or (850) 245-4732 to arrange specimen submission to the CDC Rabies Laboratory. The Florida State Laboratories will conduct FA testing of postmortem brain tissue.

ELISA testing for rabies has not been communicated in the objective peer-reviewed literature for sensitivity nor specificity. The tests have not been regulated nor sanctioned by an official organization such as the Food and Drug Administration or the Association of Public Health Laboratories. THESE TESTS ARE NOT RECOMMENDED for routine rabies diagnostics at the National Reference Center at CDC. Erroneous conclusions may be obtained, not only for diagnostics, but also as concerns the potential need for a booster in those individuals at risk of exposure based on serology.

Patient History – Record a complete account of the patient's history beginning with the exposure, if known. If exposure is unknown, begin with the first related clinic, emergency room, or hospital visit.

Positive Indicators for Rabies

- Nonspecific prodrome prior to onset of neurologic signs
- Neurologic signs consistent with encephalitis or myelitis
 - dysphagia
 - hydrophobia
 - paresis
- Progression of neurologic signs
- Negative test results for other etiologies of encephalitis

Negative Indicators for Rabies

- Improvement or no change in neurologic status
- Illness with ≥ 2 to 3 week duration

Saliva Specimen - Collect saliva (not sputum) for possible virus isolation in a small sterile container(s) which can be securely sealed. No preservatives or additional materials should be added. Seal the container securely (tape around the cap will ensure that it does not loosen). This specimen should be frozen immediately on dry ice (-70° C). This and all other specimens must be shipped in sealed mailing cans.

Neck Biopsy Specimen - A full thickness skin biopsy, 3-6 mm in diameter should be taken from the posterior aspect of the neck just above the hairline. The area from which the specimen is taken should contain as many hair follicles as possible. Shave the area prior to taking the specimen. Place the specimen in a small sterile, sealed container such as a screw top tube with a small amount of gauze moistened with phosphate buffered saline or other isotonic solution such as viral transport medium (tissue culture medium) sufficient to prevent it from drying (no preservatives or additional fluids). Seal container securely as indicated above. Also freeze this specimen on dry ice (-70° C).

CSF and Serum Specimens - Neutralizing antibody is usually not present until the 8th -10th day of clinical illness. Specimens collected before the 8th day are usually not helpful except as the first of paired samples with the second samples being collected 8 or more days after onset. **Do not ship whole blood!** When possible, serum specimens should be of at least 2.0 ml volume to ensure completed testing. No preservatives or additional materials should be added. Seal these containers securely as indicated above.

Handling, Shipping and Notification - *Contact the Division of Environmental Health prior to shipping specimens – (850) 245-4732.* Neck biopsies and saliva must be sent to CDC on dry ice. Serum and CSF can also be shipped on dry ice or without refrigeration. It may be more convenient to send all specimens on dry ice when any one of them must be frozen. Specimens must be placed in sealed mailing cans containing sufficient absorbent material to contain any leakage in the event of rupture of any or all of the enclosed specimen containers. Such containers will also prevent possible exposure of the specimens to CO₂. Sealed mailing containers should be placed in a foam shipping

container with at least 10 lbs. of dry ice and shipped by the most expeditious mode (i.e., Federal Express). The Division of Environmental Health requires the following information for shipping: Specimens shipped, mode of shipment, expected arrival time, and airway bill or other packing tracing number. The package should be addressed as follows: Rabies Laboratory, DASH, Building 4, Room B32, The Centers for Disease Control and Prevention, 1600 Clifton Road NE, Atlanta, GA 30333.

Treatment

The primary treatment for rabies is supportive. In 2004, a 15-yr-old girl from Wisconsin, treated against rabies with antivirals (ribavirin, vidarabine, ketamine, amantadine, and interferon-alpha)¹ and induction of coma survived the disease. The treatment protocol used for this patient and an associated rabies treatment registry is available from the attached website.

<http://www.mcw.edu/display/router.asp?docid=11655>

¹ Willoughby RE Jr, Tieves KS, Hoffman GM, Ghanayem NS, Amlie-Lefond CM, Schwabe MJ, Chusid, MJ, Rupprecht CE, N. Engl. J. Med., 2005 June 16; 352(24):2508-14.

Attachment 4-A

Animal Bite Report Form

Attachment 4-B

Decision Tree for Management of Possible Rabies Exposure

Attachment 4-C

Model Patient PEP Refusal Letter

Attachment 4-D

Confidential Rabies post- Exposure Prophylaxis (PEP) Report Form

Attachment 4-E

Questions and Answers - Rabies Prevention and Control



**ANIMAL BITE REPORT
RABIES CONTROL INVESTIGATION**

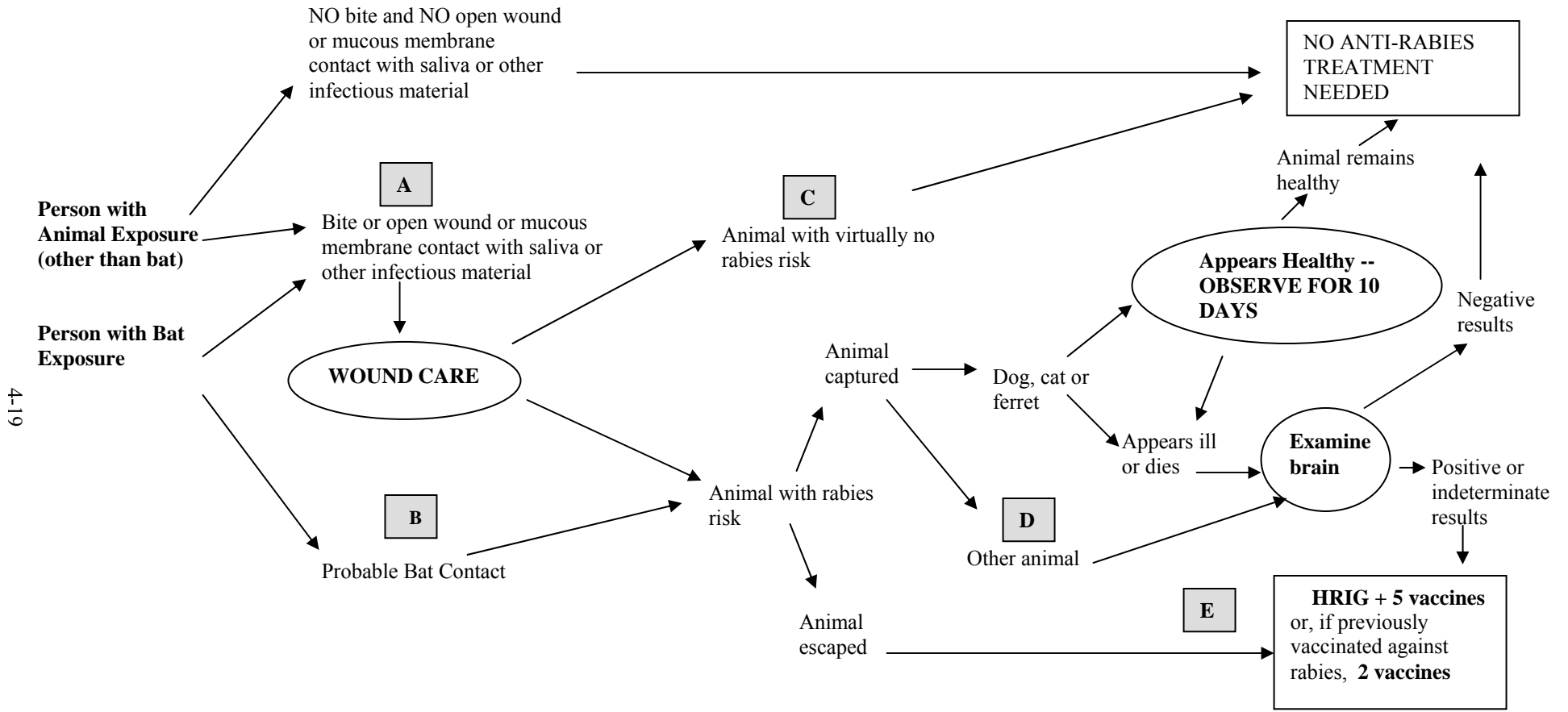
1. Case Number:

Date of Report: _____

2. Name (Last, First):		3. Sex: <input type="checkbox"/> Male <input type="checkbox"/> Female		4. Age:	5. Telephone:
6. Address (No. & Street): _____ (City) _____ (State) _____ (Zip)					
7. Name of Parent/Guardian (if victim is a minor):			8. Address (if different than above):		
9. Source of Information (Person or Office):				Telephone:	
10. Place of Attack:			11. Time and Date of Attack:		
12. Circumstances of Attack: <input type="checkbox"/> K-9 (Police Action) <input type="checkbox"/> Unknown <input type="checkbox"/> Unprovoked <input type="checkbox"/> Playful <input type="checkbox"/> Provoked <input type="checkbox"/> Sick/Hurt <input type="checkbox"/> Other _____					
13. Animal Owner (Custodian):				Telephone:	
14. Address (No. & Street): _____ (City) _____ (State) _____ (Zip)					
15. Type of Animal: <input type="checkbox"/> Dog <input type="checkbox"/> Cat <input type="checkbox"/> Other (specify) _____ <input type="checkbox"/> Owned <input type="checkbox"/> Male <input type="checkbox"/> Spayed/Neutered <input type="checkbox"/> Estimated Age: <input type="checkbox"/> Stray <input type="checkbox"/> Female <input type="checkbox"/> Unaltered <input type="checkbox"/> Wild <input type="checkbox"/> Unknown					
16. Description (Breed, Color, Etc.):		17. License Number:		Date:	From:
18. Behavior: <input type="checkbox"/> Normal <input type="checkbox"/> Abnormal <input type="checkbox"/> Unknown			19. Prior Bite History: <input type="checkbox"/> Yes <input type="checkbox"/> No		
20. Vaccination Status: <input type="checkbox"/> Vaccinated <input type="checkbox"/> Unvaccinated <input type="checkbox"/> Unk. VET: _____				Vaccination Date:	Rabies Tag No.: <input type="checkbox"/> 1 Year Vaccine <input type="checkbox"/> 3 Year Vaccine <input type="checkbox"/> 4 Year Vaccine
21. Animal Location: <input type="checkbox"/> Unable to Locate Animal <input type="checkbox"/> Animal Confined		From Date:		To Date:	
22. If at owner's home, has Quarantine Agreement been signed? <input type="checkbox"/> Yes <input type="checkbox"/> No					
23. Cause of Death: <input type="checkbox"/> Illness <input type="checkbox"/> Injury <input type="checkbox"/> Euthanasia Date: _____					
24. Quarantine Released: _____ Date: _____ By: _____					
25. Veterinarian <input type="checkbox"/> Did <input type="checkbox"/> Did Not See Animal			26. Head examination is: <input type="checkbox"/> Requested <input type="checkbox"/> Not Warranted		
27. Remarks:					
28. Head Sent to Lab:		Date:	By:	Telephone:	
29. Results: <input type="checkbox"/> POSITIVE <input type="checkbox"/> NEGATIVE <input type="checkbox"/> UNSATISFACTORY					
30. Victim Notified By: <input type="checkbox"/> Person <input type="checkbox"/> Phone <input type="checkbox"/> Mail		Date:	By:		
31. <input type="checkbox"/> Case Closed		Date:	By:		
32. Person Completing Form:				Telephone:	

DH 4042, 10/06
Stock No. 5744-000-4042-4

Management of Possible Rabies Exposure



For more information, consult the *Rabies Prevention and Control in Florida* guidebook.
<http://www.doh.state.fl.us/environment/community/arboviral/Zoonoses/RabiesguideUpdated.pdf>

Adapted from: Istre, GR, Emerson, JK, and Hopkins, RS (1984). In *Critical Decisions in Trauma* (Moore, Eiseman, Van Way, eds). pp. 484-487. The C.V. Mosby Co., St. Louis.

Management of Possible Rabies Exposure

- A. Individuals bitten on the head or neck by a high-risk animal (wild carnivore, raccoon, or stray dog, cat or ferret) may need postexposure prophylaxis (PEP) as soon possible after the exposure. If the animal is not rabid (tests negative or remains healthy during quarantine), PEP may be discontinued. For consultation contact your local county health department.
- B. Because of the association of human rabies in the US with bat rabies variant, PEP is recommended in situations where there is a reasonably high probability that contact with bats occurred (e.g., awakening to find a bat in a the room, or an adult witnesses a bat in a room with a previously unattended child).
- C. Animals with no rabies risk include reptiles, birds and fish. Animals with virtually no rabies risk include, in the judgment of health officials, rabbits, hares, rodents, or animals reared in an environment where exposure to rabies can be eliminated.
- D. No definitive observation periods exist for other mammals. However, large domestic animals such as horses and cows, if apparently healthy, may be confined and observed for clinical signs compatible with rabies at the discretion of the County Health Department.
- E. Rabies (PEP) consists of human rabies immune globulin (HRIG) and rabies vaccines. **For persons NOT previously immunized against rabies**, HRIG is given once (20 IU/kg) -- as much as possible is infiltrated at the site of the wound and the remainder administered intramuscularly (IM) away from the vaccination site. Five 1.0 ml doses of rabies vaccine should be administered IM, in the deltoid one on day 0, 3, 7, 14 and 28. **For persons previously immunized against rabies**, HRIG should **NOT be given** and only two doses of vaccine administered IM, one on day 0 and one on day 3.

For more information, consult the *Rabies Prevention and Control in Florida Guidebook*





Date: _____

Dear _____

Enclosed you will find the _____ County Health Department Rabies Refusal Letter. Please take time to read this letter outlining your risk for infection with the rabies virus and the outcome of such an infection. If you still do not wish to receive this protective treatment, please initial all lines and sign and date the letter at the bottom of the page. Please mail it back to the Health Department in the provided addressed and postage paid envelope.

This will allow me to close your case.

Thank you for your cooperation on this matter.

Sincerely,

Epidemiology
(xxx) xxx-xxxx



Name: _____ D.O.B. _____ Sex: M F
Parent/Guardian: _____ Phone: (H) _____ (W) _____
Address: _____ City: _____ Zip: _____
Date of Exposure: _____ Animal: _____ Exposure Type: _____

Please read all of the material below and initial in the area provided.

_____ Rabies is present in raccoons throughout Florida. The time period between infection and onset of illness in raccoons is not known, but could be more than 107 days.

_____ Domestic animals such as dogs and cats may acquire rabies from being bitten by a rabid wild animal. Other animals that may get infected include: bats, foxes, coyotes, ferrets, skunks, and bobcats.

_____ Rabies virus is found in the saliva and nervous system of rabid animals. A rabid animal can transmit the virus through a bite or if infectious material gets into an open wound or mucous membrane.

_____ I have been advised that a treatment is available to me that can prevent me from getting rabies.

_____ This post exposure treatment consists of receiving passive immunity with the rabies immune globulin and then active immunity with rabies vaccine. The immune globulin is given only once on the first visit. The vaccine is given 5 times – one during the initial visit then on days 3, 7, 14 and day 28 following the first vaccine. People who have received pre-exposure vaccine, would be boosted on day 0 and 3. The most common side effects with the immune globulin are soreness at the injection sites and a mild temperature. The most common side effect with the vaccine is pain, redness, swelling and itching at the injection site. Mild reactions such as headache, nausea, abdominal pain, muscle aches and dizziness may occur.

_____ Rabies is fatal if not prevented. Death occurs from respiratory arrest.

_____ I have been advised that my animal exposure could place me at risk for rabies.

Please initial one of the following:

_____ Having read all the above information and initialed the highlighted areas I **REFUSE** the post exposure treatment for rabies offered to me by the _____ County Health Department or my doctor.

_____ Having read all the above information and initialed the highlighted areas I **ACCEPT** the post exposure treatment for rabies offered to me by the _____ County Health Department or my doctor.

Signature: _____

Date: _____



CONFIDENTIAL RABIES POST EXPOSURE PROPHYLAXIS (PEP) REPORT FORM

(see reverse for instructions and routing procedures)

SECTION I: PATIENT INFORMATION

Social Security Number _____ Driver's License Number (optional) _____
Last Name _____ First Name _____ MI _____
Address _____
City _____ State _____ Zip _____ County _____
Phone Number: (____) _____
Gender (check one): _____ Date of Birth ____/____/____ Age _____
1 ___ Male
2 ___ Female
9 ___ Unknown
Race (check one): _____ Ethnicity (check one): _____
1 ___ Am. Indian/Alaskan 1 ___ Hispanic
2 ___ Asian/Pacific Islander 2 ___ Non-hispanic
3 ___ Black 3 ___ Unknown
5 ___ White
8 ___ Other
9 ___ Unknown/not specified

SECTION II: CASE INFORMATION

Type of animal: _____ Animal (check one): owned ___ unowned ___ unknown ___
Patient relationship to animal (check one): Owner ___ Occupational ___ Other (specify) _____
Animal ever vaccinated against rabies? (check one): Y ___ N ___ unknown ___
If yes, by (check one): Veterinarian ___ Owner ___
Date of most recent vaccination: ____/____/____
Animal tested for rabies: _____ Date tested ____/____/____
(check one): positive ___ negative ___ unsatisfactory ___ not tested ___
If not tested (check one): observed 10 days ___ escaped ___ unknown ___
not applicable (e.g., wild animal) ___
Incident reported to Animal Control (AC)? Y ___ N ___ No AC in County ___ unknown ___
Date of the exposure: ____/____/____
Type of exposure (check one): bite ___ nonbite ___
If nonbite (check one): animal saliva ___ cerebrospinal fluid (CSF) ___ nerve tissue ___

IN (check one): scratch ___ wound ___ eyes ___ mouth of
victim ___

Other exposure:

If bite, where (anatomically) was the exposure: _____

Wound care information:

Patient washed wound (check one): Y ___ N ___; How long after exposure?: _____

Physician's wound care:

Patient saw physician on (date): ___/___/___

Physician: washed/flushed wound (check one): Y ___ N ___

Gave tetanus (check one) Y ___ N ___

Gave antibiotics: Y ___ N ___ Sutured wound: Y ___ N ___

Other treatment:

PART III: PEP INFORMATION

Who was consulted for PEP recommendation? (check one):

County Health Department ___ State Health Office ___

If neither consulted, who recommended PEP?

Name: _____ Telephone : (____) _____

Date PEP initiated: ___/___/___

Patient previously vaccinated (check one): Y ___ (Date : ___/___/___) N ___ unknown ___

Type of PEP (check):

___ HRIG + 5 vaccines

___ 2 vaccines (patient previously vaccinated)

___ Continuing vaccinations begun in County _____

State _____

___ Other, Specify _____

___ PEP not given,

Specify _____

PEP supplied by (check one): DOH (State or CHD pharmacy) ___ Private MD ___

PEP administered by (check one): CHD ___ ER ___ Private MD ___

Patient Reported on 2016 (check one): Y ___ N ___

Form Completed by (print name)

County Health Department

Date

Purpose:

This form is to be completed for each person for whom PEP is recommended in Florida in order to help evaluate the Rabies Prevention and Control Program.

Routing Procedures:

After completing this form, please enter into Merlin or fax or mail to the Surveillance Section, Bureau of Epidemiology. The confidential fax number and the Bureau's mailing address are as follows:

Florida Department of Health
Bureau of Epidemiology/Surveillance Section
4052 Bald Cypress Way, Bin #A-12
Tallahassee, FL 32399-1720
Confidential Fax #: (850) 414-6894

Forms Retention Schedule:

This form is subject to the retention period specified in DOH Schedule 1, Item 2. Once data is entered into the Florida morbidity reporting system database, backed-up, and verified as entered, the electronic copy becomes the permanent record and the hard copy of the disease reporting form becomes a duplicate.

Questions and Answers - Rabies Prevention and Control

How is rabies transmitted?

Answer: The rabies virus is transmitted when saliva from an infected animal comes in contact with mucosal membranes or a fresh wound of a person or another animal. The virus is primarily transmitted by bites. Other types of contact, such as contact with blood, urine or animal hide do not constitute rabies exposures (**Page 3-2**).

Which animal species are considered high risk for rabies?

Answer: Raccoons, bats, skunks, coyote, fox, otter, bobcats and stray dogs, cats and ferrets are considered high risk for rabies infection in Florida (**Page 4-4**).

Is there a difference between the 1 and 3-year rabies vaccines for dogs and cats?

Answer: Both vaccines are effective at protecting the animal from rabies. The three-year vaccine has a longer duration of protection (3-year vs a 1-year immunity). Some vaccines now offer 4-year immunity. All vaccines require a booster shot one year after the first vaccine dose (**Page 3-1**).

Is there a test to verify that vaccinated animals are protected from getting rabies?

Answer: No. All animals must be revaccinated either annually or triennially. Although it is possible to test pets for rabies antibodies, animals with rabies antibodies may not be protected from getting the disease (**Page 3-2**).

How long does a pet (dog, cat or ferret) that is responsible for biting or scratching a person or another animal, have to be isolated and observed for signs of rabies?

Answer: Ten days (**Page 3-3**).

How long and where does a pet (dog, cat or ferret) that has been bitten or scratched by another animal suspected to have rabies, have to be quarantined?

Answer: If the biting animal is not available for testing or observation (as appropriate), pets with current rabies vaccination can be quarantined for 45 days at home. Pets without a current rabies vaccination should be euthanized or quarantined for 180 days at an appropriate facility (**Page 3-5 - 3-6**).

Can a pet that has just been bitten or scratched by a rabid animal be tested to determine whether it has been infected or not?

Answer: It takes several weeks to months for the infected animals to develop rabies (**Page 2-2**).

Where do I send specimens for laboratory testing for animal rabies?

Answer: The local animal control office or county health department submits specimens to the DOH Laboratories to test brain tissue from suspected rabid animals (**Page 2-8**).

What is the treatment protocol for people who have been exposed to rabies?

Answer: When the rabies risk assessment indicates a need, rabies post-exposure prophylaxis (PEP) treatment (rabies vaccines with or without human rabies immune globulin) is indicated (**Page 4-5**).

Page 2. Questions and Answers Rabies Prevention and Control.

Does a person who handles a pet that has been attacked by a rabid animal need PEP?

Answer: Generally not, the skin is an effective barrier against rabies. People with skin disorders or fresh wounds need to be evaluated on a case-by-case basis (**Page 4-3**).

Where do I send specimens for human rabies testing?

Answer: The DOH Laboratories can test brain tissue from infected people. Ante mortem testing at CDC may be possible but must be requested through DOH (**Page 4-9**).

CHAPTER 5

EPIDEMIC CONTROL MEASURES

Most Florida counties currently address the problem of epizootic raccoon rabies via a coalition of state and county public health agencies and collaborators using some combination of the following preventive measures: 1) Area Quarantine; 2) enforcement of pet vaccination ordinances; 3) low-cost rabies vaccination clinics; 4) apprehension of stray dogs, cats and nuisance wildlife; 5) selective reduction of concentrated raccoon populations; and 6) public information campaigns. The prevention and control measures in this compendium represent a model developed over the years by various county health departments and local animal control agencies. Every jurisdiction must address their particular situation within the context of existing conditions and constraints.

In general, any unusual increase in the number of rabid animals elicits the declaration of a **Rabies Alert** by the county health officer. When an outbreak situation continues to escalate, a limited **Area Quarantine** may be imposed. In all raccoon rabies outbreaks, it is essential that planned prevention and control measures are discussed with allied collaborators and interested parties. Once a decision is made to initiate an alert or quarantine, the media should be advised immediately to facilitate public understanding and acceptance of any actions taken. The following recommended guidelines for controlling raccoon rabies outbreaks, although not all inclusive, have proven over time to be effective in a variety of settings.

A. Coalition Development and Public Awareness

Rabies control programs are more effective when local coalitions are formed to plan and implement prevention strategies. County health departments should take the lead in developing these coalitions which may include community members from: animal control; medical and veterinary medical associations; hospitals, HMOs and walk-in clinics; FWC; state-chartered humane organizations; wildlife rehabilitation centers; public parks and recreational lands; and contract wildlife trappers.

Media involvement (press releases, radio and TV coverage) early in Rabies Alerts and Area Quarantines generally sets the stage for better public understanding of rabies and its modes of transmission, and community acceptance of control measures taken.

B. Enforcement of State Rabies Laws and Local Ordinances

- Dogs, cats and ferrets must be vaccinated against rabies by licensed veterinarians only.
- Pets must be under leash control or in a fenced setting when outdoors. All stray dogs and cats must be captured, impounded and sacrificed if not claimed or adopted within a reasonable time (usually 14 days - local ordinances vary).
- The public should be advised not to keep wildlife as pets or interact with strange or sick domestic pets (including feral cats), livestock or wild animals.
- Strategies must be devised to reduce human-wildlife contact in residential and recreational areas.

C. Rabies Alert and Area Quarantine

The county health officer may declare and establish an area-wide Rabies Alert or Area Quarantine under authority of state laws (Ch. 381, F.S.), public health regulations (Ch. 64D-3.91, F.A.C.), and local ordinances, in cooperation with appropriate livestock authorities (FDACS) and wildlife conservation agencies (FWC, DEP).

Rabies Alert: A Rabies Alert may be called when:

- a confirmed diagnosis of a rabid domestic animal occurs;
- a geographic clustering of wildlife rabies cases occur;
- an area experiences several confirmed rabid animals (e.g., raccoons) in a short period of time (e.g., up to 50% increase from previous 5-year average); or
- a clear shift towards furious behavior in a population of raccoons occur.

Note: Animals found dead with no human or pet exposure that tested positive for rabies should not be counted in this total, nor should they be tested as a practical matter.

The CHD or designee should notify the State Public Health Veterinarian, the local rabies control coalition, the media and neighboring CHD(s) (if close to or overlapping geographic borders) of the Rabies Alert.

Information contained in the alert should include:

- number and type of animals involved
- delineation of the alert area
- change in rabies demographics, if applicable
- the need to immunize pets
- advisories to reduce exposure to wildlife (e.g., not leaving pet food out, garbage control)

Other control measures include:

- Requesting the local animal control agency increase surveillance for the identification and capture of stray dogs and cats and wildlife vectors.
- Requesting the state-chartered humane organizations and other agencies that deal with unwanted pets to use discretion when adopting out stray animals.
- Coordinating with the local veterinary medical association to heighten awareness about the possibility of rabies exposure in staff and need for pre-exposure prophylaxis.
- Considering rabies vaccination clinics.
- Coordinating with local FWC officials, animal control agencies and other local law enforcement to assure that wildlife complaints are handled expeditiously and translocation of rabies vector species is prohibited.

Alerts should be evaluated and **removed** after rabies activity has ceased. A 60-day period is a general guideline for this in practice unless the CHD or designee in consultation with the State Public Health Veterinarian deems a longer period appropriate.

Area Quarantine: The decision to enact a rabies quarantine should be made carefully. A rabies quarantine is a very specific set of activities that must be judiciously applied. Area Quarantines should be considered for implementation only with clear and compelling evidence that the situation is beyond the scope of rabies activity for that area or the state in general. Conditions for establishing a quarantine include the diagnosis of a translocated strain of rabies (e.g., coyote) or the lab confirmation of **epidemic** levels of rabid animals above those levels and conditions for creating a Rabies Alert. As with the alert, the positive test of road-killed or other dead animals should not be counted in this total, nor should they be tested as a practical matter.

***NOTE:** The Division of Environmental Health must approve plans for an Area Quarantine. Information required by the Bureau includes: a description of the area to be covered by the quarantine; the reason for the quarantine; the duration of the quarantine; the agencies involved; and any other particulars necessary to gain a full understanding of the current situation. If approval is given, the Bureau must be kept fully informed of quarantine-related activities in the area.*

Quarantine requires the following steps:

- Notifying media and other members of the local rabies control coalition. Holding meetings/updates to assess the situation and determine further activities.
- Ensuring that all dogs and cats roaming at-large will be impounded by animal control agencies. (Animals may be released to their owners upon payment of assessed impounding fee and board. If the impounded dog or cat is not currently vaccinated by a licensed veterinarian, it must be vaccinated while impounded. If such a service is not available at the animal shelter, the owners shall be required to show a valid vaccination certificate or document evidence of appointment with a licensed veterinarian within 24 hours.)
- Confining all dogs, cats and captive wild mammals to their owners' premises. Confinement should be by fence or cage, inside the living quarters or related buildings or on a leash under control of a responsible person.
- Restricting the movement of animals. Dogs, cats or horses may be moved outside of the quarantine area if they are vaccinated by a licensed veterinarian not less than 30 days or longer than a year prior to intrastate movement and have had no exposure to a potentially rabid animal. Other animal movement is at the discretion of the county health officer and State Agriculture Veterinarian or their designees.
- Prohibiting adoption from animal shelters of previously free-roaming dogs, cats or other animals that have no proof of vaccination or rabies vaccination tag in quarantined areas until quarantine is terminated by the county health officer or his/her designee.
- Conducting rabies vaccination clinics.
- Educating the public about rabies (consider a newsletter for rural areas where livestock may be impacted).
- Restricting importation and exportation of domestic animals susceptible to rabies by enforcing importation/exportation guidelines.
- Humanely destroying free-roaming wild mammals determined to be a contributing factor to the epidemic in residential areas. **Translocation of trapped rabies vector species to other areas must be absolutely forbidden because of the risk of spreading the epizootic to other areas.**

***NOTE:** It has been generally recognized that trapping, antifertility agents and toxic baits are not necessarily efficient or effective ways to reduce the incidence of rabies in most wildlife populations. However, in Florida, population reduction through live trapping has limited the duration and intensity of rabies epizootics in selected concentrations of urban raccoons. The effectiveness of such wildlife rabies control operations depended upon the density, range and characteristics of the population involved, its susceptibility to the technique used, public acceptance of the program, and the extent of the local support and assistance. Also, this technique of selective control has only been cost efficient and effective when applied in conjunction with other prevention and control measures.*

Quarantine must be time-certain and removed as soon as the threat subsides. Notification of all parties should be done with the same diligence as the imposition of the quarantine

D. Rabies vaccination campaign for dogs and cats during an Area Quarantine

When a rabies quarantine area is established, a county health department-sponsored, low-cost rabies vaccination clinic should be conducted. These vaccine clinics can be done in a variety of formats; the following procedures are by no means exhaustive. The key issues in development of a clinic are: 1) local veterinary assistance; 2) coordination with county animal control agencies, if available; 3) the availability of vaccine at reasonable rates; 4) a suitable staging area for the clinic; and 5) suitable media coverage to assure turnout.

- **The local veterinary community** is the single best source for a program of this type. If the local veterinarians will sponsor this program in their offices on given days, many of the logistical issues are solved, and the only issues are vaccine supply and media coverage.

In the event that the vaccine clinics cannot be held in veterinarians' offices, participating veterinarians are encouraged to follow the recommendations of the AVMA Professional Liability Insurance Trust with proper attention to safety and AVMA guidelines.

- **Animal control** has the capability to provide, in many cases, the space to stage a vaccine clinic program. They can provide cages for controlling animals brought to the site, and assist in maintaining separation of species. They should have officers on station throughout the event in case of an escape requiring capture.
- In general, the staging area should be confined with ingress and egress limited to no more than two ways. This can be done, for example with automobiles in a mall parking lot if necessary. Volunteers, animal control, or CHD staff can fill out the necessary paperwork for processing. If outdoors, local funeral homes may have tents available for shade for these personnel. Rotate these personnel on 2-hour shifts, as these programs are quite demanding.

The area should allow for two lines (one for dogs, one for cats) and be clearly marked. Personnel should be at the entrance to advise citizens of the path they should take. They can also stop citizens who have unrestrained animals. Staff should be at various places in line to monitor separation of the animals. If the parking area is away from the site, staff with cages should be

placed there (particularly for cats); they can also retrieve the cages upon the owner's return. Leashes should be available, as a substantial number of citizens will not come prepared.

- These events are usually well covered by the media. Publicize the program at least one week in advance. After the event, provide follow-up data (e.g., number of pets vaccinated).

The clinics should be held on two different schedules (e.g., Wednesday evening from 5 p.m. - 8 p.m. and then again on Saturday morning from 9 a.m.-1 p.m.). This allows for most people's schedules to be accommodated. Overall, the key to a successful program is that all members of the community work together in the effort. Think through the site of the program, and all the possible problems. Location, for example, too close to a major highway can cause problems if an animal escapes.

E. Oral rabies vaccine

Oral rabies vaccination (ORV) has been in use in the United States since 1990, in Canada since 1985 and in Europe since 1980. The currently licensed oral rabies vaccine in the U.S (a recombinant vaccine) is available to the USDA and its cooperators for distribution to wildlife. The use of ORV has been combined with other wildlife management techniques to successfully control raccoon rabies in urban and rural environments, limiting the spread of raccoon rabies to uninfected areas, in 16 states, and to dramatically control rabies in coyotes and gray fox in south Texas. The goal of these coordinated programs is to stop the spread of wildlife rabies and eventually eliminate terrestrial wildlife rabies. *USDA, APHIS Wildlife Services (WS), has provided leadership, funding and program support to assist states with ORV programs and to coordinate regional rabies control efforts.*

In situations of epizootic raccoon rabies, the state or county government might consider the distribution of ORV to control the outbreak. Given a properly designed and executed program, ORV has been demonstrated to be effective in reducing or eliminating the number of raccoon rabies cases. Baiting densities of 70 baits per square kilometer twice a year or 100-150 baits once per year have proven effective in some settings. The cost effectiveness of the program depends upon success ORV and other wildlife management techniques and the continued value placed on public safety and on animal health. State funding for ORV programs is not available.

NOTE: *Counties interested in beginning an ORV program must submit proposals to the Florida Rabies Advisory Committee for approval (c/o Dr. Carina Blackmore, Department of Health, 4052 Bald Cypress Way, BIN A08, Tallahassee, FL, 32399-1710- see Attachment 5-A).*

Questions about the proposal can be directed to Dr. Blackmore at 850-245-4732.

Attachment 5-A

Issues to be addressed in Government – Sponsored Oral Rabies Vaccine Proposal

Attachment 5-B

Template letter –No Relocation of Raccoon Policy

Attachment 5-C

Raccoons and Rabies – Question and Answers about Oral Rabies Vaccine

ISSUES TO BE ADDRESSED IN Government–Sponsored ORAL RABIES VACCINE PROPOSAL

BACKGROUND

Describe the:

- History of rabies in area
- Habitats in the area of the proposed baiting
- Estimates of human and companion animal populations in the area
- Support for the project from local community and political groups with an interest in rabies control
- Rationale for use of oral rabies vaccine in this situation including expected outcome

PRE-BAITING EVALUATION

Describe how population studies/estimates of target species for vaccination will be done to find out the:

- Background levels of biomarker in target and non-target species
- Background levels of rabies antibodies in target and non-target species
- In case placebo baiting trials have been performed, describe here

VACCINE PACKAGE

Description of bait and rationale for use of this particular product.

VACCINE DISTRIBUTION

Describe the proposed:

- Vaccine distribution mode (airplane, helicopter, vehicle, or foot) with rationale
- Bait density (even distribution or targeted) with rationale
- Timing (time of year, frequency) with rationale
- Duration – estimate of number of years needed to continue (long-term commitment needed)
- Contingency plans if a rabid animal is identified in the baited area

POST-BAITING EVALUATION

Describe how the following will be evaluated:

- Distribution and frequency of positive rabies cases
- Biomarker levels in target and non-target species after baiting
- Antibody levels in target and non-target species after baiting

STAFFING

Describe how staff will be selected, trained and monitored.

Significant professional oversight by a veterinarian and wildlife biologist will be needed. Describe how these services will be obtained.

COOPERATION WITH FEDERAL, STATE AND LOCAL AGENCIES

Partnerships are very important for the vaccination project to succeed.

Describe your partnerships with:

- Centers for Disease Control and Prevention
- US Department of Agriculture
- Florida Department of Health (including neighboring county health departments)
- Florida Department of Agriculture and Consumer Services
- Florida Fish and Wildlife Conservation Commission
- Animal Control officials
- Law Enforcement officials

PUBLIC RELATIONS PLAN

How public will be notified

Who will handle calls from public

SAFETY

How the human and animal medical community will be notified and educated.

What recommendations will be given for humans and animals exposed to vaccine

Any special recommendations for immunocompromised persons exposed to vaccine

BUDGET

Estimated costs for the program

Sources of funding

CERTIFICATION OF APPROVAL BY LOCAL GOVERNING BODY

Should be submitted

Submit request to Rabies Advisory Committee

c/o Dr. Carina Blackmore

Division of Environmental Health

4052 Bald Cypress Way, Bin #A08

Tallahassee, FL 32399

[Template] Raccoon Relocation Letter

Date

Re: Relocation of Rabies Vector Species (Raccoons)

An oral wildlife rabies vaccine bait distribution campaign is underway in x county. In order to protect areas that have not been affected, and maintain the gains accomplished by previous years' baiting, the **"NO RELOCATION"** policy for raccoons has been put in place. This policy prohibits the relocation of raccoons into X County from another county.

This important epidemic control measure is outlined in Florida Rabies Control and Prevention, 2008 Guidebook. (Chapter 5)

"Humanely destroy free-roaming wild mammals determined to be a contributing factor to the epidemic in residential areas. Transportation of trapped rabies vector species to other areas must be absolutely forbidden because of the risk of spreading the epidemic to other areas." (5-3)

This especially applies to **"NO RELOCATION"** of vector species (raccoons) to public parks and recreation areas.

Wildlife rehabilitators may release in X County only those rehabilitated raccoons that were rescued in X County. Such releases must be made within a mile of the original point of rescue.

Further, this policy is strongly supported by Dr. Carina Blackmore, D.V.M., Ph.D., State Public Health Veterinarian.

Humane organizations and individual permittees who continue to trap raccoons MUST comply with the above guidelines. Failure to comply may result in a **Five Hundred Dollar (\$500.00)** fine levied against the offending organization or individual.

Arrangements for the humane euthanasia of captured raccoons and disposition of the remains must be made with a private source and is the responsibility of each permittee. All raccoons must be considered potentially infected. Permission for euthanasia and disposition of remains must be approved by the X County Health Department, Environmental Health Division; telephone () .

Due to their high risk of contracting rabies, all individuals involved in trapping or handling raccoons should consider undergoing pre-exposure vaccination. The X County Health Department offers the pre-exposure series. Contact (name) for further details.

Questions about rabies should be directed to (name)

Sincerely,

X County Animal Services
Department

Director, X County Health
County Health Officer

Take the BITE out of Rabies!!

How can I help?

The bait is intended for wild animals- specifically, raccoons. Everyone can help by keeping their pets inside or on leashes during the baiting time and about five days afterwards. This will help to prevent your pet from getting the baits and gives raccoons a chance to eat the baits.

Important Reminders:

Be aware of what the bait looks like. Keep dogs and cats inside or on leashes at least a week after your area was baited. Do not attempt to take a bait away from your pet! That is the same as taking food away from an animal. You may be bitten. Baits may be picked up while wearing gloves, or with a plastic bag or towel. Do not handle a partially eaten or damaged bait with bare hands. Damaged baits should be placed in a baggie and disposed of in normal trash. If you touch the bait or the liquid vaccine (a red fluid inside the bait) thoroughly wash your hands or exposed skin with soap and water.

Call the Florida Oral Rabies Vaccine Information Line
1-866-4USDA WS (1-866-487-3297).

To report any incidents or to answer questions.

The oral rabies vaccine bait, shown here, consists of a square block made from a compressed mixture of fishmeal and fish oil known to attract raccoons. The vaccine is inside a plastic packet that is inserted in the middle of the block. People should tell their children to leave the bait alone. Pet owners are asked to keep their dogs and cats inside or on leashes so raccoons can eat the bait. Most of the baits will be gone in about five days after being dropped.

Rabies: Five Ways to Protect Yourself and Your Family

- 1) Do not feed, touch or adopt wild animals, and be cautious of stray dogs and cats. Rabid animals do not always appear vicious! Teach children to leave wildlife alone. Be sure your child knows to tell you if an animal bites or scratches them.
- 2) Have your veterinarian vaccinate your dogs, cats or ferrets against rabies. Keep their vaccinations up-to-date.
- 3) Tightly close garbage cans. Open trash attracts wild or stray animals to your home or yard.
- 4) Feed your pets indoors, never leave pet food outside as this attracts wildlife.
- 5) Call your doctor for advice if an animal bites you. Report the incident to your local health department.

The Oral Rabies Vaccination Project is conducted by the Florida Department of Agriculture and Consumer Services and the Florida Department of Health, your local health departments, the Centers for Disease Control and Prevention (CDC), and the U.S. Department of Agriculture Wildlife Services (USDA/APHIS/WS).

Rabies Information Line
1-866-4USDA WS
(1-866-487-3297)

Raccoons and Rabies



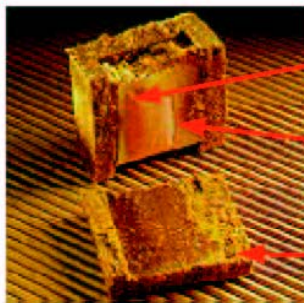
- Questions And Answers About Oral Rabies Vaccine

Why are there concerns about raccoons and rabies?

Rabies is a viral infection that affects the nervous system of mammals, including humans. The disease is almost always fatal to both people and animals. Raccoon rabies spreads rapidly and infects large numbers of raccoons. The disease often spreads to other wildlife and pets, making human exposure a real concern. To address this problem, the Florida Department of Agriculture and Consumer Services and the Florida Department of Health, and other state, federal and local partners, initiated a program to vaccinate wild raccoons in the Central Western region of Florida. This vaccination program builds on the successes of the Pinellas County program.

What does Raboral VR-G® oral rabies vaccine bait look like?

A rabies vaccine packet is inserted into the hollow center of a fishmeal polymer bait and is held in place by wax. The bait weighs 23 grams and is 1.25" x 1.25" x .75" in size.



The vaccine packet contains 2 ml. of oral rabies vaccine.

A low-temperature sealing wax is used to hold a vaccine packet inside the bait.

The bait matrix is composed of fishmeal with a polymer additive that acts as a binding agent.

S-11

How is a raccoon vaccinated?

A raccoon is vaccinated by eating a bait containing the vaccine. The raccoon will develop antibodies in two to three weeks. The antibodies will protect the raccoon if it is exposed to another infected raccoon. If enough raccoons are vaccinated, the disease can be stopped.

Can the vaccine cause rabies?

It is not possible to get rabies from the vaccine. The vaccine contains only a single gene of the rabies virus, not the entire virus.

What if my dog or cat eats a bait?

The bait is not harmful to pets or livestock if they find and eat one. Because additional baits may have been dropped nearby, check the area for more. Any other baits can be removed and placed where they are more likely to be found by a raccoon, not your pet.

Are these baits or vaccines harmful to people?

The bait shell is made of fishmeal, an ingredient in animal feed so it is not harmful to touch an intact bait. However, the bait does have a strong odor, so wearing gloves is recommended.

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For Immediate Release
Date: XXXXX

Contact Person: XXXXX
Environmental Health, Director
XXXXX County Health Department
Phone: XXXXXX

Rabies Alert

Town of XXXXX: XXXXXX, Director, XXXXXX County Health Department, has issued a rabies alert for the central geographical region of XXXXX County. This is in response to XXXXX that tested positive for rabies reported on XXXXXX (date).

All citizens in XXXXX County should be aware that rabies is present in the wild animal population and domestic animals are at risk if not vaccinated. The public is asked to maintain a heightened awareness that rabies is active in XXXXX County. Alerts are designed to increase awareness to the public, but they should not give a false sense of security to areas that have not been named as under an alert.

The recent rabies alert is for 60 days. The center of the rabies alert is at (geographic location) XXXXXX and includes the following area boundaries in XXXXX County:

- XXXXXXXX
- XXXXXXXX
- XXXXXXXX
- XXXXXXXX

An animal with rabies could infect other wild animals or domestic animals that have not been vaccinated against rabies. All domestic animals should be vaccinated against rabies and all wildlife contact should be avoided, including and especially raccoons, bats, and foxes.

Rabies is a disease of the nervous system and is fatal to warm blooded animals and humans. The only treatment for human exposure to rabies is rabies specific immune globulin and rabies immunization. Appropriate treatment started soon after the exposure, will protect an exposed person from the disease.

The following advice is issued:

- All pets should have current rabies immunizations.
- Avoid contact with all wildlife, especially raccoons, bats, and foxes.
- All persons with any unusual exposure incident, or bites, with a wild animal should contact the XXXXX County Health Department.
- For general questions pertaining to animals, contact the XXXX County Animal Services at (phone #) XXXXXX or the XXXXXX (local humane Society) at (phone #) XXXXXX.
- Secure outside garbage in covered containers to avoid attracting wild animals.
- Do not leave pet food outside. This also attracts other animals.
- For questions regarding the health of an animal, contact a veterinarian.
- Veterinarian staff and animal control staff should be alert for animals encountered with signs suspicious for rabies and contact the XXXXX County Health Department (phone number) XXXXXX.

For further information on rabies, go to the Florida Department of Health website:
http://www.doh.state.fl.us/disease_ctrl/epi/diseases.htm or contact XXXXX County Health Department, Environmental Health office, (phone number) XXXXXX.

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