

## **Background and Transmission**

Rabies is one of the most feared zoonoses because it nearly always results in fatal, acute encephalitis. This disease is usually transmitted to humans when the virus is introduced into an open wound or abrasion of the skin or mucous membranes following exposure to the saliva of a rabid animal. The first known human case of rabies in Florida was recorded as “hydrophobia” on a death certificate of a 38 year old white male from Key West in 1881. A total of 73 human cases of rabies have been reported as Florida-acquired cases since then, with the last case seen in 1948. This was a black male from Tampa, Florida, who refused treatment from the local health department after being bitten by a neighbor’s dog.<sup>1</sup> More recently, two additional human cases reported in adult males during 1994 and 1996 were found to have had exposure to dogs in Haiti and Mexico respectively.<sup>2,3</sup>

## **History**

Between the turn of the century and World War II, rabies outbreaks in dogs became quite common throughout the state. The disease in dogs was finally brought under control in the early 1950s as public concern resulted in the passage of rabies vaccination and animal control laws in many Florida cities and counties. Vaccination of cats was not initially included in many local animal control ordinances; however, it is now required as part of a statewide rabies ordinance passed by the legislature in 1994. Rabies in raccoons and other wildlife is now endemic throughout most of the state.

## **Rabies in Florida**

In 2005, there were 201 confirmed cases of animal rabies reported in Florida compared to 205 in 2004, and 188 cases reported during 2003. Rabid animals were identified in 38 counties in 2005, and eight counties reported 10 or more cases. The majority of cases were among wild animals, especially raccoons (N=108, 54%), foxes (N=29, 14%) and bats (N=28, 14%). Rabid bobcats (N=2), skunks (N=2) and an otter were also recorded. Since 1988, the number of rabies cases in cats continues to outnumber dogs. In 2005, 26 rabid cats and 5 rabid dogs were reported. No beavers, cattle or horses were found rabid this year. The urban/suburban epizootics of raccoon rabies that spill over into foxes, bobcats, otters, feral cats, dogs and horses present unique control problems for local authorities. Recommended guidelines for management

of animals that expose humans or other animals, submission of animal heads for laboratory testing and quarantine procedures are published in DOH Guidelines for Rabies Prevention and Control in Florida<sup>4</sup> and a National Rabies Compendium.<sup>5</sup>

## **Treatment and Prevention**

Recommendations for the prevention and treatment of rabies published by the CDC<sup>6</sup> are endorsed by the Florida Department of Health (DOH). After immediate cleansing of a wound following exposure, post-exposure treatment consists of a human rabies immune globulin (HRIG) series in conjunction with Human Diploid Cell Vaccine (HDCV, Imovax), Diploid Fetal Rhesus-Lung Cell Vaccine (RAV, Michigan Department of Public Health), or Chick Embryo Cell Vaccine (PCEC, RabAvert). Persons in occupations at risk for exposure are encouraged to have pre-exposure prophylaxis with HDCV or PECE with scheduled boosters. HRIG, HDCV and PCEC may be obtained through all DOH County Public Health Departments and most major hospitals.

Prepared by Lisa Conti, DVM, MPH

Florida Department of Health

10/26/99

Updated 9/20/05

## **References**

1. Burrige, MJ, Sawyer, LA, and Bigler WJ, *Rabies in Florida*, HRS 1986.
2. CDC. *Human rabies - Miami 1994*. MMWR 1994;43:773-75.
3. CDC. *Human rabies - Florida 1996* MMWR 1996;45:719-27
4. *Rabies Prevention and Control in Florida*. Department of Health 2006.
5. *National Compendium of Rabies Prevention and Control 2006*. National Assn.of State Public Health Vets.
6. CDC. *Rabies prevention-United States, 1991*. MMWR 1991;40:RR-3