Managing Other Animals that Bite Humans

When a domestic dog, cat or ferret bites a human, the animal must, under law (NC GS 130A-196), be confined for 10 days regardless of vaccination status, and observed for development of rabies. If the animal remains normal and healthy through the end of confinement, then no post-exposure prophylaxis (PEP) is required for the victim. Normal, healthy livestock (horses, cattle, goats, swine, etc.) that bite people, in a provoked manner, are typically observed for 15 days under the direction of the local health director (see Management of Livestock and Horses That Bite Humans).

Wild hybrids are regarded as wild animals in North Carolina and should be managed as wild animals in the event that a person is bitten. A 10-day confinement or observation period cannot be implemented for a wolf hybrid, cat hybrid, or a wild animal that bites a person (see Animal Rabies Vaccination: Requirements and Guidelines) because the shedding period for rabies virus is not known for hybrids or wild animals. Therefore, if a hybrid or wild animal bites a person, the animal should be humanely euthanized and the head submitted for rabies diagnostic testing at the State Laboratory of Public Health.

If a high-risk rabies vector (raccoon, bat, fox, skunk, woodchuck [groundhog], beaver, or other wild carnivore) bites a person, there is no recognized confinement or observation period as there is in dogs, cats, ferrets or livestock. The required rabies challenge studies have not been accomplished to determine the rabies shedding period prior to clinical signs in these species. A bite inflicted by a high-risk rabies vector is considered an exposure to rabies unless the animal tests negative for rabies at the State Laboratory of Public Health. Rabies post-exposure prophylaxis (PEP) is advised for the bite victim if the captured animal tests positive, OR if the high-risk animal cannot be captured for testing.

Low-risk wildlife (rabbits, squirrels, and small rodents) rarely need to be tested for rabies. However, the circumstances of exposure and animal health status and behavior should always be carefully assessed with a public health official to determine the need for testing the animal or for providing PEP to the victim if the animal is lost to follow-up.

Only mammals can be infected with rabies and potentially transmit the disease. Species that pose no risk of rabies direct transmission include avians (e.g., chickens, ducks, geese, hawks, eagles, owls, and even vultures), reptiles (lizards, turtles, etc.), and amphibians (e.g., frogs).

Bites from other mammals, including exotic species like monkeys, have the potential to expose a person to rabies and should be reported immediately to the local health department. Management of other mammals depends on many factors including: the animal species; the circumstances of the exposure (bite, non-bite, provoked, or unprovoked); health status and behavior of the animal; and the animal’s potential for exposure to rabies, including, importantly, the exposing animal’s housing history since birth.

The shedding period of rabies virus, prior to clinical signs, has not been determined for species other than dogs, cats and ferrets. Since vaccination of exotics is considered “off-label,” euthanasia and testing may be a necessary outcome. If a rarely encountered species bites a human, and there is uncertainty about the risk of exposure to rabies virus, local
health departments and Animal Control are advised to consult with N.C. Veterinary Public Health (919-733-3419) for a detailed risk assessment. Even if the animal does not carry rabies, it may carry other serious zoonotic diseases that can be transmitted to humans.

When a bite caused by a monkey or primate is reported to an animal control officer, local health department or healthcare provider, always call N.C. Veterinary Public Health (919-733-3419) for guidance. The first question should always be: “what type of monkey?” Certain species of Old World monkeys, primarily the macaques (genus Macaca), are likely to be carriers of herpes B infection, a potentially serious and fatal disease in humans. Macaque monkeys infected with herpes B virus usually have no or only mild symptoms, but the virus can cause a rapid and fatal encephalomyelitis in humans after exposure. Bites, scratches, percutaneous inoculations, and aerosol transmission have been reported with herpes B virus. However, New World monkeys – those of Central & South American origin – are not known to harbor or transmit the herpes B virus. For information on herpes B virus testing for both exposed people and monkeys, see the herpes B virus web sites of the Viral Immunology Center at Georgia State University (http://biotech.gsu.edu/virology) and the CDC (www.cdc.gov/herpesbivirus).