

## ***Responsibility for Rabies Control in North Carolina:***

### **Roles and Responsibilities of Agencies and Individuals**

*The responsibility for controlling rabies and preventing transmission of this deadly viral disease is shared among animal owners, veterinarians, healthcare providers, local public health and animal control, local officials, state officials, national agencies and others.*

#### **Local Response**

*Each response to a bite incident, a rabid animal, and potential rabies exposures to humans or domestic animals always begins at the local level, often in collaboration with state and federal partners. Getting to know your local partners and developing response plans and protocols together is a necessary element for successful rabies prevention and control.*

**Animal owners** – Pet owners are responsible for ensuring that their animals are currently immunized against rabies and wear current vaccination tags (cats and ferrets may be exempted from wearing tags by local ordinance). All owned dogs, cats and ferrets in North Carolina are required to be vaccinated against rabies by four months of age per N.C. General Statute 130A-185 and should be re-immunized within 12 months after the initial vaccination and thereafter vaccinated every 1, 3, or 4 years, depending on the animal species and vaccine used (per vaccine package insert).

Vaccination of livestock (including horses) is not required by North Carolina state law. However, the *Compendium of Animal Rabies Prevention and Control* recommends that all horses be vaccinated, and encourages farmers and producers to vaccinate livestock against rabies if the animals are particularly valuable and/or will have frequent contact with people. Animals placed in public settings (*i.e.*, petting zoos) should be vaccinated against rabies if a vaccine licensed for use in that species is available.

If a dog, cat or ferret bites or attacks a person, owners are also responsible for immediately reporting the incident and certain identifying information to the local health director.

**Licensed Veterinarians** have received a Doctor of Veterinary Medicine degree from an accredited veterinary school and are licensed by the N.C. Veterinary Medical Board ([www.ncvmb.org](http://www.ncvmb.org)). Veterinarians play an integral role in rabies prevention and control in North Carolina and in educating the public about rabies and other zoonotic diseases. They vaccinate domestic cats, dogs and ferrets, horses and livestock according to the state law and vaccine product requirements, and issue rabies vaccination and health certificates and rabies tags. Some may provide practical training of local Certified Rabies Vaccinators under the guidance of the State Public Health Veterinarian, supervise registered veterinary technicians administering rabies vaccines to animals, and assist in county rabies vaccination clinics. Veterinarians report all animal rabies cases in livestock to the State Veterinarian's Office (NC DA&CS) and report pet rabies, and pet and human rabies exposures to the local health director. Veterinarians oversee 10-day bite confinements and required quarantines when animals have been exposed to rabies, and work together with Local Animal Control to euthanize and submit animals for rabies testing.

**Registered Veterinary Technicians (RVT)** are registered by the N.C. Veterinary Medical Board and may administer rabies vaccines under the direct supervision of a licensed veterinarian..

## **Local Health Departments and Local Health Directors**

The local health director is responsible by law, NCGS 130A-41.b.10\_for examining, investigating and controlling rabies in his/her jurisdiction. Whenever an animal required to be vaccinated against rabies bites a person, the bite and all identifying information must be reported to the local health director immediately by the person bitten or by the animal's owner or person in control of the animal, as well as by the attending physician, within 24 hours. Local health department **communicable disease (CD) nurses** or designated staff are often the first health care providers contacted when humans are bitten or otherwise exposed or potentially exposed to rabies. CD nurses or designated staff conduct rabies risk assessments and investigations and provide information about rabies pre- and post-exposure prophylaxis for humans. The local health directors direct and administer the local rabies control program and have the authority to order confinement, quarantine, or euthanasia and rabies testing of any biting animal, as provided by law. They must also organize or assist in organizing at least one countywide rabies vaccination clinic per year for vaccinating pets. If there are not enough licensed veterinarians in the county to participate in scheduled clinics, the health director shall appoint Certified Rabies Vaccinators (CRVs) to administer rabies vaccine.

**Certified Rabies Vaccinators (CRV)** are appointed by the local health director and trained and certified under the direction of the State Public Health Veterinarian. They act under the supervision of the local health director to administer rabies vaccine to animals in the county of appointment and to issue vaccination certificates and rabies vaccination tags as a part of the local rabies control program, usually at county shelters or during rabies control clinics. CRVs can only administer one-year rabies vaccines to dogs, cats or ferrets in the county of appointment.

**Local Environmental Health Departments** have varied roles in rabies prevention and control, depending on the county. Responsibilities may include local animal control, facility or building environmental health inspections, and management of disease-carrying pests.

**Local Animal Control** agencies enforce N.C. statutes, rules and local ordinances that pertain to public health rabies prevention and control, animal control and animal bites, under the direction of the local health director per state law. Animal control agencies and officers may be housed under different departments depending on the local jurisdiction, including the local health department, environmental health, sheriff's department, the police department or the county manager. Animals that have bitten or otherwise potentially exposed people to rabies, or have been exposed to rabies themselves, are to be captured by Animal Control Officers for bite confinement, 6-month quarantine, or euthanasia and submission to the State Laboratory of Public Health for rabies testing, depending on the circumstances. Duties include investigating bites to humans and animal rabies exposures, enforcing rabies vaccination laws, and capturing and impounding unvaccinated or unclaimed animals. To facilitate seamless rabies investigations, Animal Control personnel should have a close working relationship with the LHD CD Nurses and veterinarians at the local level.

**Local Wildlife Control Agents (WCA)** are trained, certified and regulated by the N.C. Wildlife Resources Commission, work for privately owned and operated businesses that are contracted to provide services for the removal or control of nuisance wildlife, including bats, raccoons, skunks, foxes and other animals that may carry rabies. It is important for WCA to communicate to the property owners the importance of contacting the Local Health

Department and local Animal Control for possible rabies exposure assessments and possible testing of the nuisance animals for rabies. To find a WCA, go to <https://www.ncwildlife.org/Trapping/Wildlife-Control-Agent>.

**Local Health Care Providers (HCPs)** - Per N.C. General Statute 130A-196, physicians (and other HCPs under their direction, including physician assistants and nurse practitioners) who attend a person bitten by an animal known to be a potential carrier of rabies shall report within 24 hours to the local health director the name, age and sex of that person. HCPs at emergency departments, urgent care and other health care facilities may provide rabies exposure risk assessments; treat bite wounds; prescribe antibiotics, tetanus and rabies post-exposure prophylaxis; and perform other indicated interventions. Primary care providers and local health departments may also provide rabies post-exposure prophylaxis under some conditions, as well as pre-exposure prophylaxis for individuals who are at heightened risk of rabies exposure due to their work or other circumstances (e.g., veterinarians and staff, animal control, wildlife workers, spelunkers/cavers, and travelers to certain countries). While extremely rare, a suspect or actual human rabies case must be reported to the N.C. Division of Public Health, Communicable Disease Branch within 24 hours of diagnosis (919-733-3419).

**Local Emergency Departments** provide bite treatment, rabies risk assessments, human tetanus and rabies post-exposure prophylaxis and other indicated interventions to people who have been exposed or potentially exposed to rabies.

### **State Response**

*State agencies and programs work together to assist local entities in responding to rabies-related investigations. They are available 24/7 for rabies consultation, support and assistance.*

#### **N.C. Department of Health and Human Services, Division of Public Health**

(<http://publichealth.nc.gov>): Prevention and control of rabies is one of the essential public health services provided by law by N.C. DHHS to the residents of North Carolina. Several different Public Health program areas are involved in rabies prevention and control:

**N.C. Communicable Disease Branch** (<http://epi.publichealth.nc.gov/cd>) – Public Health veterinarians, epidemiologists and nurses in the branch's Medical Consultation Unit (919-733-3419) provide training, assistance and 24/7 consultation for local health department CD Nurses, environmental health, animal control and others who are on the front line of rabies control in their counties/jurisdictions. The [N.C. Communicable Disease Manual](#) and this companion document, [N.C. Rabies Public Health Program Manual](#) provide guidance on reporting, assessments, investigation steps and other resources for rabies exposures and for all communicable diseases reportable by law in North Carolina. While human rabies cases are extremely rare, North Carolina law requires them to be reported to the Communicable Disease Branch within 24 hours of diagnosis. The Branch will then consult with the CDC on diagnosis, treatment and control issues.

The DPH **Veterinary Public Health Program** (919-733-3419)

(<http://epi.publichealth.nc.gov/cd/diseases/vph.html>) is the part of the Communicable Disease Branch that focuses on the control and prevention of zoonotic diseases—communicable diseases such as rabies that can be passed between animals and

humans. The program's staff provide 24/7 consultations on rabies exposure risk evaluations and share their expertise, advice and technical assistance with local health departments, healthcare providers, veterinarians, animal control and others who are dealing with individual and mass rabies exposures and other situations. Public health veterinarians provide training for Certified Rabies Vaccinators (CRVs) to assist in counties that do not have enough veterinarians, and certify them to administer rabies vaccine to animals in their county. VPH provides rabies vaccination tags, links and rivets to licensed veterinarians and counties for certified rabies vaccinators. VPH also administers rabies education and prevention programs for physicians, emergency room personnel, legislators, local officials, schools, health departments and the general public, as well as maintaining surveillance data on rabies, zoonotic and vector-borne diseases across the state.

**N.C. State Laboratory of Public Health (SLPH)** (<http://slph.ncpublichealth.com>) — The Rabies Laboratory in the Virology/Serology section of the SLPH is the sole source for public health diagnostic rabies testing in North Carolina (**919-733-7544**). This service is available to all health care providers within the state. Generally, only animals that have potentially exposed a person, unvaccinated domestic pet, horse or livestock to rabies should be submitted for rabies testing. Specimens for rabies testing must meet the established testing criteria (<http://slph.state.nc.us/virology-serology/rabies.asp>) in order to be tested, and are usually submitted officially by local animal control through the LHD and state courier service. Large animals and livestock (such as horses, cattle, deer, large dogs) must be submitted to the SLPH through the NCDA&CS Veterinary Diagnostic Laboratory System (VDLS) ([www.ncagr.gov/vet/ncvdl](http://www.ncagr.gov/vet/ncvdl)).

**N.C. Occupational & Environmental Epidemiology (OEE) Branch** (<http://epi.publichealth.nc.gov/oeo>) – In the case of bat infestations, DPH/OEE industrial hygienists (**919-707-5900**) offer assessments and technical expertise to the Local Health Director or Local Environmental Health for safe removal and exclusion of bats and for cleanup of contamination from substances that can cause human disease, such as bat guano (histoplasmosis) or feral cat feces (toxoplasmosis).

Two agencies within the **N.C. Department of Agriculture and Consumer Services (NCDA&CS)** are directly involved in rabies prevention and control:

The **N.C. Veterinary Division** ([www.ncagr.gov/vet/](http://www.ncagr.gov/vet/)) investigates rabies exposures to livestock (including equines) and rabies cases in livestock and equines, and implements rabies prevention and control measures (**919-707-3250**).

**N.C. Veterinary Diagnostic Laboratory System** ([www.ncagr.gov/vet/ncvdl](http://www.ncagr.gov/vet/ncvdl)) – Located across the state, the four laboratories of VDLS assist veterinarians and producers in diagnosing diseases of livestock and poultry, conduct surveillance, and assist in responding to and preventing animal disease to protect both public health and the food supply. Large animal and livestock specimens for rabies testing (such as horses, cattle, deer, very large dogs) must be submitted directly to VDLS (not to the SLPH) for brain removal; VDLS forwards the brain specimen to the SLPH for rabies testing (contact Rollins Lab, **919-733-3986**). Local Animal Control should develop a working relationship with the VDLS lab in their region.

**N.C. Wildlife Resources Commission** ([www.ncwildlife.org](http://www.ncwildlife.org)) trains, certifies and regulates Wildlife Control Agents (WCA), see <https://www.ncwildlife.org/Trapping/Wildlife-Control->

[Agent](#). WRC biologists are a resource for dealing with diseases, like rabies, in wildlife populations (see [www.ncwildlife.org/contacts.aspx](http://www.ncwildlife.org/contacts.aspx) or call **866-318-2401**).

### **Federal Agencies**

*Federal agencies and organizations provide information and guidance, and are available to state agencies for consultation and assistance with rabies issues.*

**U.S. Centers for Disease Control and Prevention (CDC)** ([www.cdc.gov](http://www.cdc.gov)) provides both general and highly technical information and guidance for the public, travelers, doctors, diagnostic laboratories and others, including definitive human immunization guidelines (<http://www.cdc.gov/mmwr/preview/mmwrhtml/rr57e507a1.htm>) through the Advisory Committee on Immunization Practices (ACIP). CDC also provides training, prevention programs and consultation for state health departments, and tracks rabies data and trends. CDC epidemiologists provide expert assistance and support to state public health departments in dealing with diseases, outbreaks and other public health issues.

The **National Association of State Public Health Veterinarians (NASPHV)** ([www.nasphv.org](http://www.nasphv.org)) helps direct and develop uniform public health procedures involving zoonotic disease in the United States and its territories and authors the authoritative animal rabies guidance document, the Compendium of Animal Rabies Prevention and Control (<http://www.nasphv.org/documents/CompendiaRabies.html>).

**USDA APHIS Wildlife Services** ([http://www.aphis.usda.gov/wildlife\\_damage](http://www.aphis.usda.gov/wildlife_damage)) administers the national Oral Rabies Vaccine program, an integrated program covering several states, including North Carolina, that involves the use of oral rabies vaccination targeting wild animals. Bait packets containing oral rabies vaccine are distributed throughout areas where rabies is endemic in wildlife (such as raccoons, foxes, coyotes and skunks). The goal of the program is to prevent the spread of wildlife rabies to other areas and eventually eliminate terrestrial rabies in the United States.