STATE OF NEW HAMPSHIRE
DEPARTMENT OF HEALTH AND HUMAN SERVICES
DIVISION OF PUBLIC HEALTH SERVICES

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603-271-4781 1-800-852-3345 Ext. 4781
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A FEW BASIC TIPS

WHEN SERVING AS A LOCAL HEALTH OFFICER OR DEPUTY:

- Keep a log to document complaints, and your response to them. Include notes on phone calls, e-mails, and other activities you take to respond.
- Keep a hard-copy file on all cases and inspections. Many health officers now back this up with electronic copies as well.
- Carry a camera to take pictures if necessary when you are in the field.
- For additional support during inspections, take a second person with you. This could be a selectman (who under state law is a member of the local Board of Health), another town official such as a building inspector, police officer, animal control officer or your deputy health officer.
- For continuity between health officers, when your term is completed, please meet with the new health officer to pass on your manual and files. Brief the new health officer on any cases that are not resolved that they may be involved in.

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With this manual comes ongoing technical assistance and support. Please call the Health Officer Unit at 1-800-852-3345, ext. 4781 with your questions.

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We solicit your opinions and comments about this manual as you use it. Please send us your suggestions!

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With recognition and appreciation for your time and energy in fulfilling the role of health officer.

Louise Merchant Hannan
Health Officer Liaison
Division of Public Health Services

AN INTRODUCTION TO THE ESSENTIAL ROLES AND RESPONSIBILITIES OF LOCAL HEALTH OFFICERS

INTRODUCTION:

The goal of public health is to maintain and improve the health and well-being of all New Hampshire residents. Public health succeeds when the span of healthy life and the quality of life are increased.

We define public health as a system – the organizations and people that contribute to and support achieving improvements in health. The concept of a public health system describes a complex network of individuals and organizations that have the potential to play significant roles in creating the conditions for health. The component parts of a potential system can act for health individually, but when they work together toward a health goal, they act as a true system - a public health system.

The importance of an effective local public health system recognizes that health improvement is best achieved at local and regional levels. Communities can identify health problems, galvanize a community or regional response, and devise appropriate solutions based on available resources.

Local health officials have a critical role in effective local and regional public health systems and are responsible for three critical functions. The first is to enforce applicable New Hampshire laws and administrative rules (i.e. regulations), as well as local ordinances and regulations enacted by your community. The second critical function is to serve as a liaison between state officials, local elected officials, and your community on issues concerning local public health. The third is to be a leader and active participant in efforts to develop regional public health capacities. These roles have become more important than ever as our state faces continuing outbreaks of disease and demands greater emphasis on public health emergency preparedness.

The practice of public health at local, state, and national levels is defined by the Ten Essential Public Health Services. In order to effectively implement these Essential Services, public health system partners must coordinate and collaborate to maximize their capabilities, resources, and strengths. By doing so, we will collectively improve the conditions that result in improved health and engage residents to improve their personal health and the health of their community.

THE TEN ESSENTIAL PUBLIC HEALTH SERVICES

1. **Monitor** health status to identify community health problems.

2. **Diagnose and investigate** health problems and health hazards in the community.

3. **Inform, educate, and empower** people about health issues.

4. **Mobilize** community partnerships to identify and solve problems.

5. **Develop policies and plans** that support individual and community health efforts.

6. **Enforce** laws and regulations that protect health and ensure safety.

7. **Link** people to needed personal health services and assure the provision of health care when otherwise unavailable.

8. **Assure** a competent public and personal health care workforce.

9. **Evaluate** effectiveness, accessibility and quality of personal and population-based health services.

10. **Research** for new insights and innovative solutions to health problems.

SOME EXAMPLES OF LOCAL HEALTH OFFICIALS' ROLES AND RESPONSIBILITIES:

COMMUNICABLE DISEASES:

- Assist the Division of Public Health Services (DPHS), as requested during disease outbreaks. A primary role is to assist in disseminating educational materials throughout your city or town.

EMERGENCY RESPONSE:

- Health officers should contact their local Emergency Management Director, to both participate in the development of local Emergency Operations Plans, and discuss their role within the community's existing plan. Health officers also act as liaisons to local citizens by linking them to state, local and federal resources and by distributing educational materials from the state and

federal agencies during the response to, and recovery from, an emergency. Health officers should also participate in regional public health planning initiatives.

PUBLIC EDUCATION:

- Health officers should always look for opportunities to provide education to residents, local officials, and public health system partners. This is achieved by disseminating materials produced by local, state and national partners, sharing your expertise with individuals and groups in your community, and educating local officials and other partners about important public health issues and needs.

NUISANCES:

- Conducts sanitary investigations into complaints and nuisances that may endanger public health. These include noise, garbage, insects, unsanitary living conditions, rodents, and safe drinking water inspections.

SEPTIC SYSTEMS:

- Inspects septic systems to determine if it has failed and certify that, when necessary, in cooperation with NH Department of Environmental Services. May perform a dye test and, perhaps, a test of suspected sewage to confirm system failure. Depending on town ordinances, a health officer may also witness test pits, inspect repaired and new system installations, and review and approve septic system design plans. Many health officers report they find that becoming licensed as a septic system installer and/or designer is very helpful.

RENTAL HOUSING (RSA 48A):

- Enforces minimum standards for rental housing, including: safe drinking water, availability of hot water, garbage control, properly functioning septic systems, vermin control, adequate heat, and that walls and roofs do not leak.

HEALTH FACILITIES:

- Inspects new or modified health facilities to certify that they meet local health codes. These include hospitals, nursing homes, massage therapy establishments, electrologists, hair salons, and health club facilities.

CHILDCARE\FOSTER HOMES:

- Inspects\approves facilities used to provide childcare and the home of persons serving as foster parents to assure they meet local health codes. Many times these inspections are done in conjunction with representatives from local fire and zoning departments.

FOOD-BORNE ILLNESS:

- Responds to complaints and reports cases of suspected or known violations to the DPHS' Food Protection Section.
- In case of an imminent danger to the public health, orders cleaning or closure of food service establishments (when your town has adopted He-P 2300).
- In conjunction with the DPHS' Food Protection Section, contacts food service establishments in the event of a food-borne disease outbreak.

MOSQUITO BORNE ILLESSES:

- Health officers play an important role in disseminating educational materials to the community regarding West Nile Virus and Eastern Equine Encephalitis and may also collect dead birds for testing by the DPHS' Public Health Laboratory.

RABIES:

- Enforces the Rabies Control Act, in cooperation with the local animal control officer.
- Serves as a local resource for information on rabies.

LEAD:

- May conduct lead paint poisoning inspections with a DPHS lead inspector upon request. The DPHS' Childhood Lead Poisoning Prevention Program may also request a local health officer verify whether lead hazard reduction activities are taking place, or check to determine if a child under the age of 5 resides in a particular dwelling unit.

DRINKING WATER:

- Tests any public\private water supply suspected of being unsafe, per directives from the Department of Environmental Services.

PUBLIC SWIMMING PLACES:

- Tests water per directives from the Department of Environmental Services.

SMOKING:

- Follows up on complaints and violations of the smoking law, at the request of DPHS.

LAWS REGARDING THE APPOINTMENT AND AUTHORITY OF LOCAL HEALTH OFFICIALS

APPOINTMENT OF HEALTH OFFICERS (RSA 128:1)

State law defines the process by which local health officers are appointed. The Board of Selectmen in a town recommends an individual for appointment to the Commissioner of the Department of Health and Human Services (DHHS), Division of Public Health Services (DPHS). The Commissioner then appoints the health officer based on that recommendation. The Commissioner has the sole legal authority to appoint health officers. Identification cards, certificates and letters of appointment are issued by the DPHS. If there are any questions about a term of office, please contact the DPHS' Health Officer Liaison unit.

According to the statutes, a recommendation must be submitted to the Commissioner within 15 days of notification by the Department. If a recommendation is not made, then the Commissioner may appoint a health officer.

TERM OF OFFICE (RSA 128:4)

Town health officers are appointed for a three (3) year term or until a successor is appointed. An individual currently serving as health officer can be reappointed, and there is no legal limit on the number of times a health officer may be reappointed.

REMOVAL FROM OFFICE (RSA 128:4)

The Commissioner may remove a health officer for cause, after notification and a hearing.

If the selectmen would like to remove a health officer, they may request the health officer resign. If the health officer refuses to resign, the matter may be brought for review to the Commissioner. The Commissioner has the authority to determine when there is adequate cause to remove the health officer.

RESIDENCE (RSA 128:2):

The health officer must be a resident of the State of New Hampshire.

HEALTH OFFICERS FOR SEVERAL TOWNS (RSA 128:6):

An individual can serve as the health officer of more than one town. This individual would be recommended by the Board of Selectmen of each town and appointed by the Commissioner as the health officer in each town.

DEPUTY HEALTH OFFICERS (RSA 128:6a) and ASSISTANTS (RSA 147:5)

Health officers have the authority to appoint a deputy health officer. The appointment of a deputy health officer, under RSA 128:6a, is subject to the approval of the Board of Selectmen and the Commissioner of the DHHS. Health officers also have the legal authority to employ assistants as necessary to carry out their responsibilities under RSA 147:5. Deputy health officers are empowered to enforce public health laws and make sanitary investigations as directed by the health officer or requested by the Commissioner.

Forms to appoint a deputy health officer are available from the Health Officer Liaison.

The term of office of deputy health officers is determined by each town and is established by the procedures and policies of each town.

LIABILITY: (RSA 31:105)

According to RSA 31:105, a city or town may vote to indemnify and save harmless for loss or damage occurring by any person employed by it, from personal financial loss and expense, including reasonable legal fees and costs, if any, arising out of any claim, demand, suit, or judgment by reason of negligence or other act resulting in accidental injury to a person or accidental damage to or destruction of property if the indemnified person at the time of the accident resulting in the injury, damage, or destruction was acting in the scope of employment or office.

BOARD OF HEALTH (RSA 128:3)

The health officer and the Board of Selectmen constitute the local Board of Health. The health officer is the secretary and executive officer of the Board of Health. The role of the board is to take cognizance of the public health of the town and to pass local health ordinances as allowed in RSA 147:1.

CITIES:

The governing body of a city has the sole authority to appoint a health officer. The state is not involved in the appointment of city health officers.

Cities have the authority to enact health codes; the governing body also has the authority to promulgate bylaws and ordinances (RSA 47:17). These bylaws and ordinances may be more stringent than those established by a state statute, unless the state statute preempts local governments from adopting a different, more stringent standard. City ordinances may not be more lenient than a state statute.

LOCAL REGULATIONS (RSA 147:1)

Town health officers have the authority to promulgate regulations for the prevention and removal of nuisances. They also have the authority to make other regulations relating to public health, as in their judgment are necessary to protect public health and safety. Such local regulations must be approved by the Board of Selectmen, recorded by the town clerk, and published in a local newspaper, or have copies of the regulation posted in two or more public

places with in the town. State law does not require such regulations be brought before the annual meeting of the town.

Local regulations are typically used to clarify situations and create equity in applicability. Any person violating a local regulation is guilty of a violation.

In order to remain informed the DPHS requests that copies of local regulations be submitted to the Health Officer Liaison.

ENTRY (NEED RSA 128:5, RSA 147:14)

In order to conduct an investigation of sanitary conditions a health officer may enter onto private property without the consent of the owner (RSA 128:5-a). The health officer has the authority to enter onto private property regardless of whether there is a sign of "no trespassing" and so would not be guilty of criminal trespass. In addition, pursuant to RSA 147:14(a), the health officer may enter *"any land"* to inspect a faulty private septic system. However, a health officer should always make every possible attempt to gain the permission of the property owner before coming onto their property.

The authority to enter private property without the consent of the owner for the investigation of sanitary conditions does not include the right to enter into the living quarters (the home) located on the property. In order to conduct an inspection in a person's living quarters without the owner's consent, a health officer must obtain an Administrative Inspection Warrant (see below).

INVESTIGATIONS AND COMPLAINTS (RSA 147:3, RSA 595-B)

Town health officers shall inquire into all nuisances and other causes of danger to the public's health. Whenever a health officer knows or has cause to suspect that any nuisance or other causes of danger to the public health is in any building or enclosure, he/she may obtain an **administrative inspection warrant** under RSA 595-B, which may include, when necessary, authority for forcible entry. An administrative inspection warrant is a written order in the name of the state, signed by a justice of any municipal, district or superior court.

PROCEDURES FOR WARRANT UNDER RSA 595-B:5

Inspection pursuant to a warrant issued under RSA 595-B shall not be made between 6 P.M. and 8 A.M., unless specifically authorized by the court issuing the warrant. The health officer requesting a warrant would have to show that authority is needed to effectuate the purpose of the law, rule, code, ordinance or regulation being enforced. *Entry by force* shall only be made when facts are shown sufficient to suggest violation of a state/local law, rule ordinance, or code exists that would present an immediate threat to public health and safety.

In conducting an inspection, depending on the situation, it is recommended to inform the owner/occupant in advance, or, on arriving at the property, to attempt to speak with the occupant(s) to explain your purpose. The goal is to obtain the support and cooperation of the owner(s)/occupant (s).

Communicable Diseases

Public Health Issues

A communicable disease is one in which an infected person is capable of spreading the disease to another person. These diseases can be spread via the air, blood, intestinal tract, or by direct contact. The control and prevention of communicable diseases is a major focus of the Communicable Disease Section of the New Hampshire Public Health Department. Access to health care and education are two important issues in the control of communicable diseases. The local health officers support this vital public health role with the provision of current information about the occurrence, transmission, and prevention of communicable diseases in their towns.

Role of the Health Officer:

Reports communicable diseases. By New Hampshire law, local health officers may report communicable diseases to the Bureau of Communicable Disease Control.

In a food borne outbreak, assists the Bureau of Disease Control and Bureau of Food Protection, in the investigation (i.e. specimen collection, interviewing staff people, keeping town officials notified, completing questionnaires from people who ate at the same time).

Assists the Bureau of Disease Control or other health officials with the disease control of an identified illness in their community. (i.e. posting signs regarding swimming in a contaminated public beach.)

May assist the Bureau of Communicable Disease Control with educational information for their community.

Assists with the isolation and quarantine policies and procedures that are based on each region's Public Health Emergency Preparedness Plan, as directed by the State of NH Communicable Disease Control Section.

Reporting of Communicable Disease (RSA 141-C:1-8)

1. Any physician or other health care provider who assesses, diagnoses, or treats a person believed by him to be a case or suspect case of a reportable disease shall immediately report the same to the Department by telephone, mail or electronic transmission on forms provided by the commissioner.

2. Reports provided pursuant to (1) above shall include: The full name, age, sex, race, ethnicity, address, telephone number, occupation, and place of occupation of the patient; the name of the disease; the date of onset; diagnostic test(s) performed, specimen type(s), date(s), and result(s); the name of the person reporting; and, in the case of sexually transmitted diseases, the name and amount of the medication prescribed.

3. When no physician or other health care provider is in attendance, the person in charge of any institution, which could be a Health Officer, public or non - public school, child care agency, hotel, restaurant, boarding house, labor camp or other camp, vessel, workplace, hospital, dispensary, pharmacy, or charitable, penal, or other institution or place of detention in which there is a case or suspect case of a reportable disease, shall report the same immediately to the Bureau of Communicable Disease Control.

4. Reports provided pursuant to (3) above shall include: The full name, age, sex, race, ethnicity, address, telephone number, occupation, and place of occupation of the patient; the name of the disease; the date of onset; and, the name of the person reporting.

5. Local Boards of Health shall report immediately to the Bureau of Communicable Disease Control those cases or suspect cases of reportable diseases of which they have knowledge.

Isolation and Quarantine

Isolation is defined in the law, "as the separation, for the period of communicability, of infected persons from others in such places and under such conditions as to prevent or limit the direct or indirect transmission of the infectious agent from those infected to those who are susceptible or who may spread the agent to others." (RSA 141-C:2, XII)

Quarantine is defined in the law, "as the restriction of activities of well persons who have been exposed to a case of communicable disease, during its period of communicability, to prevent disease transmission during the incubation period if infection should occur." (RSA 141-C:2, XIII)

The Bureau of Communicable Disease Control per order of the Commissioner of Health and Human Services or his agent is the only agency that can issue a legal order of isolation or quarantine. The Bureau of Disease Control may ask the Health officer for assistance in helping the individual or group of individuals with compliance and helping them fulfill their everyday needs. In most instances people who are infected with a disease that requires isolation will remain isolated on a voluntary basis.

Communication with Public Health

While the Bureau of Communicable Disease Control makes every effort to keep the Health Officer informed when it comes to illness in their town, it is typically not necessary to inform a Health Officer regarding a single case of communicable disease. Decisions about whether or not to inform the Health Officer about individual cases are made on a case-by-case basis. A Health Officer may be notified in situations that involve an outbreak or cluster of illness.

New Hampshire
Department of Health and Human Services

Reportable Diseases 2008

Anaplasmosis [*Anaplasma Phagocytophilum*]
Anthrax [*Bacillus anthracis*]*
Arboviral infection, including EEE & WNV*
Babesiosis [*Babesia microti*]
Botulism [*Clostridum botulinum*]*
Brucellosis [*Brucella abortus*]*
Campylobacteriosis [*Campylobacter* species]
Chlamydial infection [*Chlamydia trachomatis*]
Cholera [*Vibrio cholerae*]*
Coccidioidomycosis [*Coccidioides immitis*]
Creutzfeldt-Jakob Disease*
Cryptosporidiosis [*Cryptosporidium parvum*]
Cyclospora infection [*Cyclospora cayetanensis*]
Diphtheria [*Corynebacterium diphtheriae*]*
Ehrlichiosis [*Ehrlichia* species]
Escherichia coli O157 infection and other shiga toxin producing *E. coli*
Giardiasis [*Giardia lamblia*]
Gonorrhea [*Neisseria gonorrhoeae*]
Haemophilus influenzae, invasive disease, sterile site*
Hantavirus Pulmonary Syndrome [Hantavirus]*
Hemolytic Uremic Syndrome (HUS)
Hepatitis, viral: A*, B, E, G
Hepatitis, viral: positive B surface antigen in a pregnant woman
Human Immunodeficiency Virus (HIV), including perinatal exposure
Human Immunodeficiency Virus-related CD4+ counts and all viral loads
Legionellosis [*Legionella pneumophila*]
Leprosy, Hansen's disease [*Mycobacterium leprae*]
Listeriosis [*Listeria monocytegenes*]
Lyme disease [*Borrelia burgdorferi*]
Malaria [*Plasmodium* species]
Measles [Rubeola]*
Mumps*
Neisseria meningitidis, invasive disease, sterile site*
Pertussis [*Bordetella pertussis*]*
Plague [*Yersinia pestis*]*
Pneumococcal disease, invasive [*Streptococcus pneumoniae*]
Pneumocystis pneumonia [*Pneumocystis jiroveci* formerly *carinii*]
Poliomyelitis [Polio]*
Psittacosis [*Chlamydophilia psittaci*]*
Rabies in humans or animals*
Rocky Mountain Spotted Fever [*Rickettsia rickettsii*]
Rubella, including Congenital Rubella Syndrome*
Salmonellosis [*Salmonella* species] (report *S.* Typhi* within 24 hours)
Shigellosis [*Shigella* species]
Streptococcus Group A/B, invasive disease [*S. pyogenes/agalactiae*]
Syphilis, including Congenital Syphilis Syndrome [*Treponema pallidum*]
Tetanus [*Clostridium tetani*]
Toxic-Shock Syndrome (TSS) *[streptococcal or staphylococcal]*
Trichinosis [*Trichinella spiralis*]
Tuberculosis disease [*Mycobacterium tuberculosis*]*
Tuberculosis infection, latent
Tularemia [*Francisella tularensis*]*
Typhoid fever [*Salmonella* Typhi]*
Typhus [*Rickettsia prowazekii*]*
Varicella*
Vibriosis [any *Vibrio* species]*
Vancomycin Resistant Enterococci (VRE)
Vancomycin Resistant *Staphylococcus aureus* (VRSA)*
Yersiniosis [*Yersinia enterocolitica*]
Any suspect outbreak, cluster of illness, or unusual occurrence of disease that may pose a threat to the public's health must be reported within 24 hours of recognition*

Disease Reporting Guidelines

✓ All suspect and confirmed cases must be reported within 72 hours of diagnosis or suspicion of diagnosis
✓ Diseases with an asterisk (*) and in red must be reported within 24 hours of diagnosis or suspicion of diagnosis
✓ Reports are handled under strict confidentiality standards

Disease Reports Shall Include:

1. Name of the disease
2. Name of the person reporting
3. Physician name and phone number
4. Patient information
   - ❒ Name
   - ❒ Date of birth and age
   - ❒ Sex
   - ❒ Race
   - ❒ Ethnicity
   - ❒ Address
   - ❒ Telephone number
   - ❒ Occupation
   - ❒ Place of employment
   - ❒ Date of onset

5. Diagnostic test information

- ❒ Type of test performed
- ❒ Specimen type(s)

6. Treatment

- ❒ Date
- ❒ Drug
- ❒ Date
- ❒ Dosage

How to Report a Disease:

PHONE

Office:	1-603-271-4496
Toll Free Office:	1-800-852-3345 ext. 4496
Hotline:	1-888-836-4971

After Hours Response: 1-603-271-5300
Toll Free After Hours: 1-800-852-3345 ext. 5300

FAX: 1-603-271-0545 Do Not FAX HIV/AIDS Reports

MAIL
NH Department of Health and Human Services
Division of Public Health Services
Communicable Disease Control and Surveillance
29 Hazen Drive, Concord, NH 03301-6504

www.dhhs.state.nh.us/DHHS/CDCS

ARBOVIRAL DISEASES:

WEST NILE VIRUS/EASTERN EQUINE ENCEPHALITIS

PUBLIC HEALTH ISSUE:

West Nile virus (WNV) was first seen in the western hemisphere in the U.S. in 1999, in the New York City area of Queens. In 2003, New Hampshire reported 3 human cases of WNV. Between 1964 and 2005, 242 human cases of Eastern Equine Encephalitis (EEE) were reported nationwide. New Hampshire reported 7 human cases of EEE in 2005. These viruses may be found in birds and are passed from bird to bird by certain types of mosquitoes. Occasionally, an infected mosquito will pass these viruses to humans or other animals. Most healthy people do not get sick from these viruses, but sometimes they can cause illness, and occasionally death. When a human gets ill from WNV or EEE, they may have serious symptoms that include encephalitis (inflammation of the brain) or meningitis (inflammation of the lining of the brain and spinal cord); encephalitis and meningitis can also be caused by other means, such as head injury, bacterial infections, or most commonly, other viral infections.

ROLE OF THE HEALTH OFFICER:

The health officer may be consulted by citizens of his/her community to provide recommendations for various WNV or EEE issues. The following information will guide the health officer in providing such information. For issues not addressed below, you may call the WNV/EEE information line @ 1-866-273-6453 or the Bureau of Communicable Disease Control @ 1-800-852-3345 x 4496. Many resources including fact sheets and the State Arboviral Plan are available at www.dhhs.state.nh.us.

DISEASE CHARACTERISTICS:

Most people who get infected with WNV or EEE have no symptoms; some can experience mild illness such as a fever, headache, mild rash, swollen lymph glands, and body aches before fully recovering. In some individuals, particularly the elderly and people with immune system disorders, WNV or EEE can cause serious disease that affects brain tissue. They can cause permanent neurological damage and can be fatal. Encephalitis (inflammation of the brain) symptoms include the rapid onset of severe headache, high fever, stiff neck, confusion, loss of consciousness (coma), and muscle weakness. Death may result in some cases.

There are presently no specific therapies for treating WNV or EEE. In more severe cases, intensive supportive therapy is indicated, i.e., hospitalization, intravenous (IV) fluids and nutrition, airway management, ventilatory support (ventilator) if needed, and prevention of secondary infections (pneumonia, urinary tract, etc.), along with good nursing care.

Being bitten by an infected mosquito will not necessarily cause illness, since most people who are infected with WNV or EEE have no symptoms or experience mild illness. If illness were to occur, it would be within 3-14 days of being bitten by a WNV infected mosquito and 4-10 days after being bitten by an EEE infected mosquito.

IMMUNIZATION:

Currently, there are no human vaccines for the prevention of WNV or EEE. However, an equine (horse) vaccine is available for both viruses through local veterinary services.

EXPOSURE AND TRANSMISSION OF WNV AND EEE:

Mosquitoes become infected when biting a bird that carries WNV or EEE. WNV and EEE are spread to humans by the bite of an infected mosquito. You or your child cannot get WNV or EEE from a person who has the disease. WNV and EEE are not spread by person-to-person contact such as touching, kissing, or caring for someone who is infected. In rare cases, WNV can be transferred through blood transfusions and in utero (from mother to unborn child). Currently, all human blood products are screened for WNV to reduce the risk from blood transfusions.

TYPES OF BIRDS ELIGIBLE FOR COLLECTION:

Crows and blue jays are ideal sentinels for the detection of WNV and EEE. Please contact the NH Department of Health and Human Services Arboviral Disease Coordinator (603-271-4496) for bird species currently eligible for bird testing.

BIRD DESCRIPTIONS

Crow

Adult crows are about 17 to 21 inches in length, while juvenile crows are about 10 inches in length, or about the length of a person's forearm. Juvenile crows have brownish-black feathers. Crows are all black including feathers, beak, legs and feet. The crow's nostrils are covered with bristles.

Blue Jay

Blue jays are 10 inches long, and have a black sturdy bill, and blue crest. They have a black eye line and breast band and a grayish-white throat and under parts. The wings are bright blue with black bars and white patches. Blue jays have a long blue tail with black bars and white corners and dark legs.

HANDLING INSTRUCTIONS FOR DEAD BIRD SPECIMENS:

As part of the surveillance plan for WNV and EEE, the Department of Health and Human Services is monitoring dead bird sightings within New Hampshire. Bird deaths, especially crow and blue jay deaths, could indicate the presence of WNV or EEE, although not every dead bird will be related to these infections. The viruses can be isolated only from relatively fresh carcasses, meaning those that are found in the first 24 hours after dying. Remember, not every

dead bird will be infected and not every dead bird is worth testing. While the NH Department of Health and Human Services is interested in collecting information about dead birds as part of our efforts to understand WNV and EEE, unfortunately, due to limitations in laboratory capacity, **we will not always test *every* dead bird reported**. We will collect only a sample of the dead birds reported. However, we encourage New Hampshire residents to report all dead bird sightings to assist the state's monitoring efforts.

If a member of your community finds a dead bird and reports it to you, you may refer them to the WNV/EEE reporting line, 1-866-273-6453 (NILE). The caller will then be questioned about the specimen, and if it seems the specimen is viable for testing, will be instructed in how to prepare the specimen for transport to the public health laboratory for testing. State Public Health staff are unable to transport birds to the laboratory for testing. It is the responsibility of the community and town officials to arrange for transportation. If the bird has been dead for more than 24 hours, it will not be testable, however we will use the report to help determine if more intensive surveillance efforts are needed in your area. The caller will be instructed to call their local animal control officer, health officer, or their designated representative to ensure local authorities are aware of what may be occurring in their communities. If the caller reaches the info line after hours, they are requested to leave a message including their name and telephone number. They will receive a return call the next business day. ***We request birds not be delivered without prior authorization***.

It is important to provide the following information to the official who is picking up the bird:

1. Species of bird (if known)
2. Date and Time found or first noticed
3. City or Town where the bird was found
4. Street address or closest physical address where the bird was found
5. Your name and telephone number

How should a dead bird be collected? (For designated collection personnel)
WNV and EEE have never been known to spread directly from birds to people, however dead birds must not be handled with bare hands.

1. Use waterproof gloves when handling a dead bird. If you don't have gloves, insert your hand into a plastic bag, grasp the bird carefully and invert the bag over the bird.
2. Each bird should be double-bagged: Place each bird in a separate sealed leak-proof plastic bag, and then place each bird inside a second sealed bag. See-through zip lock type plastic bags are recommended.
3. If possible, refrigerate the specimen immediately in an insulated container with freezer packs or in a refrigerator not used for food, or place ice packs on top of the bird and invert a pail over it, weighted down to avoid being dislodged, until the bird can be picked up.
4. Attach the intake form or a piece of paper to each bag with the following information:
   a. Species (if known)
   b. Date collected
   c. Exact location where bird was found (town/street/address, etc.)
   d. Condition of bird when found

e. Name, address and phone number of reporting individual
f. Include any additional history on the back of the form

5. Transport bird to the NH Public Health Laboratories at 29 Hazen Drive in Concord within 24 hours or as soon as possible.

Please do not deliver any dead bird that was not previously authorized by department officials. The bird submission form is included at the end of this document (and available on the NH DHHS website) and should be attached to the outside of the bag of each specimen.

LABORATORY TESTING OF BIRDS FOR WNV AND EEE:

Diagnostic testing will only be performed provided that the specimen has met the following criteria:

1. Bird must be a member of the corvidae family, specifically blue jays and crows.
2. The specimen must be </= 24 hours old (since time of death)
3. There must be no obvious cause of death such as trauma; specimen must be intact and whole.
4. Crows and blue jays found on the side of roads and near telephone poles, houses, and windows have a high possibility of other trauma such as broken necks.

Serologic tests by RT-PCR are available at the New Hampshire Public Health Laboratories to detect the presence of virus due to WNV or EEE.

PROTECTION AGAINST WNV AND EEE:

From June to October, when mosquitoes are most active, take the following precautions:

- If outside during evening, nighttime and dawn hours, or at any time mosquitoes are actively biting, children and adults should wear protective clothing such as long pants, long-sleeved shirts, and socks.
- If outside during evening, nighttime and dawn hours, or at any time mosquitoes are actively biting, consider the use of an effective insect repellent.
- Repellents containing DEET (N, N-diethyl-methyl-meta-toluamide) have been proven effective. Use no more than 30% DEET for children and adults.
- Repellents containing Picaridin (KBR3023) or oil of lemon eucalyptus (a plant based repellent) provide protection similar to repellents with low concentrations of DEET. Oil of lemon eucalyptus should not be used on children under the age of three years.
- Always use repellents according to manufacturer's directions.
- Do not apply repellent directly on children. Apply to your own hands and then put it on the child's skin.
- The length of time a repellent is effective varies with ingredient and concentration. Avoid prolonged or excessive use of repellents. Use sparingly to cover exposed skin and clothing.
- Wash all treated skin and clothing after returning indoors.
- Store repellent out of reach of children.

- Vitamin B, ultrasonic devices, incense and bug zappers have not been shown to be effective in preventing mosquito bites.

More information on mosquito repellents is available in a technical article for physicians at the American College of Physicians website (Mark S. Fradin, MD. Mosquitoes and mosquito repellents: A clinician's guide. Annals of Internal Medicine, June 1 1998. 128:931-940) and the websites for the NH Department of Health and Human Services (www.dhhs.state.nh.us) and Centers for Disease Control and Prevention (www.cdc.gov).

HOUSEHOLD PRECAUTIONS FOR THE PREVENTION OF MOSQUITO BREEDING:

Mosquitoes lay their eggs in standing water. Weeds, tall grass, and bushes provide an outdoor home for the adult mosquitoes. Mosquitoes can enter homes through unscreened windows or doors, or broken screens. Here are some steps that you can take:

- Make sure that doors and windows have tight-fitting screens. Repair or replace all screens in your home that have tears or holes.
- Remove all discarded tires from your property. The used tire has become the most important domestic mosquito-breeding habitat in this country.
- Do not allow water-holding containers. Dispose of tin cans, plastic containers, ceramic pots, or similar water-holding containers. Do not overlook containers that have become overgrown by aquatic vegetation.
- Drill holes in the bottom of recycling containers that are left out of doors. Drainage holes that are located on the sides collect enough water for mosquitoes to breed in.
- Make sure roof gutters drain properly. Clean clogged gutters in the spring and fall.
- Tightly screen "rain barrels" to ensure mosquitoes can't deposit eggs in or on water.
- Clean and chlorinate swimming pools, outdoor hot tubs. If not in use, keep empty and covered.
- Drain water from pool covers.
- Aerate ornamental pools or stock them with fish. Water gardens are fashionable but become major mosquito producers if they are allowed to stagnate.
- Turn over wheelbarrows and change water in birdbaths at least twice weekly. Both provide breeding habitat for domestic mosquitoes
- Eliminate any standing water that collects on your property. Use landscaping as needed. Mosquitoes can develop in any puddle that last more than 4 days.
- Remind or help neighbors to eliminate breeding sites on their properties.

Please Note: Although certain pesticide products are available for sale in the market place to control mosquito larvae, one must obtain a special permit from the Department of Agriculture, Division of Pesticide Control to be able to apply pesticides to any surface waters in the state of New Hampshire. Questions regarding how to apply for such special permits may best be directed to the New Hampshire Department of Agriculture, Division of Pesticide Control at 603-271-3550.

PUBLIC HEALTH LABORATORIES
29 Hazen Drive, Concord, NH 03301-6504
1-866-273-6453 (West Nile Virus Toll Free #)

WEST NILE VIRUS and EASTERN EQUINE ENCEPHALITIS
BIRD SPECIMEN INTAKE FORM

This Information Form must be taped to <u>outside</u> of container.
Keep bird cold at all times.
Corvids (crows, bluejays) will be given priority for testing.

FOR DPHS USE ONLY
DATE_____
TIME_____

FOR PHL USE ONLY

DATE OF COLLECTION OF BIRD: _____

PROVIDE DETAILED INFORMATION ABOUT WHERE BIRD WAS FOUND:

Address or intersection:

_____

Town: _____

BIRD WAS: ☐ **Found dead** ☐ **Other (Please describe)**

_____

DID YOU OBSERVE BIRD'S DEATH? ☐ Yes ☐ No

DATE AND TIME BIRD FIRST OBSERVED DEAD: _____

WAS THERE ANY OBVIOUS CAUSE OF DEATH? ☐ Yes ☐ No Describe _____

HAS BIRD BEEN FROZEN? ☐ Yes ☐ No **DATE FROZEN:** _____

BIRD SPECIES OR DESCRIPTION OF BIRD:

_____

PERSON / AGENCY REQUESTING TESTING:

Last Name: _____ First Name: _____ Phone: _____

Facility/Agency: _____ Address: _____

City/town**:** _____ State: _____ Zip: _____

TRANSPORTER (IF DIFFERENT FROM REQUESTER):

Facility/Agency: _____

Last Name _____ First Name: _____ Phone: _____

***** In the event the bird tests positive, the Health Officer will be notified.***

RABIES

PUBLIC HEALTH ISSUE:

Rabies in humans is an acute viral encephalomyelitis, which is the inflammation of the brain and spinal cord, and is almost always fatal. Worldwide there is an estimated 30,000 deaths from rabies a year, most occurring in less developed countries. In the United States, there were three deaths in 1993. In New Hampshire, there have been no human cases of rabies recorded.

There is no effective way to treat rabies once acute illness has begun. The current emphasis is on the prevention of the disease by avoiding exposure and providing vaccine or immune globulin as appropriate. When a person has been bitten by a rabid animal, or an animal that is high risk for having rabies, a prophylactic immune globulin series of shots is usually begun immediately. Once clinical symptoms of rabies appear, the disease is almost always fatal.

ROLE OF THE HEALTH OFFICER:

- Enforce the Rabies Control Act (RSA 436:99 - 109) in conjunction with the local animal control officer. This law addresses the vaccination of domestic dogs and cats, quarantine of animals when there has been a human exposure, euthanization of the animal and submission of the head to the New Hampshire Public Health Laboratories for testing.
- Serve as a local source of public information and education about rabies (i.e. prevention, exposure, and transmission).

PROTECTION AGAINST RABIES/ Suggestions for the public:

- Do not try to touch or pick up wild animals, strays cats or dogs, or baby animals.
- Do not try to feed wild or stray animals, or make them into pets.
- Report unknown or strangely behaving animals to your town's animal control officer. If the animal is wild, contact the game warden.
- Do not make your yard inviting to wild animals. Feed your pets inside the house. Fasten trashcan lids tightly. Raccoon-proof your compost.
- Keep pets indoors at night. Pets that roam freely are more likely to get rabies.
- Wear protective gloves when handling a pet that has been involved with a wild or stray animal.

EXPOSURE:

Exposure to rabies occurs when the saliva or neural tissue (brain or spinal cord) of an infected animal is introduced into open cuts or wounds in a person's skin or contacts the mucous membranes (mouth, nose, eye).

The two categories of exposure are:

a. Bite: Any penetration of the skin by an animal's teeth. Bites, in general, are high-risk exposures.
b. Non-Bite exposure: Scratches received from an animal, or scratches, abrasions, open wounds or mucous membranes contaminated with an animal's saliva or neural tissue. A common example of this type of exposure is touching a pet shortly after a rabid animal has attacked it and getting wet saliva from the animal in an open sore on a person's skin.

While there is no documented record of a person contracting rabies in this manner, it is theoretically possible and, hence, the public is should be educated about non-bite exposures.

Finally, airborne, non-bite transmission has occurred in a bat cave and in laboratories where the rabies virus was being handled. Airborne transmission of rabies has not been documented in homes or any other settings.

TRANSMISSION:

The rabies virus may be transmitted when an animal or human is exposed to infectious saliva or central nervous system tissue (i.e. brain or spinal cord tissue). Humans are usually exposed when an infected animal bites them. Humans can also be exposed to rabies if an infected animal's saliva gets into a cut or open wound or into a person's eyes, nose or mouth.

Rabies is not transmitted through blood, urine or feces.

The virus can only be transmitted if the material containing the virus (i.e. saliva) is wet. The virus is not infectious when it is dry.

Regular household bleach (at a solution of 1 part bleach and 10 parts water) kills the rabies virus. Rotting of a rabies-infected animal carcass kills the virus.

Freezing does not destroy the virus. It is usually destroyed after a few minutes at temperatures greater than 122 degrees Fahrenheit. However, all meats should be cooked in accordance with safe cooking requirements, which typically are greater than 122 degrees.

DISEASE CHARACTERISTICS:

Rabies is a viral disease of the nervous system in humans and lower mammals. It is almost always fatal in humans once clinical symptoms begin.

Signs and symptoms in humans usually start between 5 days to 1 year from the time of exposure. This is another reason that vaccination is recommended following exposure. The time from exposure to when symptoms may appear also varies depending on the site of exposure, the amount of rabies virus transmitted, viral strain, the immune status of the exposed person, and muscle and nerve supply at the exposure site.

Early signs include apprehension, headache, fever, tiredness, itching and/or pain at the exposure site. Later signs include difficulty with swallowing/fear of water (hydrophobia), delirium, convulsions, paralysis, and death.

Pathology: The virus multiplies in skeletal muscle near the exposure site, and then moves on to the nerves, the spinal cord and to the brain, then to salivary glands and saliva.

RABIES VACCINATION AMONG HUMANS:

Pre-exposure prophylaxis with rabies vaccine is recommended for individuals at high risk of exposure to potentially rabid animals, such as veterinarians and their staff, conservation and animal control officers, animal shelter personnel, trappers, other wildlife workers, or anyone who routinely is in contact with at-risk animals.

Post exposure prophylaxis (PEP) is indicated for persons possibly exposed to a rabid animal. Possible exposures include animal bites, or mucous membrane contamination with infectious tissue, such as saliva. PEP should begin as soon as possible after an exposure. There have been no vaccine failures in the United States (i.e. someone developed rabies) when PEP was given promptly and appropriately after an exposure.
Administration of rabies PEP is a medical urgency, not a medical emergency. Physicians should evaluate each possible exposure to rabies and as necessary consult with state public health officials regarding the need for rabies prophylaxis.

IMMUNIZATION OF DOMESTIC ANIMALS:

Under state law (RSA 426:100) every dog, cat, and ferret 3 months of age and older shall be vaccinated against rabies. Young dogs, cats, and ferrets shall be vaccinated within 30 days after they have reached 3 months of age. Unvaccinated dogs, cats, and ferrets acquired or moved into the state shall be vaccinated within 30 days after purchase or arrival, unless under 3 months of age, as specified above. Every dog, cat, and ferret shall be revaccinated at such intervals and with such vaccines as the Commissioner of the Department of Health and Human Services may specify. In rabies infected areas, dogs, cats, and ferrets recently vaccinated must be kept under control for at least 30 days before being allowed to run free.

Vaccines start protecting dogs and cats about a month <u>after</u> they are vaccinated. It is recommended, but not required, that cows, horses, sheep and all other animals be vaccinated against rabies.

More rabies cases are reported annually in cats than dogs. Cats are more likely to get rabies than dogs because they are hunters and are frequently outside at night when many wild animals are active.

State law (RSA 436:102) requires that each veterinarian, at the time of vaccinating any dog, cat, or ferret complete a certificate of rabies vaccination in triplicate which includes the following information: owner's name and address, description of dog, cat, or ferret (breed, sex, markings, age, name), date of vaccination, rabies vaccination tag number, type of rabies vaccine administered, manufacturer's serial number of vaccine, and the expiration date of the vaccination. Distribution of copies of the certificate shall be: the original to the owner, one copy retained by the issuing veterinarian and, within 40 days of the vaccination, one copy to the town or city clerk where the dog, cat or ferret is kept. The veterinarian and the owner shall retain their copies for the interval between vaccinations as specified in RSA 436:100.

For dogs, a metal or durable plastic tag, serially numbered, shall be securely attached to a collar or harness. The collar or harness with the vaccination tag shall be worn whenever the dog is out-of-doors, whether on or off the owner’s premises. Cats and ferrets are not required to wear a collar or harness with the tag.
The offspring of wild animals crossbred to domestic dogs and cats (wild animal hybrids) are considered wild animals by the National Association of State and Public Health Veterinarians (NASPHV) and the Council of State and Territorial Epidemiologists (CSTE). Because the period of rabies virus shedding in these animals is unknown, these animals should be euthanized and tested rather than confined and observed when they bite humans. Wild animals and wild animal hybrids should not be kept as pets. Animals maintained in United States Department of

Agriculture- licensed research facilities or accredited zoological parks should be evaluated on a case-by-case basis.

ANIMAL BITES

CIRCUMSTANCES OF THE BITING INCIDENT:

An unprovoked attack or other unusual behavior in an animal is a sign of danger regarding possible rabies in that animal. A provoked attack by an otherwise healthy animal, although associated with a lower risk, should still be considered serious and medical attention is recommended.

SIGNS OF RABIES IN ANIMALS:

Rabies should be suspected in any animal that exhibits behavioral changes, such as becoming aggressive, agitated, hyperactive and easily excited. The animal may also become docile and even unusually friendly. A nocturnal animal may become active during the day. Unfortunately, these presentations are not unique to rabies and may be associated with other common diseases of domestic animals and wildlife. Finally, an infectious rabid animal may be healthy in appearance and behavior for a period of time prior to the onset of clinical rabies in that animal.

BITES BY WILD ANIMALS:

The rabies virus is shed in the saliva of wild animals for varying lengths of time prior to the onset of clinical signs or symptoms. Therefore, confinement and observation of behavior for ten days is not an acceptable procedure for determining whether or not a wild animal was infectious for rabies at the time of a bite. A suspect high-risk wild animal that has exposed a human must be humanely euthanized. The brain, which must be handled carefully to prevent damage and decomposition of the brain tissue and contamination of the handlers, should be brought in to the New Hampshire Public Health Laboratories for testing.

A person bitten by a high-risk wild animal should contact their physician immediately to determine if the post exposure vaccination is needed. If the animal is available for testing, the New Hampshire Department of Fish & Game should be called to arrange for euthanasia and testing of the animal.

High Risk Wild Animals: The most common wild reservoirs of rabies are raccoons, skunks, bats, foxes, and coyotes. Bites from large rodents, especially woodchucks, should result in consultation with the state health department before a decision is made to initiate post exposure vaccination.

Small rodents (such as squirrels, rats, mice, hamsters, guinea pigs, gerbils, and chipmunks) and lagomorphs (such as rabbits and hares) are almost never found to be infected with rabies and have not been known to cause rabies among humans in the United States.

TREATMENT AND FOLLOW-UP OF AN ANIMAL BITE:

- Wash the bite wound with large amounts of soap and warm water for ten minutes.
- Seek medical attention as soon as possible to evaluate if post-exposure vaccination is warranted.

A physician should assess tetanus immunity status whenever a person has been bitten.

It is important to inform people not to release any animals that may have exposed a person to rabies. There have been cases of human exposure to animals in which an animal that had been captured was released and not available for testing. Because the animal could not be tested, the exposed person had to undergo post-exposure treatment, perhaps unnecessarily.

- Report the bite to the local animal control officer.
- Try to capture the animal only if getting bitten is not a risk.
- Considering the possibility of animal rabies vaccine failure, the immunization status of a biting dog or cat is not used as the sole criterion for decision-making regarding management of the exposed person. The animal should be observed for a period of 10 days to be sure it was not infectious for rabies at the time of exposure.

PROCEDURE FOR ANIMALS THAT EXPOSE A PERSON TO RABIES:

State law describes what actions need to occur following a puncture of the skin or a "non-bite" exposure based on the vaccination status of the animal and whether or not it is symptomatic. A brief explanation follows, with full details found in RSA 436:105; 436-105-a; and 436-105-b. The owner of the animal is responsible for fees incurred for the confinement, examination, and/or testing of the animal.

- Dogs, cats, and ferrets *that have been vaccinated in accordance with state law* (RSA 436:100) and show no signs of rabies shall be confined for a period of ten days by the owner or another responsible person as required by local authorities. A veterinarian must examine them at the end of the ten days before being released from confinement. However, if signs suggestive of rabies develop during the observation period, the animal shall be humanely euthanized, its head removed, and sent for testing to the New Hampshire Public Health Laboratories.
- Dogs, cats, and ferrets that *are apparently healthy, which are unvaccinated or whose vaccination status is unknown,* shall be seized and impounded under the supervision of the local authorities for a period of ten days. If, upon examination by a licensed veterinarian, there are no signs of rabies at the end of the impoundment, the animal may be released to the owner. However, if signs suggestive of rabies develop during the impoundment period, the animal shall be humanely euthanized, its head removed, and sent for testing to the New Hampshire Public Health Laboratories.
- Dogs, cats, and ferrets that *are displaying symptoms,* which indicate a likelihood of infection with rabies, shall be immediately euthanized.
- When a stray dog or cat is the source of a potential human exposure, the local rabies control authority shall be responsible for the expense of confinement and veterinary examination. For stray ferrets, the state is responsible for these costs.
- Wild animals must not be quarantined and watched for signs of rabies. They must be humanely killed by game wardens or veterinarians and tested for rabies immediately.
- Prior vaccination of an animal may not preclude the necessity for euthanasia and testing if the period of virus shedding is unknown for that species. Management of animals other than dogs and cats depends on the species, the circumstances of the bite, and the epidemiology of rabies in the area.

- Farm animals that do not seem sick when they bite can usually be watched on site under the supervision of the owner.

PROCEDURES FOR DOMESTIC ANIMALS EXPOSED TO RABIES:

Any animal bitten or scratched by a wild, carnivorous mammal (or a bat) not available for testing should be regarded as having been exposed to rabies.

a. **Dogs, Cats, and Ferrets:** Unvaccinated dogs, cats, and ferrets exposed to a rabid animal should be euthanized immediately. If the owner is unwilling to have this done, the animal should be placed in strict isolation in a kennel under veterinary supervision and in cooperation with local authority (as stated in RSA 436) for a minimum of 6 months and vaccinated 1 month before being released. Dogs and cats that are currently vaccinated should be revaccinated immediately, confined, and observed for 90 days. When the animal is not immediately revaccinated, it shall be confined in strict isolation in a kennel for 6 months under the supervision of the local authority in cooperation with a licensed veterinarian.

b. **Livestock:** All species of livestock are susceptible to rabies; cattle and horses are among the most frequently infected of all domestic animals. Livestock exposed to a rabid animal and currently vaccinated with a vaccine approved by USDA for that species should be revaccinated immediately and observed for 45 days. Unvaccinated livestock should be slaughtered immediately. If the owner is unwilling to have this done, the animal should be kept under very close observation for 6 months.

   The following are recommendations for owners of unvaccinated livestock exposed to rabid animals:

   1. If the animal is slaughtered within 7 days of being bitten, its tissues may be eaten without risk of infection, provided liberal portions of the exposed area are discarded. Federal meat inspectors must reject for slaughter any animal known to have been exposed to rabies within 8 months.
   2. Neither tissues nor milk from a rabid animal should be used for human or animal consumption. However, since pasteurization temperatures will inactivate rabies virus, drinking pasteurized milk or eating meat cooked to at least 122 degrees Fahrenheit does not constitute a rabies exposure.
   3. It is rare to have more than one rabid animal in a herd, or herbivore-to-herbivore transmission, and therefore it may not be necessary to restrict the rest of the herd if a single animal has been exposed to or infected by rabies.

c. **Other Animals:** Other animals bitten by a rabid animal should be euthanized immediately. However, any animal currently vaccinated with a vaccine approved by USDA for that species may be revaccinated immediately and placed in strict isolation for at least 90 days.

HANDLING INSTRUCTIONS FOR RABIES SPECIMENS

1. Do not handle any material or animal possibly infected with rabies unless you have been adequately and currently immunized against rabies. Even when you have been immunized, the following precautions are necessary. If you think you have been exposed to rabies, contact your physician even if you have received pre-exposure vaccinations against rabies.
2. Do not touch live animals suspected of being rabid; they should be dead before any handling of the animal.
3. When necessary, kill the animal in a humane manner. The best method is a "jab stick" with euthanasia solution, but do not attempt to use this unless you have been trained. Any other methods should result in death as quickly as possible, but if there has been an exposure the head must be intact for testing. Do not shoot or club the animal in the head, because this may make testing impossible and the exposed person will require the full series of post-exposure vaccinations, which may have been avoided if testing were able to be performed.
4. Wear rubber gloves to handle the animal; wear two pairs, with a heavyweight pair on the outside. Wear goggles or other eye protection, a mask to protect nose and mouth, and disposable protection for your clothing. Wash thoroughly with soap and water after you are done and cleanup of the scene and tools is complete.
5. The tools used to handle an infected animal, and any scene contaminated by nervous system tissue from an infected animal, should be cleaned with fresh 10% bleach solution (1 ½ cup bleach with water to make up a gallon).
6. Bringing an animal to someone experienced in decapitation is recommended. Many veterinarians provide this service with domesticated animals. For wild animals, contact the NH Department of Fish and Game or your local animal control officer. Anyone who conducts this activity should use a shovel or other implement to place the carcass in a disposable box or bucket, taking care to avoid touching the outside of the container with the animal. Without touching the container, place it in a heavy plastic bag by inverting the bag over the container; seal the bag tightly by tying the neck of the bag on itself, not by using a twist tie, rubber band, or strap tie. Invert a second bag over the first, and seal that too. Refrigerate the specimen by lining a box with newspaper, and packing the specimen with ice. Take it to the decapitator, and follow the procedures of the facility. Dispose of all disposable items used to handle the animal at the decapitator if possible; if not, double bag them as above and treat them as a biohazard. The shovel and any other non-disposable but cleanable implements should be cleaned with 10% bleach solution; skin protection, eye protection, and mucous membrane protection should be worn until cleanup is complete.
7. Decapitation should be accomplished using a guillotine. Handle the head by double bagging it as described above and place in an insulated container with ice or coolants. If an insulated container is not available, place it in a box lined with newspaper and refrigerated with freezer packs or sealed plastic bottles with ice inside; plastic bottles filled with water and frozen work well. Close the box securely with tape and securely attach the Public Health Lab form to the <u>outside</u> of the box, and deliver it to the lab or contact the off-hours person from the lab for instructions on where to take it.
8. Carcasses of suspect animals may be disposed of safely by burying them under at least two feet of soil, at least 100 feet from the closest water supply.

LABORATORY TESTING OF ANIMALS FOR RABIES:

The standard test for detecting rabies is the fluorescent rabies antibody test on the brain tissue. This test takes 24 hours to complete. If the test is negative, rabies virus is considered not to have been in the saliva at the time of the exposure; and vaccine prophylaxis, if already begun, may be terminated. If the test is positive, it is assumed that the saliva was infectious at the time of exposure and that complete prophylaxis is necessary.

The NH Public Health Laboratories provides rabies testing at no charge on the following animals:

- A high-risk wild animal (fox, skunk, raccoon, or other carnivore, bat, woodchuck) that has exposed a human or domestic animal to possible rabies transmission by bite or not-bite exposure.
- For surveillance purposes, a high-risk wild animal which has not exposed a human or domestic animal when it is exhibiting abnormal behavior and is located in a part of the state from which rabies has not yet been confirmed in that species. The state veterinarian, the DPHS' Communicable Disease Control Section, or the Fish & Game Department must authorize surveillance testing on a case-by-case basis.
- A cat, dog or other domestic animal displaying behavior suggestive of rabies which has exposed a human or domestic animal after a determination by the state veterinarian, the DPHS' Communicable Disease Control Section, or the Fish & Game Department.
- An apparently healthy dog or cat, under observation for 10 days from the time it has exposed a human or domestic animal, which for any reason dies prior to the end of that 10-day observation period.
- A rodent (other than woodchuck) or a rabbit or hare, only if it has exhibited extremely unusual behavior and has exposed a human or domestic animal after a determination by the state veterinarian, the DPHS' Communicable Disease Control Section, or the Fish & Game Department.

In addition to the above situations, a cat, dog or other domestic animal will be tested for rabies upon request from a licensed veterinarian for diagnostic purposes when no human or domestic animal exposure to that animal has occurred. A fee of $35.00 will be charged for this testing.

For more information:

NH Bureau of Disease Control
1-800-852-3345 ext. 4496, or 271-4496

NH Public Health Laboratories
1-800-852-3345 ext. 4461, or 271-4461

NH State Veterinarian
271-2404

NH Fish and Game Department
1-800-852-3411, or 271-3361
(nights/weekends)