Upper Hudson Tri-County Animal Response Planning Group

Considerations for Animals in Disaster

April 17, 2017

ESF # 11

Upper Hudson Tri-CART Planning Group:

Washington County CART
Warren County CART
Saratoga County CART
NYSDAM

RECORD OF DISTRIBUTION

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TABLE OF CONTENTS

SECTION C: Appendices

Record of Changes/Updates:

Date of Revision	Agency	Name
April 2017	Saratoga / Warren/Washington	Stanley / Hirsch/Pease

A. Purpose

To establish a coordinated and effective response to protect livestock, domesticated animals; including companion animals, the public health, the environment, and to ensure the humane care and treatment of animals in case of a large scale natural, manmade or technological emergency or other situations that cause animal suffering, in the Upper Hudson Tri-County region of Warren, Washington, and Saratoga Counties respectively.

B. Scope

Should a significant natural or man-made disaster occur, it might quickly overwhelm local government resources and their capability to provide necessary services leading to a disaster situation. This plan is intended to take immediate action in providing a means of care and control to minimize suffering and provide response for disease control in the event of a large-scale emergency. This plan is scalable, able to expand or contract given the event scenario and the dynamic changes that occur during the event cycle of activation, response, mitigation, and recovery.

C. Situation and Assumptions

1. Any disaster that threatens humans, also threatens animals, wherein it will be necessary to try to provide water, shelter, food and first aid where available.
2. Relocation, shelter, or relief efforts for livestock, and/or domesticated animals may be required.
3. Emergency shelter locations may be required to provide domesticated animal control due to sheltered persons bringing their pets with them.
4. Livestock left in evacuated areas will need to be cared for and provisions will need to be made for re-entry to facilitate this need.
5. The owners of pets or livestock, when notified of an upcoming emergency, will take reasonable steps to shelter and provide for animals under their care and/or control.
6. Natural, technological, or manmade disasters could affect the wellbeing of domesticated or non-domesticated animals.
7. The LHD will plan both for emergency situations and to carry out response, mitigation, and recovery operations utilizing local resources. Outside animal care and rescue assistance would likely be available in most large-scale emergencies affecting the area.
8. Animal protection planning will ensure the proper care and recovery of animals impacted during an emergency. These plans may include measures to identify housing and shelter for animals, communicate information to the public, and proper animal release.
9. Public information statements will be issued through the various media outlets. This information may include locations where domestic and non-domestic animals (including livestock) might be accepted during emergency situations. All public information/risk communication will be managed by the PIO and JIC.
10. A large-scale emergency in the State may warrant immediate response from state and local personnel, agencies, and organizations. However, emergency situations may become compounded due to the nature of the emergency and also require activation of additional specialized agencies through mutual aid.
11. Numerous local, State, and federal agencies will play a role in eradicating the disease response effort by encompassing the culling of livestock and potentially infected animals. Eradication will require proper sanitary and disposal procedures for carcasses and will be done by licensed professionals with the qualifications to handle such procedure.

D. Roles and Responsibilities

1. **County Animal Response Team and Resources:**
   a. Coordinate support agencies to manage animal protection in large-scale emergencies.
   b. Provide and coordinate personnel, equipment, and shelter as required to protect domestic pets/livestock, and essential care for sick and/or injured domestic pets/livestock.
   c. Implementation of the CART will be incident driven and may be requested to be activated as a response asset through the Emergency Manager as part of a Declaration of a State of Emergency, Emergency Order (Article 2B). The CART Team will be utilized in the planning modality as needed and requested by the Emergency Manager or by its members through the Emergency Manager.
   d. Maintain a list of shelters equipped to accept pets and a list of "pet-friendly" hotels, motels, and campgrounds that may be able to provide services to pet-owners in affected areas.

2. **County Emergency Management:** The County Emergency Manager is a required member of the CART, will be actively involved in the response, and will coordinate with the New York State Division of Homeland Security and Emergency Services.
   a. Activate the Emergency Operations Center, if necessary.
   b. May place into effect established plans and procedures and direct the response, mitigation and recovery efforts of the incident.
   c. The County Comprehensive Emergency Management Plan provides the framework for the county's jurisdiction's response to emergencies and disasters.

3. **Humane Organizations, Small Animals**
   a. Provide volunteers to assist in the protection of animals during an emergency shelter situation. Work with CART personnel in the coordination of animal shelters in the area of responsibility.
   b. Coordinate personnel, equipment, and shelter as required to shelter and care for domestic pets.

4. **Cornell Cooperative Extension of Washington, Warren and Saratoga Counties Respectively:**
   a. Aid in the protection of large animals during an emergency situation. Coordinate with CART in identifying and procuring additional resources and volunteers.
      1. The Cornell Cooperative Extension may assist in coordinating efforts with local Veterinarians, State officials, and/or the United States Department of Agriculture
      2. Provide information on local agricultural conditions, producers and resources.
      3. Assist in identifying the locations for the sheltering of large animals.
      4. Provide advice regarding farms within the infected area.
      5. Assist with the need for additional resources and technical expertise.
   b. May assist in facilitating efforts of New York State Agriculture & Markets, the United States Department of Agriculture, and with local veterinarians.

5. **New York State Department of Environmental Conservation:**
   a. Provide personnel and equipment needed to protect exotic and sick and/or injured non-domestic animals. Coordinate measures to minimize damage and danger to wildlife, as appropriate.
   b. New York State Department of Environmental Conservation (DEC) may assist the respective LHDs and New York State Department of Agriculture and Markets (NYSDAM) with the disposal of diseased animals.

6. **County Health Department:**
   a. Shall coordinate the disposal of unclaimed deceased animals that may impact the public health, in conjunction with NYSDAM and DEC.
   b. Provide services to prevent the spread of zoonotic diseases to humans.
   c. Coordinate with CART in minimizing zoonotic disease outbreaks during an emergency.
   d. The County Health Department:

i. May provide advice regarding public health aspects of eradication operations.
ii. May provide public health technical assistance to the New York State Department of Health to assist in approving disposal sites within local jurisdictions.
iii. May provide advice regarding health effects of the outbreak to the public.

7. United States Department of Agriculture:

The Farm Service Agency offers an array of programs to help farmers and ranchers' recover losses suffered due to natural disasters. Producers may apply for low-interest emergency (EM) loans in counties named as primary or contiguous under a disaster designation. They may also qualify for other programs such as Crop Disaster Program (when funded), Emergency Conservation Program, Livestock Assistances Programs (when funded) and Noninsured Crop Disaster Assistance Program. These programs provide grants and payments to agriculture producers to help in their recovery from the impact of the disaster. In the event of a disaster:

a. The Farm Service Agency (FSA) can provide emergency response information to producers quickly having on-hand, up-to-date database on most agricultural prodders in the county.
b. The Farm Service Agency (FSA) maintains a listing of food and feed facilities in the county that can be accessed in the event of an emergency.

8. Veterinarians:

The county CART veterinarian will, coordinate with NYSDAM and other Veterinarians that are members or local assets of the Upper Hudson Tri-County CART, under direction of the established ICS in accordance with NIMS, to:

a. Assist as practical in medical evaluation of animals during search and rescue operations;
b. Provide on-farm/at site medical evaluations for animals that cannot be transported from an emergency area where possible;
c. Provide expertise in animal handling housing, and medical evaluation of animals during and after an emergency;
d. Provide expertise and assistance in the epidemiological investigation of an animal disease outbreak;
e. Accredited veterinarians may apply quarantines on animals where appropriate;
f. Provide any information or education concerning an animal disease via the ICS Public Information Officer;
g. Provide expertise in the selection of appropriate disinfectants for cleaning and disinfection efforts;
h. In conjunction with the respective LHD and NYSDOH and NYSDAM, assist in collection and packaging of appropriate samples in an emergency infectious animal disease outbreak, both zoonotic and non-zoonotic. Where appropriate, the CART will provide a suitable area for collection of samples.

9. New York State Agriculture and Markets

The NYS Department of Agriculture and Markets (NYSDAM) are primarily responsible for and have authority to respond to any animal disease outbreak or concern in NYS.

a. Coordinate deployment of trained personnel in the investigation of any disease outbreak in domestic animals, both zoonotic and non-zoonotic.
b. Assist, in conjunction with the LHD and NYS Departments of Health and local county CART veterinarians, in both the determination of proper laboratory samples to be collected and the identification of appropriate laboratories to receive those samples for testing.
c. Direct and assist in enhanced surveillance of surrounding areas in order to detect the possibility of and/or limit the spread of an animal disease agent.
d. Provide assistance in the epidemiological investigation of an animal disease agent.

e. Apply quarantines to animals and animal products as determined by the state veterinarian.
f. Provide information and assist in communication as determined by ICS command regarding the processes concerning both the disease agent and the measures employed by the state veterinarian concerning the incident.
g. May assist in coordinating the disposal of unclaimed deceased animals that may impact the public health, in conjunction with local health department/agency, DEC, and USDA.

10. Local Animal Control

Local Animal Control will operate under the recognized ICS structure developed and in operation for the County CART and may assist in:

a. Recovery of animals from homes and barns, and domestic animals that are in an emergency area and unrestrained as directed in each area by the Incident Commander or EOC Manager;
b. Proper identification of animals for later reuniting with owners in accordance with procedures designated by the respective county CART;
c. Transporting animals to available shelters designated by the CART;
d. Temporary care of animals at designated shelters until such time as the final disposition of each animal is determined

11. County Public Works

The County Department of Public Works may assist in:

a. Providing traffic control, and controlling access and movement.
b. Supporting response operations with specialized, heavy equipment.
c. Providing equipment to haul cargo or personnel.
d. Providing guidance for re-routing of traffic in and around the affected area.
e. Providing equipment for transport of soil and debris.

12. County Soil and Water Conservation District

The County Soil and Water Conservation District, in conjunction with the Cornell Cooperative Extension, may assist in identifying:

a. Issues relative to disposal, water quality, aquifers, and watersheds.
b. Erosion control, composting requirements, and drainage assistance.
c. Information on soil types, wetlands, and flood mapping.

13. Public Information Officer and staff

Public information will be disseminated through one Joint Information Center (JIC) representing the needs and expertise of all agencies involved. (As referenced in county CEMP)

Public Information Officer responsibilities may include:

a. Notifying the public of appropriate shelters to drop lost/ stray animals, animals that they cannot care for, or animals that need immediate medical assistance.
b. Delivering instructions to the public to prepare their pets for an impending emergency and/or instructions for minor “at home” medical responses for pets injured in an emergency situation.
c. Initiating a system to direct inquiries on lost pets to the appropriate animal shelter. Other information as appropriate to the situation.
d. In coordination with the CART leader, develop public appeals for funds, personnel, equipment, etc. as needed for the emergency.

E. Additional Resources:

1. Empire State Animal Response Team (ESART)

a. May provide personnel, equipment, and services as required to protect animals.
b. May coordinate with Federal and other agencies involved with the emergency.

2. Private Boarding Kennels, Stables, Dog Clubs, and Horse Clubs

a. Provide personnel, equipment, and shelter as required to shelter and care for pets from evacuated citizens and in cases when established animal shelters are filled or destroyed.

3. Private Farms

b. Provide shelter and supplies to care for displaced livestock.

4. Feed Mills, Farm Stores, Fencing suppliers

a. Provide supplies, feeds, etc. for displaced animals
b. If possible, have contracts in place to purchase needed items on short notice.

5. Livestock transport vehicles: trucks, vans, and trailers

a. Locate and keep a list of transport vehicles that could be used to transport animals, especially farm animals, during an emergency.
b. Keep an updated list of locations of such equipment and check regularly for any changes that might alter the availability of the equipment.

6. Animal Poison Control Center

a. Only designated veterinary personnel will consult on suspect cases of animal poisoning to ensure prompt and accurate dissemination of information.
b. It is understood that a fee will be charged for this service.
c. http://www.aspca.org/pet-care/poison-control.
d. Animal Poison Control Center: (888) 426-4435

F. Response:

This plan endorses the development of one response organizational structure that will include all responding agencies. County agencies will be organized under the framework of the National Incident Management System (NIMS), and Incident Command System (ICS) as outlined in the County Comprehensive Emergency Management Plan.

G. Recovery:

The recovery process begins when disaster operations conclude, residents can return home and day-to-day life and activities begin to return to normal. Part of the recovery effort is to provide continued assistance to help disaster victims return to normal life. During the recovery portion the following events should occur.

a. County Emergency Services will provide the public with information on how and where to relocate with their animals.
b. Animals for which no owners can be found and which cannot be placed in adoptive care may be disposed of or relocated when available. If this proves to be necessary, it will be done in accordance with established animal control procedures.
c. American Red Cross will demobilize shelter and mass care sites and continue to provide assistance to disaster victims through other operations such as: damage assessment and emergency assistance to families.

d. Each agency will consolidate and report disaster-related expenses to the finance section at the EOC.

H. Review and Update:

This plan will be reviewed at least annually. As part of this review each agency listed within this plan will provide input and recommendations to the specifics of the plan including, annexes, policies, procedures, or supporting documents to this plan. Changes or updates to the plan will be documented in the Record of Changes portion of this plan as to acknowledge the portions to which have been altered, added, or deleted.

Section A: Upper Hudson Tri-County Animal Response Planning Guidelines for (C.A.R.T.)

The Upper Hudson Tri-County Animal Response Planning group has developed the following guidance for the County Animal Response Teams (CART) made up of local animal professionals and other interested parties, for each respective county. The CART Team shall only be activated at the direction of the Emergency Manager. The CART Team will be utilized as a response organization possibly as part of a Declaration of a State of Emergency, Emergency Order (Article 2B). The CART Team will be utilized in the planning modality as needed and requested by the Emergency Manager or by its members through the Emergency Manager.

A. Concept of Operations

The primary and support agencies identified in this section will manage and coordinate local animal protection activities under emergency situations. These agencies will use established animal protection and support organizations, processes, and procedures. Responsibility for situation assessment and determination of resources needs for a large-scale emergency lies primarily with the area Emergency Management Director and in cooperation with the CART Team leader and local incident coordinators.

Request for animal protections assistance and resources such as food, medicine, shelter material, specialized personnel, and additional veterinary medical professionals, will be transmitted from the local emergency management office to the state emergency management office. Should the need for Federal or State resources exist, the State Emergency Operations Center will coordinate the request for assistance.

Animal protection operations will be managed by the CART in cooperation with other agencies, such as the county department of public health and law enforcement. Public health concerns will take precedence over others and will be coordinated between the CART team leader and an appropriate public health official.

*** *The sheltering and protection of domestic and non-domestic animals (including livestock) are the responsibility of their owners.* ***

Domestic and non-domestic animals that are lost, strayed, incapable of being cared for by their owners, or in danger to themselves or the public will be the responsibility of the designated county CART officials. These animals will be sheltered, fed, and if possible, returned to their owners. If the animals cannot be returned to their owners, they will be disposed of in accordance with established animal control procedures.

Wild animals should be left to their own survival instincts. Wild animals out of the natural habitats that are in danger either to themselves or the public will be the responsibility of the Department of Environmental Conservation (DEC) personnel, in cooperation with local animal control officials, veterinarians, and licensed rehabilitators. They should be returned to their natural habitat, if possible. Concerns of zoonotic diseases in wildlife should be coordination with the Health Department.

The designated CART will be the lead agency for situation assessment and determination of resource needs. As needed the CART will protect animals (to the extent possible) affected by any disaster: to include rescue, shelter, control and feeding of animals left homeless, lost or strayed as a result of the disaster. Local humane organizations or similar groups will be asked to assist in this effort.

During emergencies, requests for animal protection assistance and resources such as food, medicine, shelter, specialized personnel, and additional veterinary medical professionals will be routed through the county Emergency Operations Center.

Shelters that have been established for disaster victims may not accept domestic animals. However, if an evacuee comes to the shelter with their pet(s), efforts will be made to assist in locating the domestic animal(s) away from the general population and to provide proper care. The local CART should have lists of available housing sites, and may also provide temporary housing in proximity to an emergency shelter for people.

B. Search and Rescue:

Domestic pets loose or in need of assistance due to the emergency or to the death or evacuation of their owners will be coordinated by CART, who will work with local Humane Societies, local law enforcement and animal control officers. Various humane groups may also provide personnel and funds to assist. All efforts will be made to identify owners of stray/lost animals. Local humane organizations representatives will attempt to adopt the unclaimed animals in accordance with stated local law.

Livestock loose or in need of assistance due to the emergency or to the death or evacuation of their owners will be coordinated by the CART.

Wild animals out of their natural habitat that are endangering either themselves or the human population will be the responsibility of New York State Department of Environmental Conservation personnel.

In the event that animals cannot be rescued due to the emergency situation (i.e. stranded animals), food and medical assistance may be delivered to the animals by humane groups, farm organizations, and others appropriate to the emergency, if possible.

C. Shelters:

Stray/lost domestic pets - All stray/ lost domestic pets recovered in the Disaster County will be sheltered at appropriate shelters within the area of need. A list of shelters will be compiled and kept on file by the CART. Pets whose owners cannot provide care for them and domestic pets found by citizens will also be sheltered at these locations. Unclaimed animals will be managed in accordance with NYS Health or Agriculture and Markets regulations and procedures.

Evacuated and stray/ lost livestock - Due to the size of most livestock and the inability to transport large numbers of farm animals, owners are expected to develop shelter and/or evacuation plans for their own animals. Also, private farms located throughout the county may be used as shelter facilities for livestock. In advance of an emergency situation, The CART and Cornell Cooperative Extension will compile a list of farms able to house stray livestock. These contact farms will be called and asked for their assistance in the sheltering operation. A list of appropriate transport vehicles, vans, and trailers will be kept for this purpose.

Shelter operations will follow CDC guidelines.

D. Staff/Supplies:

Staff - Private boarding kennels and veterinary hospitals will be responsible for the staffing and operation of their individual facilities. Animal owners will be responsible for any compensation due for use of the animal shelter according to the established policies of the kennel or veterinary hospital.

Supplies - Each animal shelter will identify resources for potable water, food, medical, cleaning, and shelter supplies in advance of an emergency situation. The CART will coordinate and keep lists current.

In an emergency animal food distribution centers will be contacted and asked to begin shipment of supplies to an established delivery point. The delivery point will serve as a storage center and a distribution center for the various shelters and hospitals.

E. Medical:

The county emergency management director and CART will coordinate the resources for medical facilities for domestic animals that cannot be accommodated by the various shelters or farms, due to the animals' injuries. Private veterinary hospitals may serve as alternative medical facilities and animal shelters as space permits.

F. Bites/Disease Control:

Rabies and other zoonotic diseases may be a threat during an emergency situation. Appropriate steps to control such threats to humans will be implemented by a cooperative effort between the CART, the jurisdictional county department of public health, and the NYS Dept. of Agriculture and Markets in consultation with the New York State Department of Health and New York State Department of Environmental Conservation.

G. Disposal of Animal Carcasses:

Disposal of deceased animals will be the responsibility of the owners of the animals. NYSDAM shall coordinate the disposal of unclaimed deceased animals that may affect the public health. When hundreds or thousands of animals are dead. NYSDAM and NYS DEC should be contacted immediately to guide owners through this process.

Disposal of dead animals will be performed in compliance with NY Agriculture and Markets Law. Chapter 69 of the Consolidated Laws Article 25-B § 377 Disposal of Dead Animals and DEC.

H. Abandonment of Certain Animals:

NY Agriculture and Markets Law Chapter 69 of the Consolidated Laws

§ 331. Abandonment of certain animals

An animal is deemed to be abandoned when it is placed in the custody of a veterinarian, veterinary hospital, boarding kennel owner or operator, stable owner or operator, or any other person for treatment, board, or care and:

- Having been placed in such custody for a specified period of time the animal is not removed at the end of such specified period and a notice to remove the animal within ten days thereafter has been given to the person who placed the animal in such custody, by means of registered letter mailed to the last known address of such person, or:

- Having been placed in such custody for an unspecified period of time the animal is not removed within twenty days after notice to remove the animal has been given to the person who placed the animal in such custody, by means of a registered letter mailed to the last known address of such person.

- The giving of notice as prescribed in this section shall be deemed a waiver of any lien on the animal for the treatment, board or care of the animal but shall not relieve the owner of the animal removed of his contractual liability for such treatment, board or care furnished.

§ 332. Disposition

Any person having in his care, custody, or control any abandoned animal, as defined in section three hundred thirty-one of this chapter, may deliver such animal to any humane society or society for the prevention of cruelty to animals having facilities for the care and eventual disposition of such animals, or, in the case of dogs, cats and other small animals, to any pound maintained by or under contract or agreement with any county, city, town, or village within which such animal was abandoned.

The person with whom the animal was abandoned shall, however, on the day of divesting himself of possession thereof, notify the person who had placed such animal in his custody of the name and address of the animal society or pound to which the animal has been delivered, such notice to be by registered letter mailed to the last known address of the person intended to be so notified. If an animal is not claimed by its owner within five days after being so delivered to such humane society or society for the prevention of cruelty to animals, or pound, such animal may at any time thereafter be placed for adoption in a suitable home or euthanized. In no event, however, shall the use of a decompression chamber or decompression device of any kind be used for the purpose of destroying or disposing of such animal.

SECTION B: EMERGING INFECTIOUS DISEASES IN ANIMALS

Epidemiological investigations of animal related zoonotic disease might be necessary because illness detected in animals may indicate a potential threat or illness to human health. Zoonotic diseases affect both animal and humans. Some instances of zoonotic disease may be naturally occurring, some of those may be emerging diseases, and still other situations could signal an intentionally released disease. (i.e., bioterrorism event)

Authority

The New York State Department of Agriculture and Markets (NYSDAM), requires all persons to report to the Commissioner of Agriculture any cases of zoonotic disease occurring in animals (Article 5, Section 73 of the NYS Agriculture and Markets Law). Typically these reports are submitted to the Office of the State Veterinarian in the NYSDAM Division of Animal Industry (DAI, 518-457-3502). In practice, only "program diseases," those diseases for which specific control and eradication efforts are in place, are routinely reported. However, any unusual cluster of disease occurrence would warrant reporting. Table 1 lists the zoonotic NYSDAM program diseases. Some veterinarians are accredited through NYSDAM to perform specific duties under a U.S. Department of Agriculture – Animal and Plant Health Inspection Service (USDA-APHIS) veterinary accreditation program (e.g., performing health examinations and issuing health certificates prior to interstate movement of animals.). Accredited veterinarians are provided the list of diseases in Table 1 along with other, non-zoonotic program diseases.

While NYSDAM has primary responsibility for, and authority in response to, any animal disease in NYS, both NYSDOH and the county Public Health Department may be the primary responders in cases where animal-to-human transmission is the primary concern.

Determination of Public Health Threat

a) Agent Involved or Suspected

Select Agents

Suspected or confirmed presence of a select agent in an animal must be immediately reported to the State Veterinarian's office (518-457-3502). Illness suspected to be caused by Category A Select Agents (e.g., anthrax, plague, tularemia, and viral hemorrhagic fevers) would require rapid communication between local and state health to determine the most efficient means of diagnostic testing. Arrangements should be made in advance to have specimens collected by a veterinarian based on the clinical presentation of the animal. Alternatively, a euthanized or dead whole animal may be the appropriate specimen. Protocols should also be in place for rapid transport of specimens, typically either to the Wadsworth Center in Albany or to the New York State Veterinary Diagnostic Laboratory (NYSVDL) in Ithaca. The appropriate laboratory will be determined based on consultation with NYSDOH, NYSDAM and the respective laboratories.

Other Disease Agents

For illness not suspected to be due to a CDC Category A Select Agent as referred in ***Table*** 2, it still may be necessary to arrange rapid specimen collection and transport based on other circumstances, such as:

- Suspected agent is a CDC Category B or C Select BT Agent,
- Suspected agent is not naturally occurring in the area,
- Sick animals have recent travel history to an area endemic for suspected agent,
- Animal illness is spreading rapidly and/or illness is unusually severe,

- Human illness related to animals is already suspected or highly likely based on suspected agent,
- Human exposure is widespread (e.g., due to animal in a public exhibit, fair, etc.),
- Treatment and control may depend on rapid diagnosis.

b) Suspected Source of Infection

Infections that are likely to be acquired naturally (e.g., leptospirosis, psittacosis) and for which animal history suggests natural exposure (e.g., suspected leptospirosis in a dog with frequent exposure to wet, rodent-infested habitats) may have lower public health implications than a case lacking a likely infection source or where the infection source may implicate a public setting (e.g., psittacosis likely acquired at a pet store).

c) Human Cases Detected or Likely

Concern is highest if human cases are already epidemiologically linked to an animal exposure, particularly if the animal is ill. However, agents highly likely to spread (e.g., *Salmonella*) could have a high potential public health impact regardless of presence or absence of identified human cases.

Similarly, if many people were exposed to a sick animal (e.g., local fair, 4-H show, animal exhibit), public health impact is high until zoonotic potential can be fully determined.

d) Potential For Environmental Contamination/Long-Term Infection of Animals

Diseases for which heavy environmental contamination is a concern (e.g., cattle with anthrax) or for which long-term shedding by animals may be possible (e.g., salmonellosis) will have a higher potential public health impact than diseases resulting in limited environmental contamination or animal shedding.

Response

The necessity of public health intervention will depend on the potential for human illness based on the determination of the public health threat. In general, response will fall into several categories, including:

- Communication (locally and with state agencies)
- Case investigation
- Enhanced surveillance
- Control and prevention of additional cases

a) Communication

Regardless of whether a zoonotic agent is reportable in NYS, it is advisable to communicate with the NYSDOH Zoonosis Program regarding any inquiries or concerns about a potential zoonotic disease threat. Zoonosis Program responsibilities include:

- Communication with other NYSDOH programs as well as other state agencies (NYSDAM and NYSDEC) to determine the need for additional involvement at the state level.
- Coordination with appropriate laboratories (Wadsworth Center or NYSVDL) for diagnostic testing that may be required for animal specimens.
- Assisting with field investigation of the animal source, site visits, interviews etc., particularly investigations of zoonotic disease outbreaks related to animal facilities.
- Communication and reporting to appropriate federal agencies such as USDA, CDC, FDA, and others.

In addition, consideration should be given for notification of local veterinarians, hospitals and other human healthcare providers, law enforcement, animal/dog control officers, and the public. These decisions should be made in consultation with state agencies, and will depend on the circumstances of the incident and level of human health threat. In all cases, it is important to bear in mind the confidentiality of patient records at veterinary hospitals, and privacy concerns of individuals.

b) Case Investigation

Similar to human-only disease reports, investigations of human illness linked to potential animal sources or involving potentially relevant illness in animals should be done by the local health department, with assistance as needed from NYSDOH and/or NYSDAM. As with non-zoonotic diseases, basic case investigation requires gathering the appropriate information about the patient(s) (human or animal) involved, including:

- Clinical history.
- Exposure History
- Contact tracing.

c) Enhanced Surveillance

Based on the circumstances of the case, it may be necessary to consider efforts for additional case finding, enhanced surveillance for related disease in people or animals, and/or environmental testing and animal/human diagnostic screening.

Enhanced animal disease surveillance includes:

- Requesting veterinary clinic(s) to report additional cases meeting a case definition provided to them, and providing instructions regarding reporting procedures.
- Inquiries to local shelters, kennels, animal control agencies, pet dealers, etc. to identify suspected cases.
- Contacting NYSDAM and NYSDEC staff members based in the area, to determine if they are aware of similar suspect cases in agricultural animals or wildlife.

Environmental testing will depend on the agent suspected or identified, and implementing this should be done in collaboration with NYSDOH and other state agencies.

Human and animal testing might be indicated for contacts of sick or infected animals/people, and also should be done in collaboration with NYSDOH and other state agencies.

d) Control and Prevention of Additional Cases

If needed, mechanisms should be put in place to prevent further spread of infection. This section will only address animal interventions. Human disease control should be handled as for any other communicable disease. Possible interventions with animals include:

- Treatment of infected animals.
- Quarantine of infected animals/premises during communicable period. (See below for information regarding authority of the state veterinarian to order quarantine of animals.)
- Isolation of exposed animals until infection status can be determined.
- Euthanasia of infected animals because communicable period is long or unknown.
- Cleaning and disinfect ion of premises that may be contaminated.

Any determination of isolation, quarantine and euthanasia should be made in consultation with NYSDOH and other state agencies. Legal authority for any action should ideally be determined before such events occur, however in many instances local health department and state agency legal counsel will need to be involved in such decisions at the time of occurrence.

Quarantine and Isolation of Infected Animals:

It may be necessary to impose isolation or quarantine on animals until they can be treated. If an owner is unable or unwilling to have an animal treated, quarantine or euthanasia may need to be considered. Appropriate medical treatment for an animal should be determined by a licensed veterinarian, in conjunction with NYSDOH and NYSDAM.

Decisions regarding animal quarantine are the purview of the State Veterinarian at NYSDAM. In situations where human health is the primary concern, decisions to quarantine or isolate may involve state and local health departments. In some circumstances, decisions may be made at the federal level (e.g., monkey pox). Once the quarantine decision has been made, a suitable facility should be identified (preferably in advance of any case) where animals may be quarantined as needed. These need not be dedicated facilities for quarantine. Options include:

- The home of the owner.
- A room at a local animal shelter, kennel or veterinary hospital.
- A room in a municipal facility that can be sufficiently isolated and secured.

One or more considerations may be necessary in establishing an appropriate quarantine location:

- Access for appropriate husbandry and medical care of the animal.
- Security from the public.
- Ventilation not in common with other areas (for airborne agents).
- Hand washing/changing "anteroom" where PPE can be applied and removed (including footbaths, if necessary).
- Means of transport of animals to facility, if necessary.

Euthanasia of Infected Animals

In cases where treatment and quarantine are not options, it may be necessary to order euthanasia of infected or potentially infected animals. This determination will require significant discussion between local and state agencies, and should be used only as a last resort. If a decision to have animals euthanized is made, considerations include:

- Identifying a veterinarian who can perform euthanasia. This person should be working under an agreement (preferably written) with local health, and should be prepared in advance to use proper infection control when handling the animal(s).
- Documentation of need for euthanasia, and written orders to have animal(s) euthanized, including description of the animal(s).
- Plans for disposal, possibly as bio-hazardous ("red-bag") waste.
- Plans for specimen collection and testing, if needed.

Cleaning and Disinfections of Premises That May Be Contaminated

Cleaning and disinfections recommendations should be made in consultation with NYSDOH**,** NYSDAM**,** and NYSDEC. See Appendix D

Recovery

The response to an outbreak of a disease that impacts the agricultural community may be short-lived, or could extend for some period of time. Emergency response activities may include control measures that have been rapidly employed, and may result in a slow demobilization of response agencies and activities.

A variety of forces may influence the direction of the recovery process. LHD will endeavor to assist businesses and citizens in recovering from the impacts of any emergency, including an Infectious Disease that impacts Non-Human Populations. Where possible, hazard mitigation measures will be incorporated into recovery activities is order to lessen the impact of reoccurrence, or eliminate it entirely.

1. Assessment of Eradication Activities

To assess the effectiveness of response activities, sentinel animals may be placed and closely monitored at contaminated or suspected areas. These animals should have contact with all parts of the premises and objects that might have been contaminated with a pathogen. In some cases, sentinel animals may be maintained on the suspected contaminated areas for 60 days, and then collected for evidence of a disease.

The timing of sentinel placement may be governed by disease status and would normally not commence until all identified contaminated and suspected areas have been decontaminated. The removal of a quarantine restriction and restocking of a clean premise may only be permitted after a thorough examination has deemed the area safe to inhabit.

2. Social and Economic Effects

The economic effects of an outbreak of a disease, even on a small scale, may be enormous to individuals, the farming industry as a whole and to subsidiary and support industries. Employment may be affected over a wide range of industries, and any industry based on agriculture. The impact on the local economy may have a cascading effect. The potential exists for all businesses that rely upon the agriculture industry to be severely impacted, including distributors, processors, and any reliant business, market, or industry. All exports of susceptible animals and their products would cease for an undetermined period of time. The export of grain and other foodstuffs would also be affected by an occurrence of some diseases, such as Foot and Mouth Disease (FMD). Further, consumer confidence may fall if consumers feel that the safety of their food has been jeopardized.

(a) Funding and Compensation

Some diseases, such as Foot and Mouth Disease, are included in the list of diseases for which arrangements exist for compensation. In addition to existing disaster relief funding and programs, there are provisions under law to provide compensation to response agencies and farmers. Appraisal teams composed industry representatives and State and federal officials, will assemble and coordinate with the United States Department of Agriculture to consider provisions for compensation.

While State Law allows for compensation for bovines only, federal statutes allow for fair market value compensation for animals and carcasses, as well as products and articles that were destroyed in an effort to effectively control or eradicate a disease. In addition, federal law also allows for compensation of milk and milk products, foodstuffs, board fences, feed racks, and contaminated buildings.

Other federal programs are being explored, and may reveal additional programs that can be implemented to support disaster recovery.

(b) Zone Designation

Zone designation is a measure that may help reduce the adverse economic effects as a result of an endemic disease. If a disease is only established in part of the county, it may be possible to establish infected and disease-free zones in order to retain some economic benefit.

Disease-free zones may be identified as a 'free zone', which must be effectively sealed off from disease-affected zones by extremely tight movement and quarantine controls. In the long term, it may be possible to eradicate a disease from an impacted zone.

3. Risk Reduction in Recovery

(a) Tracing

Tracing may play an important role in identifying infected and in-contact animals to determine if the disease is still present. Trace-back and trace-forward procedures that have been employed in the response may identify possible future or potential threats.

This activity may include inspection of stock, investigation of reports of suspect disease, and a serological survey. The level and direction of surveillance will be driven by the epidemiological information being collected.

(b) Surveillance

Surveillance after an outbreak should be carefully coordinated to optimize the available resources. Many factors, such as potential spread by wind or wildlife, could warrant increased surveillance in some areas. The intervals between inspections and surveys may depend on the observed incubation period, the resources available, and the level of exposure risk. In addition, efforts must be made to educate producers about the clinical signs of a disease and to report such information to veterinary officials.

Surveillance within an area will be primarily by inspection of livestock. Surveillance may involve abattoir surveillance, serological surveys, and investigation of reports of suspected disease.

(c) Vaccination

In some cases, vaccination may be an effective risk reduction measure. Consideration should be given to strategic vaccination around outbreaks (ring vaccination) to help contain a disease, or a general vaccination over a wide area (blanket vaccination) where other disease control methods may be infeasible. However, vaccination is not always practical. With some diseases, such as Foot and Mouth Disease (FMD), vaccination is not a preferred option due to the nature of the pathogen, and its potential to disrupt the economy.

(d) Public Awareness

A media campaign may be conducted to reemphasize the importance of farmers inspecting susceptible animals regularly and of reporting suspicious lesions and unusual deaths promptly. Further, information and education materials may be disseminated to sportsmen's groups to reinforce the goals of the media campaign. The importance of movement controls and what this means to individuals needs to be strongly emphasized. In addition, media releases coordinated through the County Joint Information Center (JIC) should address issues regarding the safety of food, and attempt to reassure the general public that the food is safe to consume.

Case Investigation

Similar to human-only disease reports, investigations of human illness linked to potential animal sources or involving potentially relevant illness in animals should be done by the ***local health department***, with assistance as needed from NYSDOH and/or NYSDAM. As with non-zoonotic diseases, basic case investigation requires gathering the appropriate information about the patient(s) (human or animal) involved, including:

- Clinical history: In the case of animals that have been seen by a veterinarian, chart review by the veterinarian will be the best way to determine clinical history. If the animal has not been evaluated, the owner should provide the LHD with as much information as possible regarding illness onset, clinical signs, any recent travel or other exposures outside the home, and relevant illness in other pets or family members.
- Exposure history: It is important to consider likely activities for owners and their animals. Sources of exposure might include
    - foods (e.g., raw food diets)
    - dietary indiscretion (e.g., trash eating, knowing if the animal roams unattended or has a tendency to hunt small animals)
    - places visited (e.g., dog parks, animal shelters, boarding facilities, veterinary offices, animal shows)

  Note that the owner may not have all of the animal's exposure history. Consider others who may care for the animal while the owner is away (e.g., pet sitters, dog walkers, etc.)
- Contact tracing: Similar to exposure history, tracing animals and people who may have been in contact with an infected animal involves first determining who is most knowledgeable about the time period of interest, and then evaluating the appropriate activities and likelihood of contact.

Keep in mind that a local veterinarian, even if not the patient's veterinarian, may be a valuable source of knowledge regarding local activities, animal interest groups, dog parks, popular kennels, etc.

Appendix A: Bioterrorism Agent Fact Sheets

ANTHRAX

FACT SHEET

Anthrax: What You Need To Know

What Is Anthrax?

Anthrax is a serious disease caused by ***Bacillus anthracis***, a bacterium that forms spores. A bacterium is a very small organism made up of one cell. Many bacteria can cause disease. A spore is a cell that is dormant (asleep) but may come to life with the right conditions.

There are three types of anthrax:

- **skin (cutaneous)**
- **lungs (inhalation)**
- **digestive (gastrointestinal)**

How Do You Get It?

Anthrax is not known to spread from one person to another.

Anthrax from animals. Humans can become infected with anthrax by handling products from infected animals or by breathing in anthrax spores from infected animal products (like wool, for example). People also can become infected with gastrointestinal anthrax by eating undercooked meat from infected animals.

Anthrax as a weapon. Anthrax also can be used as a weapon. This happened in the United States in 2001. Anthrax was deliberately spread through the postal system by sending letters with powder containing anthrax. This caused 22 cases of anthrax infection.

How Dangerous Is Anthrax?

The Centers for Disease Control and Prevention classifies agents with recognized bioterrorism potential into three priority areas (A, B and C). Anthrax is classified as a Category A agent. Category A agents are those that:

- pose the greatest possible threat for a bad effect on public health
- may spread across a large area or need public awareness
- need a great deal of planning to protect the public's health

In most cases, early treatment with antibiotics can cure cutaneous anthrax. Even if untreated, 80 percent of people who become infected with cutaneous anthrax do not die. Gastrointestinal anthrax is more serious because between one-fourth and more than half of cases lead to death. Inhalation anthrax is much more severe. In 2001, about half of the cases of inhalation anthrax ended in death.

What Are the Symptoms?

The symptoms (warning signs) of anthrax are different depending on the type of the disease:

- Cutaneous: The first symptom is a small sore that develops into a blister. The blister then develops into a skin ulcer with a black area in the center. The sore, blister and ulcer do not hurt.
- Gastrointestinal: The first symptoms are nausea, loss of appetite, bloody diarrhea, and fever, followed by bad stomach pain.

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Frequently Asked Questions About Plague

What is plague?
Plague is a disease caused by *Yersinia pestis* (*Y. pestis*), a bacterium found in rodents and their fleas in many areas around the world.

Why are we concerned about pneumonic plague as a bioweapon?
Yersinia pestis used in an aerosol attack could cause cases of the pneumonic form of plague. One to six days after becoming infected with the bacteria, people would develop pneumonic plague. Once people have the disease, the bacteria can spread to others who have close contact with them. Because of the delay between being exposed to the bacteria and becoming sick, people could travel over a large area before becoming contagious and possibly infecting others. Controlling the disease would then be more difficult. A bioweapon carrying *Y. pestis* is possible because the bacterium occurs in nature and could be isolated and grown in quantity in a laboratory. Even so, manufacturing an effective weapon using *Y. pestis* would require advanced knowledge and technology.

Is pneumonic plague different from bubonic plague?
Yes. Both are caused by *Yersinia pestis*, but they are transmitted differently and their symptoms differ. Pneumonic plague can be transmitted from person to person; bubonic plague cannot. Pneumonic plague affects the lungs and is transmitted when a person breathes in *Y. pestis* particles in the air. Bubonic plague is transmitted through the bite of an infected flea or exposure to infected material through a break in the skin. Symptoms include swollen, tender lymph glands called buboes. Buboes are not present in pneumonic plague. If bubonic plague is not treated, however, the bacteria can spread through the bloodstream and infect the lungs, causing a secondary case of pneumonic plague.

What are the signs and symptoms of pneumonic plague?
Patients usually have fever, weakness, and rapidly developing pneumonia with shortness of breath, chest pain, cough, and sometimes bloody or watery sputum. Nausea, vomiting, and abdominal pain may also occur. Without early treatment, pneumonic plague usually leads to respiratory failure, shock, and rapid death.

How do people become infected with pneumonic plague?
Pneumonic plague occurs when *Yersinia pestis* infects the lungs. Transmission can take place if someone breathes in *Y. pestis* particles, which could happen in an aerosol release during a bioterrorism attack. Pneumonic plague is also transmitted by breathing in *Y. pestis* suspended in respiratory droplets from a person (or animal) with pneumonic plague. Respiratory droplets are spread most readily by coughing or sneezing. Becoming infected in this way usually requires direct and close (within 6 feet) contact with the ill person or animal. Pneumonic plague may also occur if a person with bubonic or septicemic plague is untreated and the bacteria spread to the lungs.

Does plague occur naturally?
Yes. The World Health Organization reports 1,000 to 3,000 cases of plague worldwide every year. An average of 5 to 15 cases occur each year in the western United States. These cases are usually scattered and occur in rural to semi-rural areas. Most cases are of the bubonic form of the disease. Naturally occurring pneumonic plague is uncommon, although small outbreaks do occur. Both types of plague are readily controlled by standard public health response measures.

Can a person exposed to pneumonic plague avoid becoming sick?
Yes. People who have had close contact with an infected person can greatly reduce the chance of

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FACT SHEET

Facts about Botulism

Botulism is a muscle-paralyzing disease caused by a toxin made by a bacterium called *Clostridium botulinum*.

There are three main kinds of botulism:

- Foodborne botulism occurs when a person ingests pre-formed toxin that leads to illness within a few hours to days. Foodborne botulism is a public health emergency because the contaminated food may still be available to other persons besides the patient.
- Infant botulism occurs in a small number of susceptible infants each year who harbor *C. botulinum* in their intestinal tract.
- Wound botulism occurs when wounds are infected with *C. botulinum* that secretes the toxin.

With foodborne botulism, symptoms begin within 6 hours to 2 weeks (most commonly between 12 and 36 hours) after eating toxin-containing food. Symptoms of botulism include double vision, blurred vision, drooping eyelids, slurred speech, difficulty swallowing, dry mouth, muscle weakness that always descends through the body: first shoulders are affected, then upper arms, lower arms, thighs, calves, etc. Paralysis of breathing muscles can cause a person to stop breathing and die, unless assistance with breathing (mechanical ventilation) is provided.

Botulism is not spread from one person to another. Foodborne botulism can occur in all age groups. A supply of antitoxin against botulism is maintained by CDC. The antitoxin is effective in reducing the severity of symptoms if administered early in the course of the disease. Most patients eventually recover after weeks to months of supportive care.

FACT SHEET

Key Facts About Tularemia

This fact sheet provides important information that can help you recognize and get treated for tularemia. For more detailed information, please visit the Centers for Disease Control and Prevention (CDC) Tularemia Web site (www.bt.cdc.gov/agent/tularemia).

What is Tularemia?

Tularemia is a potentially serious illness that occurs naturally in the United States. It is caused by the bacterium *Francisella tularensis* found in animals (especially rodents, rabbits, and hares).

What are the Symptoms of Tularemia?

Symptoms of tularemia could include:

- sudden fever
- chills
- headaches
- diarrhea
- muscle aches
- joint pain
- dry cough
- progressive weakness

People can also catch pneumonia and develop chest pain, bloody sputum and can have trouble breathing and even sometimes stop breathing.

Other symptoms of tularemia depend on how a person was exposed to the tularemia bacteria. These symptoms can include ulcers on the skin or mouth, swollen and painful lymph glands, swollen and painful eyes, and a sore throat.

How Does Tularemia Spread?

People can get tularemia many different ways:

- being bitten by an infected tick, deerfly or other insect
- handling infected animal carcasses
- eating or drinking contaminated food or water
- breathing in the bacteria, *F. tularensis*

Tularemia is not known to be spread from person to person. People who have tularemia do not need to be isolated. People who have been exposed to the tularemia bacteria should be treated as soon as possible. The disease can be fatal if it is not treated with the right antibiotics.

How Soon Do Infected People Get Sick?

Symptoms usually appear 3 to 5 days after exposure to the bacteria, but can take as long as 14 days.

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Questions and Answers About Ricin

What is ricin?

Ricin is a poison found naturally in castor beans. If castor beans are chewed and swallowed, the released ricin can cause injury. Ricin can be made from the waste material left over from processing castor beans. It can be made in the form of a powder, a mist, or a pellet, or it can be dissolved in water or weak acid.

How toxic is ricin? How do people get sick from it?

Ricin is very toxic. It works by getting inside the cells of a person's body and preventing the cells from making the proteins they need. Without the proteins, cells die. Eventually this is harmful to the whole body, and may cause death.

As with most chemicals, whether or not a person becomes ill after exposure to ricin depends on how much ricin the person was exposed to, how long the exposure lasted, what the exposure method was (inhalation, ingestion, or injection), and other factors. In general, when the dose is the same, being exposed to ricin by injection has the greatest potential for causing illness, followed by inhalation, and then ingestion.

The purity of the ricin can also significantly affect the how sick someone becomes. For instance, ricin has greater potential for causing illness if it has been purified by special, technically difficult processes that are not readily available. In addition to the complexities involved in producing ricin that is highly purified, it is also very difficult to produce ricin that retains the physical properties which make it easy to inhale. These are just some examples of the more important factors that can help predict whether or not someone may get sick after being exposed to ricin.

How might I be exposed to ricin?

You can be exposed to ricin either by ingesting (swallowing) or inhaling (breathing) material containing ricin. In a few rare, past cases, injections of ricin have led to poisoning. This is a very unlikely method of exposure because it requires someone to actually inject the material into you

What are the signs and symptoms of ricin poisoning?

If ricin is ingested, initial symptoms typically occur in less than 6 -12 hours. These initial symptoms are most likely to affect the gastrointestinal system and include nausea, vomiting and abdominal pain. The symptoms of ricin poisoning are then likely to rapidly progress (generally over 12-24 hours) to include problems such as severe dehydration, and kidney and liver problems. This rapid progression of symptoms and illness is noticeably different than what typically occurs with most (but not all) infectious foodborne illnesses, which generally resolve within a day or two. Nevertheless, it is important to note that ricin is not the only potential cause of such symptoms, other illnesses due to chemicals and non-chemical causes (e.g., infectious) can also present with these signs and may be cause for concern.

If ricin is inhaled, initial symptoms may occur as early as 4-6 hours after exposure, but serious symptoms could also occur as late as 24 hours after exposure. The initial symptoms are likely to affect the respiratory system and

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FACT SHEET

Laboratory Testing for Ricin

This fact sheet provides a brief outline of how laboratory testing is done on environmental samples or human clinical specimens that may contain ricin, a poisonous protein from the castor bean plant.

How biological and chemical agents are detected

Law enforcement personnel sometimes investigate suspicious powders, or environmental surveillance systems indicate possible contamination involving a threatening agent. In other instances, hospital or commercial laboratories may come across a sample for which the presence of a threatening agent cannot be ruled out. Certain locations around the country, such as government and U.S. Postal Service offices, use sensors to test for traces of threatening agents. Threatening agents are biological organisms or chemicals that could cause harm to people's health. Processed ricin toxin is such an agent that could harm people if it is released into water, air, or food. If federal law enforcement officers feel the threat is credible, or if a hospital or commercial laboratory cannot rule out the presence of a threatening agent, suspicious samples are transferred to a nearby Laboratory Response Network (LRN) facility or to the Centers for Disease Control and Prevention (CDC) where high-confidence tests can be performed to identify the threat agent.

Biological agents are detected in environmental samples and clinical specimens using specialized tests, including rapid DNA-based tests that yield results within hours. These tests are performed by state and local public health laboratories that are LRN members.

Chemical agents can be detected in body fluids of persons (that is, in clinical specimens) exposed to these agents. Such detection can be used to identify who has been exposed and in some cases to assist in directing medical interventions. The LRN includes public health laboratories that can perform these types of analyses.

What the Laboratory Response Network is

The LRN is a national network of local, state, and federal public health, food testing, veterinary diagnostic, and environmental testing laboratories that provide the laboratory infrastructure and capacity to respond to biological and chemical terrorism and other public health emergencies. The more than 150 laboratories in the LRN are affiliated with federal agencies, military installations, international partners, and state and local public health departments.

The LRN was established in 1999 by the Department of Health and Human Services through CDC in accordance with Presidential Decision Directive 39, which outlined national antiterrorism policies and assigned specific missions to federal departments and agencies. Its founding partners are the Federal Bureau of Investigation and the Association of Public Health Laboratories. CDC maintains the LRN through a partnership with other federal agencies and private organizations.

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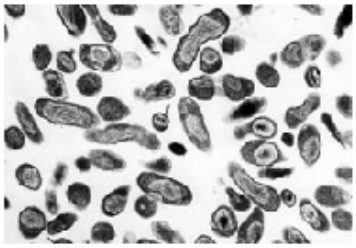
Q Fever and Animals

What is Q fever?



Q fever is a rickettsial infection caused by *Coxiella burnetii* (COX-ee-ELL-uh burn-ETT-eye). Only about half the people infected with this organism get sick with Q fever. Most people who get sick start having symptoms 2 to 3 weeks after getting *C. burnetii*, although symptoms can start sooner. These symptoms include fever, headache, chest or stomach pain, vomiting, and diarrhea. The fever can last 1 to 2 weeks, but many people can also get more serious lung or liver infections as a result of Q fever.

Organism Responsible for Q fever
Rocky Mountain Laboratories, NIAID, NIH

Most people get better within 1 to 2 months after being infected. Rarely, people can be sick from Q fever a year or more after getting this disease. For these people, inflammation (swelling) of the heart, especially the valves in the heart, can be a serious problem.

Can animals transmit Q fever to me?

Yes, some animals can pass Q fever to people. Cattle, sheep, and goats are most likely to carry *C. burnetii*, but other kinds of animals can also have this disease. Most infected animals do not show signs of Q fever, but the organism can be in barnyard dust that contains manure, urine or dried fluids from the births of calves or lambs. People usually get Q fever by breathing in this contaminated barnyard dust. Occasionally, people can get Q fever from drinking contaminated milk or from tick bites.

How can I protect myself from Q fever?

- When possible, avoid contact with the placenta, birth products, fetal membranes, and aborted fetuses of sheep, cattle, and goats.
- Eat and drink only pasteurized milk and milk products.
- If you work around pregnant sheep and goats, get vaccinated (where possible) against *C. burnetii* infection.
- Quarantine imported animals.
- If you have pre-existing heart valve disease or have had valve replacements, be extra careful around areas with sheep, cattle, and goats.

How can I find out more about Q fever?

Viral Hemorrhagic Fevers

Fact Sheet

What are viral hemorrhagic fevers?

Viral hemorrhagic fevers (VHFs) refer to a group of illnesses that are caused by several distinct families of viruses. In general, the term "viral hemorrhagic fever" is used to describe a severe multisystem syndrome (multisystem in that multiple organ systems in the body are affected). Characteristically, the overall vascular system is damaged, and the body's ability to regulate itself is impaired. These symptoms are often accompanied by hemorrhage (bleeding); however, the bleeding is itself rarely life-threatening. While some types of hemorrhagic fever viruses can cause relatively mild illnesses, many of these viruses cause severe, life-threatening disease.

The Special Pathogens Branch (SPB) primarily works with hemorrhagic fever viruses that are classified as biosafety level four (BSL-4) pathogens. A list of these viruses appears in the SPB disease information index. The Division of Vector-Borne Infectious Diseases, also in the National Center for Infectious Diseases, works with the non-BSL-4 viruses that cause two other hemorrhagic fevers, dengue hemorrhagic fever and yellow fever.

How are hemorrhagic fever viruses grouped?

VHFs are caused by viruses of four distinct families: arenaviruses, filoviruses, bunyaviruses, and flaviviruses. Each of these families share a number of features:

- They are all RNA viruses, and all are covered, or enveloped, in a fatty (lipid) coating.
- Their survival is dependent on an animal or insect host, called the natural reservoir.
- The viruses are geographically restricted to the areas where their host species live.
- Humans are not the natural reservoir for any of these viruses. Humans are infected when they come into contact with infected hosts. However, with some viruses, after the accidental transmission from the host, humans can transmit the virus to one another.
- Human cases or outbreaks of hemorrhagic fevers caused by these viruses occur sporadically and irregularly. The occurrence of outbreaks cannot be easily predicted.
- With a few noteworthy exceptions, there is no cure or established drug treatment for VHFs.

In rare cases, other viral and bacterial infections can cause a hemorrhagic fever; scrub typhus is a good example.

What carries viruses that cause viral hemorrhagic fevers?

Viruses associated with most VHFs are zoonotic. This means that these viruses naturally reside in an animal reservoir host or arthropod vector. They are totally dependent on their hosts for replication and overall survival. For the most part, rodents and arthropods are the main reservoirs for viruses causing VHFs. The multimammate rat, cotton rat, deer mouse, house mouse, and other field rodents are examples of reservoir hosts. Arthropod ticks and mosquitoes serve as vectors for some of the illnesses. However, the hosts of some viruses remain unknown -- Ebola and Marburg viruses are well-known examples.

SMALLPOX FACT SHEET

Smallpox Overview

The Disease

Smallpox is a serious, contagious, and sometimes fatal infectious disease. There is no specific treatment for smallpox disease, and the only prevention is vaccination. The name *smallpox* is derived from the Latin word for "spotted" and refers to the raised bumps that appear on the face and body of an infected person.

There are two clinical forms of smallpox. Variola major is the severe and most common form of smallpox, with a more extensive rash and higher fever. There are four types of variola major smallpox: ordinary (the most frequent type, accounting for 90% or more of cases); modified (mild and occurring in previously vaccinated persons); flat; and hemorrhagic (both rare and very severe). Historically, variola major has an overall fatality rate of about 30%; however, flat and hemorrhagic smallpox usually are fatal. Variola minor is a less common presentation of smallpox, and a much less severe disease, with death rates historically of 1% or less.

Smallpox outbreaks have occurred from time to time for thousands of years, but the disease is now eradicated after a successful worldwide vaccination program. The last case of smallpox in the United States was in 1949. The last naturally occurring case in the world was in Somalia in 1977. After the disease was eliminated from the world, routine vaccination against smallpox among the general public was stopped because it was no longer necessary for prevention.

Where Smallpox Comes From

Smallpox is caused by the variola virus that emerged in human populations thousands of years ago. Except for laboratory stockpiles, the variola virus has been eliminated. However, in the aftermath of the events of September and October, 2001, there is heightened concern that the variola virus might be used as an agent of bioterrorism. For this reason, the U.S. government is taking precautions for dealing with a smallpox outbreak.

Transmission

Generally, direct and fairly prolonged face-to-face contact is required to spread smallpox from one person to another. Smallpox also can be spread through direct contact with infected bodily fluids or contaminated objects such as bedding or clothing. Rarely, smallpox has been spread by virus carried in the air in enclosed settings such as buildings, buses, and trains. Humans are the only natural hosts of variola. Smallpox is not known to be transmitted by insects or animals.

A person with smallpox is sometimes contagious with onset of fever (prodrome phase), but the person becomes most contagious with the onset of rash. At this stage the infected person is usually very sick and not able to move around in the community. The infected person is contagious until the last smallpox scab falls off.

Appendix B: Safe Handling of Exotic Animals

Many exotic pets have unique features that need to be considered when handling these animals. Some basic guidelines for handling common exotic species follow.

Rabbits

Grasp loose skin over the neck and shoulders while directing the head away from your body. Support the lower part of the rabbit's body with the other hand. Never restrain or lift a rabbit by the ears. If the rabbit begins to struggle or kick violently, immediately place on a solid surface and calm the animal. Struggling often results in fractured spinal vertebrae and subsequent euthanasia.

Mice

Mice are generally caught and handled by their tails. Grasp the tail between its midpoint and the mouse's body. For more control, grasp the loose skin over the mouse's neck and shoulders using the thumb and fingers. Do not drop mice into cages. Rather lower them into the cage and release upon contact with bedding.

Guinea Pigs

Gently, place one hand on the shoulders or chest of the guinea pig. Use the other hand to support the animals' hindquarters. Wrap the guinea pig in a towel or hold the animal against your body to reduce any struggling. Do not attempt to restrain guinea pigs solely by grasping the skin. Guinea pigs lack an ample amount of loose skin to do this safely and handling them in this manner may cause hair loss.

Birds

Pet birds, such as parrots and finches, may be restrained by capturing in a towel. Darkening the room prior to entering the cage will assist the handler in the capture process and calm the bird. Care should be taken with wild birds, such as birds of prey. These species should only be captured and restrained by qualified handlers.

Quickly grab the bird's neck from behind the animal. Your hand should gently encircle the neck to elongate the neck between the head and shoulders. Once the animal is under control, grasp the legs from the front of the animal and stretch the animal as much as possible without causing injury. The weight of the towel will keep the wings at the bird's side.

Ensure that the bird's ribcage is not restricted and do not hold the bird around the body. Small birds may be caught without using a towel. First, capture the bird from the rear by encircling the neck. Then grasp the feet with the other hand.

Lizards

Hold the head firmly by grasping behind the jaw with your thumb and first finger while wrapping the other fingers around the lizard's shoulders to control the front legs. Use the other hand to grasp the rear legs and tail just below the base of the pelvis. Do not grab the length of the tail. Many lizards have the ability to lose their tails as a natural defense mechanism.

Snakes

Hold the head gently by grasping behind the jaw. Allow your hand to move with the snake's head movement to prevent injury. Providing good support for the rest of the snake's body will help ensure it feels secure. Multiple handlers may be necessary for large snakes. Do not allow the snake to wrap the end of its tail around you or other objects.

Turtles and Tortoises

Grasp the shell midway between the front and rear legs. Prevent bites by not reaching across the front of a turtle or tortoise that is unrestrained. Frightened animals will often urinate on handlers as the animals are being picked up.

Amphibians

Fine mesh nets or small plastic containers may be used for catching and transferring animals. If the animal must be handled, protect the animal's skin by using moistened gloves and/or a moistened paper towel or dishcloth. Large amphibians, such as giant salamanders, large toads, and hellbenders, should have their heads restrained to prevent biting. Place their head between your thumb and first finger.

Ferrets

Grab the loose skin around the back of the neck firmly. Hold the ferret up so the hind feet cannot touch the ground. Stroke the animal's underside from top to bottom to aid in relaxation.

Appendix C: General Cleaning Guidelines

1. Wash and scrub all items with soap and water, rinse thoroughly, then spray with dilute bleach solution or soak in bleach solution and allow to sit for 10 minutes and then allow drying.

2. Bleach solution should be made as follows – 1 oz. bleach in a 32 oz. spray bottle, ½ cup per gallon of water (in a 5 gallon bucket add 2 ½ cups bleach). Eyeballing the amount of bleach added is not to be allowed.

3. Clean items in batches. Food and water bowls should be washed first, then cages and crates, then litter boxes. There should be designated scrub brushes for bowls and dishes and crates/cages and litter boxes. They should be clearly marked as such.

4. Soap and water and bleach solutions should be replaced after every cleaning session (no new items that currently need cleaning), or at every shift change. If ongoing cleaning is necessary, bleach solutions should be replaced every 2 hours.

Cages / Crates

1. Take cages and crates apart to the extent possible. Cat cages should be taken outside for thorough cleaning.

2. Wash and scrub with soap and water and rinse thoroughly. Items should be sprayed with a dilute bleach solution (see General Guidelines for preparation of solutions) and they need to sit a minimum of 10 minutes for disinfection. They can then be allowed to dry or dried by hand.

3. Do not use the litter box scrub brush to clean the cages and crates.

Bowls and Dishes

1. Bowls and dishes should be washed before cages/crates or litter boxes. They should be washed and scrubbed with soap and water and rinsed thoroughly. They should then be either sprayed with a dilute bleach solution (see General Guidelines for preparing bleach solution) or soaked in the dilute bleach solution for a minimum of 10 minutes before being allowed to air dry or be hand dried.

2. There should be a clearly marked scrub brush for bowls and dishes only

Litter Boxes

1. Litter boxes should be washed last after bowls and dishes and crates and cages in any cleaning session.
2. They should be washed and scrubbed with soap and water and then thoroughly rinsed. They should then be sprayed with a dilute bleach solution (see General Guidelines for preparing solution) or soaked in the bleach solution and allowed to sit for a minimum of ten minutes. They can then be allowed to air dry or be hand dried.

3. Soap and water solution and bleach solutions should be discarded and replaced with new solutions after litter boxes are cleaned during any cleaning session.

4. Use only the clearly marked scrub brush for litter boxes.

Appendix D: Shelter Cat Housing Guidelines

1. Limit capacity in each cat housing room. Population density in current cat housing room must *not* be increased.

2. At no time should cages be stacked more than 2 high.

3. Ensure that each large cage is used for housing only one adult cat, a bonded pair of cats, or one litter (with or without a mother). On rare occasions, 3 adult bonded cats may house together in one large cage, if housing 1 of the 3 separately causes distress.

4. Cats from the same household that are housed together in a large cage and later exhibit aggression should be each given their own large cage (not housed on either side of a divided cage.

5. Do not use cage dividers to house more than one cat in one cage.

6. Smaller cages must never be used to house more than one cat.

7. Each cat must be provided with a hiding box.

8. Whenever unfamiliar cats are housed in adjacent cages, ensure that a complete barrier is in place at all times (cardboard or fabric.) This barrier will help prevent direct disease transmission and stressful encounters between cats in neighboring cages

9. Cat condos should be used as follows: 1 cat per column of 3 vertically connected cages. The entire condo bank should house a total of 4 cats, rather than 12 cats (3 rows of 4 cats.) This cage bank will not be used at maximal capacity because the cages are smaller and more difficult to clean and because it is more difficult to provide barriers between cats in adjacent cages. So this cage bank will not be used at maximum capacity.

Management of cat sub-populations to reduce disease risk:

Assign each animal to a category, in terms of its health (healthy vs. sick with contagious disease [e.g. upper respiratory signs or diarrhea) and age/disease susceptibility (young animals most susceptible, adult animals less susceptible.) So, for cats, there would be sub-populations:

- Healthy kittens
- Healthy adult cats
- Sick (contagious) kittens
- Sick (contagious) adult cats.

When possible, assign different animal care staff members/volunteers to clean and care for animals in each group. When that is not possible, the same animal care volunteer could care for each group sequentially, in order of decreasing health and disease susceptibility (Group A first, then group B, then C, and group D last.) Of healthy kittens (group A) should be cleaned first, while cages of sick adult cats (group D) should be cleaned last.

Revaluate group assignments once daily. Any cat or kittens on meds for infectious or contagious condition is considered "sick" (i.e. sick= possibly shedding contagious disease.) Category assignments (Groups A, B, C and D) should be indicated on white board list of cats in each cage. Category assignments may change as an animal's health changes.

Appendix E: Public Education Messages

Domestic Pets

- If you evacuate your home, DO NOT LEAVE YOUR PETS BEHIND. Pets most likely cannot survive on their own and you may not be able to find them when you return.

- For public health reasons, many emergency shelters cannot accept pets. Find out which motels and hotels in your area allow pets. Include your local animal shelter's number in your list of emergency numbers-they will be able to provide information concerning pets during a disaster.

- Make sure identification tags are up to date and securely fastened to your pet's collar. If possible, attach the address and/or phone number of your evacuation site.

- Make sure you have a current photo of your pet for identification purposes.

- Make sure you have a secure pet carrier, leash or harness for your pet so that if the animal panics, it cannot escape.

- Take pet food, bottled water, medications, veterinary records, cat litter/pan, can opener, food dishes, first aid kit and other supplies with you in case they are not available later.

- Make sure you have a copy of your pet's medical records. If you are unable to return to your home right away, you may need to board your pet. Most boarding kennels, veterinarians, and animal shelters require that your pet's vaccinations be current.

- If it is impossible to take your pet with you to temporary shelter, contact friends, family, veterinarians, or boarding kennels to arrange for care. Make sure medical and feeding information, food, medicine and other supplies accompany your pet to its foster home.

Equines, cattle, and small livestock

Evacuate equines, cattle, and small livestock. The evacuation sites should have or be able to readily obtain food, water, veterinary care, handling equipment and facilities. If evacuation is not possible, a decision must be made whether to move large animals to available shelter or turn them outside. This decision should be determined based on the type of disaster and the soundness and location of the shelter. All animals should have some form of identification that will help facilitate their return.

Wildlife

Never attempt to capture a wild animal unless you have the training, protective clothing, restraint equipment and caging necessary to perform the job. Often, during natural disasters, mosquitoes and dead animal carcasses may present disease problems. Outbreaks of anthrax, encephalitis and other diseases may occur. Contact your local emergency management office for help.

Appendix F: Guidelines for Handling Animals During Capture and Emergency Containment

Horses

Adapted from the American Veterinary Medicine Association Disaster Preparedness and Response Guide

Free roaming horses will naturally group together and move as a group. Many horses will allow themselves to be caught, especially if they are encouraged with grain. Catching a horse can be done by first placing a rope loosely around its neck, and then fitting on a halter. If a large group of horses will not allow themselves to be caught, they should be rounded up in small groups and corralled into smaller confinements. If the horses cannot be rounded up and have not suffered any obvious injuries, they may be kept fenced in and fed without further human contact.

When moving horses into an unfamiliar environment, the handler should allow them time to investigate their new surroundings. Not all horses are familiar with being tied to a stationary object. If horses must be tied, use a quick release knot. Many horses have only been kept in wooden fenced paddocks. If wire fencing is all that is available, tie 2" x 24" cloth strips to the top wire every 6 to 10 feet.

Identification

Many horses are permanently identified with a tattoo on the inside of their upper lip, freeze brands under the mane, and brands on the outsides of their hind limbs. These are helpful in recording the identification on a horse. Other methods for identification that can be used include neck banding, microchip injection, painting or etching the hooves, and describing all whorls of the horses' coats. Photographs of the right and left sides of the body, medial and lateral aspects of the lower legs, and the face of a horse are helpful in matching owners' descriptions when trying to locate misplaced animals.

Behavior

Most horses are familiar with people and are used to being handled. Horses will seek to establish hierarchy when first grouped together. If this occurs under confined conditions, horses may become violent resulting in serious injuries to each other and to people handling them. Horses show signs of aggression toward people by pinning their ears back, extending their necks to bite, or turning their hind ends toward an approaching person. Special care should be taken to avoid standing between mares and their foals, and when handling stallions (adult uncastrated males).

Ideally, horses should be kept in small herds at pasture or in individual stalls. If this is not possible, allow horses plenty of room to reduce aggression. Never place two or more stallions together. If at all possible, observe horses for the first few hours after placing together in a herd.

Methods of Restraint

Most horses will cooperate once they have a halter and lead rope on. People unfamiliar with horses' behavior should always work in pairs. Both people should always stand on the left side of the horse. Apprehensive horses can be twitched on the nose, or by grabbing a handful of skin on the lower side of the neck. Alternatively, sedatives may be used. Authorized personnel will perform sedation. Injured horses should not be worked on until they are fully sedated. This usually takes 5 – 10 minutes after intravenous injection. Sedated horses may still kick if abrupt movements or sounds startle them.

Health Concerns

Dietary changes predispose horses to colic, laminitis, and hyperlipemia. Mixing of horses from various sources predisposes them to contagious respiratory disease. Vaccinating all horses against

Equine Herpes Virus, Equine Influenza, Eastern and Western Equine Encephalitis, and tetanus can minimize the spread of contagious disease. Any horse that will be spending more than a few days grazing on shared pasture should be dewormed with a paste dewormer.

Typical Weights

Horses are measured in "hands". One hand is equal to 4 inches. Horse's heights are measured at the highest point of the shoulder (withers). Typical weights and sizes of horses are:

	Adult weight (#)	Newborn weight (#)	Approx. Height
Giant Breeds	1,500 – 2,000	150 – 200	17+ hands
Full Size	750 - 1,200	75 – 100	15 – 17 hands
Pony	500 - 750	50 – 75	< 15 hands
Miniature	200 - 400	20 – 40	< 40 inches

Typical Feeding Requirements of Horses

Ideally, horses should be fed individually or in small groups. They should be fed twice a day at regular intervals. If horses are fed in groups, the most aggressive ones should be fed first. If that is not possible, observe horses at feeding time to ensure that all horses allow each other access to feed and water.

Under resting conditions and when ambient temperatures are above 40° F, horses should consume about 2% of their body weight per day in dry matter. About 75% of this should be derived from forages (hay) and 25% from grain. 12% protein horse pellets and sweet feed are the preferred grains. Total feed intake depends on body size. For example, a 1,000 lb. horse will require 7.5 lbs. (approximately 1/5 of a rectangular bale) of hay and 2.5 lbs. of grain at each feeding. This amount should be fed in the morning and in the evening. In addition, horses require about 2% of their body weight in fresh water per day, and 1 –2 oz. of loose salt. All of the feeding requirements should be doubled for lactating mares and increased if ambient temperatures fall below 40^{o} F.

To estimate the amount of feed required for a horse herd, calculate the biomass of the horses by estimating the approximate weight of all the horses and adding the weights together. Multiply this figure by the feed requirements listed above to calculate the amount of hay, grain, water, and salt needed for the herd.

Sheltering and Housing

Ideally, horses should be kept in small herds at pasture or in individual stalls. The amount of bedding required depends on the type of flooring. Porous flooring with plenty of lime mixed into it requires the least additional bedding. Concrete flooring requires the most. The approximate amount of bedding that will be required is one bale of straw per 12 x 12 ft. stall.

Straw is the preferred bedding under emergency conditions, as it is likely to be available, is space efficient, and is most degradable. Alternatively, 2 bales per stall of conifer wood shavings or shredded newspapers can be used. Black walnut and exotic wood shavings cannot be used.

Fencing materials that are free of projections should surround paddocks for horses. Barbed wire is not suitable for fencing horses. Electric wire fencing can be used, but it must be made visible to horses by 2" x 24" strips of cloth every 6 to 10 feet.

Sanitation

Horses will produce about 0.5% of their body weight of manure per day. Manure should be removed from stalls at least once a day. Manure from horses on pasture should be collected once per week if possible. Manure should be stacked in neat piles, with minimal surface area, to promote composting and reduce fly hatching. To further reduce fly burdens, the manure pile can be sprayed every 3 days with fly spray.

Horses void about 0.5% of their body weight as urine each day. Urine is a major attractant to stable flies. Completely remove the stall bedding at least every third day to reduce fly problems. The total amount of manure and bedding that will accumulate can be calculated from the number of horses, the average amount of manure produced, plus the number of straw bales used. Manure piles should be located at least 200 yards from the stabling facilities.

Zoonosis

Salmonella is endemic in many horse populations. Stressed horses, such as those surviving a major disaster, are most likely to suffer from clinical salmonellosis and develop fulminant diarrhea. Horses that develop diarrhea may have a guarded to poor prognosis and are a potential source of infection to other horses and personnel. For these reasons, serious consideration should be given to euthanasia, especially if the horse can only be maintained by compromising the level of care to other horses.

Euthanasia and Disposal

Disposal must be considered prior to euthanasia. If at all possible, it is easiest to walk the horse to the site where the carcass will be buried, rather than transport dead horses to a disposal site. Euthanasia will be done under supervision of qualified personnel. Records will be kept of all dead horses.

Cattle

Background

Cattle are grazers and browsers by nature and are easily adaptable to new environments. They are gregarious animals that follow herd instincts, but may be excited and frightened by new persons, predators, and dogs in their midst. Because of their gregarious nature, individual cows become anxious in situations that lead to their isolation from the herd. They have keen eyesight and hearing and can detect something unusual at distances of several hundred yards.

Behavior during the Disaster Event

Cattle normally will move away from fire and flood, but in an excited state they may actually move into such a disaster. Herding and driving cattle during a disaster is made more difficult because herding instinct is overridden by survival reaction. Injuries, especially to the younger animals, are much more probable during a disaster.

Behavior during the Immediate Aftermath

Most cattle, if given hay, water, and a space to stand or lie down, will acclimate well with their new surroundings. The more antisocial animals, especially bulls, may not become content as quickly and may attempt escape. Bulls should always be approached with caution, particularly under stressful conditions. Due to the unpredictable nature of bulls, volunteers must work in pairs when working among, handling or capturing bulls over 6 months of age. There is also a problem with establishment of social dominance within a group if new numbers are added. This is particularly true with bulls, and though cows usually settle down soon, the bulls may continue the struggle for dominance for a protracted period.

Capture, Containment, and Restraint

Dairy cattle are used to caretakers, are socialized to human beings, and are easily penned. Beef cattle commonly are fed hay and grain in or around a barn or corral, which can aid in penning. If a preexisting structure is not in place, a temporary corral can be built with portable gate panels. Avoid barbed wire and woven wire fencing because of the danger of injury to excited animals and animals unfamiliar with fences. Portable corrals may be used to make runways and chutes for restraint.

The most common and available method of restraint is the lariat and halter. This restraint is dependent on having something to which the animal can be secured. For particularly fractious animals, application of a nose lead in combination with a rope halter provides additional distractions and approved restraint. A properly applied tail jack will immobilize the rear quarters for the purpose of examination or other minor procedures.

The most desirable restraint device is the portable cattle chute with a head restraint. Diagnosis and treatment are much easier and safer with this equipment. Tranquilization or sedation of injured animals may be necessary. Tranquilization will be done under supervision of qualified personnel.

If evacuation from the home premise is necessary, bumper-pull or fifth wheel type stock trailers, 12’ x 16’ or larger and without compartments, should be used. The low bed with a low center of gravity allows easier loading and unloading and is more stable in winds and water.

Animal Identification Methods

Permanent identification of dairy cattle is usually numerical by means of an ear tag, ear tattoo, brand, microchip, or numbered neck chain. Animals may be temporarily identified through use of livestock marking crayons.

Typical Weights

Dairy cattle – Holsteins are the largest of the 5 major breeds of dairy cattle. Cows weigh an average of 1,500 lbs., with mature bulls tipping the scales at more than a ton. Jersey dairy cattle are the smallest, with mature cows weighing approximately 1,000 lb. and bulls near 1,500 lb. Weigh tapes for measuring heart girth provide a fairly accurate estimate of weight in dairy cattle.

Beef cattle – There are wide variations among and within beef breeds. Weights can range from an 850- lb. British crossbred female to 2,500- lb. Charolaise male. A weight tape for beef cattle, which measures heart girth, is fairly accurate.

Nutritional Requirements

Cattle are grazing animals and can be maintained adequately on a variety of grasses. Care should be taken in selecting the site to pen cattle, because ornamental plants, which may be appealing to hungry ruminants, can be extremely toxic if consumed by cattle. Milk production in dairy cattle will raise or lower according to nutrient intake. Grass hay can be fed to dairy cattle for several days and they will suffer only temporary milk production loss when put back on their full production level ration. By reducing the caloric intake, a cow will reduce its milk production. Decrease in milk production may not be rapid enough to prevent mastitis. If the disaster causes electric power outages or if the cattle are moved to a location without milking facilities, milking even a small number of cows becomes an unrewarding and difficult task.

Beef cattle and yearling cattle require only grass hay and water for survival. If grass for pasturing cattle is not available, baled hay fed at the rate of 20 to 25 lbs./head/day is the best alternative. Calves less than 3 months old will require milk or milk replacer along with grass hay. The amount of hay that is required daily is 22 lbs. for adult cattle (weighting 1000 lbs. or more) and 13 lbs. for calves (weighing 132 to 500 lbs.). Clean water should be provided at the rate of 7.5 gal for cattle greater than 700 lbs. and

5.3 gal for those less than 700 lbs. In moderate weather conditions, mature dairy cattle will consume 12 to 15 gallons of water per head per day.

Because contaminated water may contain pathogenic organisms, treat it with chlorine to make it safer. Sodium hypochlorite (household bleach) at the rate of 2 gallons per 100 gallons water will be beneficial. Ideally, the water should be tested, but during a disaster this may not be possible.

Health Concerns

Emergency conditions that lead to the gathering of animals from various operations increases the risk of infectious diseases caused by a multitude of enteric and respiratory disease pathogens. In light of the difficulty imposed by attempting individual treatment, mass medication through the drinking water may be considered for treatment and control of infection. Large ruminants are frequently affected with bloat, diarrhea, and pneumonia during prolonged unusual events.

Prevention of most bloat and diarrhea can be accomplished through nutritional management. Pneumonia can be partially prevented through vaccination against respiratory pathogens and providing rest and fresh air during the disaster. Even the best managed cattle will contract some stress-related pneumonia and a treatment center should be set up for care of sick cattle.

Severe traumatic injuries will require individual examination and treatment. Lacerations and fractured bones may be detected in cattle during the aftermath of a disaster. The lacerations can be treated but fractures are difficult to manage in cattle and euthanasia may be required. Qualified personnel will conduct drug administration and pain management.

Housing and Sanitation

Dairy cattle should be kept clean, dry and comfortable. If the disaster occurs during the hot and humid season, shade must be provided if it does not exist in the area of confinement. Avoid total enclosure, but shelter animals with shade cloth or plastic tarp from the extremes of heat or cold stress. Cattle should be moved with care if the ambient temperature exceeds 30^{o} C (86^{o} F) in order to avoid heat stress. The comfortable range in temperature for dairy cattle is between 41^{o} and 78^{o} F. Beef cattle requiring medical care might be housed in a confined area to expedite treatment, but healthy cattle do better in pastures or paddocks, and they tend to settle down quicker when put in an environment similar to where they had been maintained prior to the disaster. In addition, the open air will help disperse respiratory pathogens.

Provision for manure removal is important. Cattle excrete about 5% of their body weight in manure and urine daily. Straw should be used for bedding, when required, because it will be easier to obtain and dispose of during times of disaster.

Zoonosis Concerns

The greatest risk is enteric pathogens such as salmonellosis, cryptosporidiosis, campylobacteriosis, and giardiasis. Adult cattle maintained in questionable sanitary conditions can transfer these diseases without becoming clinically ill. Calves and yearlings will usually become sick and require treatment. Contaminated water can be a source of pathogens for the cattle, therefore caretakers should use caution in handling cattle with diarrhea and never consume water from an unapproved source.

Euthanasia and Disposal

The recommended method of euthanasia is with an appropriate chemical injection. Euthanasia will be performed under supervision of qualified personnel. Records will be kept of all dead animals. Disposal of dead cattle can create a problem due to the potential health hazard and great volume of

carcasses. Methods such as deep burial or burning can be done if local air and water quality regulations permit.

Dogs and Cats

Behavior during the Disaster Event

Capturing pets during a disaster is made more difficult because the pet-owner bond may be overridden by survival instincts. Injuries, especially to young animals, are much more likely during a disaster. In the event that animals cannot be rescued due to the emergency, food may be delivered to the animals by the appropriate agency when possible.

Behavior during the Immediate Aftermath

Most pets, if given food, water and a cage to stand or lie down, will acclimate well with their new surroundings. The more antisocial animals, especially cats, may be calmed by providing them with a box in which to hide inside the cage.

Capture, Containment, and Restraint

Human life will not be risked to capture loose animals. However, many pets are socialized to human beings, and are easily caught. Offering food may capture loose hungry dogs and cats. In many disasters, there is too much noise and commotion during the day, and misplaced pets (especially cats) will stay hidden. Baited traps placed at night in the cat's home territory are very effective. Dogs are not trapped as frequently as cats, as they tend to move around whereas cats are often found in their home territory.

Trapping cannot be done during floods, as it is too dangerous to be on the water at night. The most common and available method of restraint of dogs is the muzzle and leash. Cats that can be caught may be subdued by wrapping tightly in a large heavy towel with only the head extended. Slip nooses can be used with traumatized, aggressive animals.

Tranquilization or sedation of injured animals may be necessary. Tranquilization will be done under supervision of qualified personnel.

Animal Identification Methods

Pet identification methods consist of collar and tags, implanted microchips, or tattoos on the inside of the ear, the lip, or the inside of the hind leg. Every animal that normally wears identification should have some form of identification put on it when it comes into a designated shelter. Animals without prior identification may be temporarily identified through use of uniquely numbered metal livestock tags tied with twine passed around the neck and knotted in a square knot. A corresponding numbered animal description sheet will be filled out on all animals entering a designated shelter.

Nutritional Requirements

Food will be provided as per supplies. Reasonable efforts will be made to maintain adequate diets. Qualified personnel will supervise dietary needs. Clean water should be provided daily at the rate of 1/2 gallon for average-sized dogs and 1 pint for cats. Because contaminated water may contain pathogenic organisms, chlorine may be used to make it safer. Sodium hypochlorite (household bleach) at the rate of 2 ounces per 100 gallons of water will be beneficial. Ideally, the water should be tested, but during a disaster, this may not be possible.

Health Concerns

Emergency conditions that lead to the gathering of animals from various locations increases the risk of infectious diseases caused by a multitude of viral and bacterial disease pathogens. The greatest risks to dogs and cats are rabies, parvovirus, canine distemper, feline infectious peritonitis, and feline

pan leukopenia. Unvaccinated puppies and kittens will often become sick and require treatment. Even the best managed facility will contract some stress-related respiratory disease and a treatment center should be set up for care of sick pets. Due to the difficulty imposed by attempting individual treatment, mass medication through the drinking water may be considered for treatment and control of infection.

Severe traumatic injuries will require individual examination and treatment. Lacerations and fractured bones may be detected in pets during the aftermath of a disaster. Qualified personnel will supervise pain management.

Housing and Sanitation

Cages may be utilized to provide temporary shelters. Temporary dog runs may be created using chain link panels obtained from construction companies or businesses that rent temporary fencing. The chain link panels should be 6 to 8 feet long with no gap along the bottom. Manure disposal will be in accordance with county and state regulations.

Zoonosis Concerns

Contaminated water can be a source of pathogens, therefore caretakers should use caution in handling animals with diarrhea and never consume water from an unapproved source.

Euthanasia and Disposal

The recommended method of euthanasia for dogs and cats is with an appropriate chemical injection or by carbon monoxide (CO). Qualified personnel will perform euthanasia. Because of the mass injuries that can occur in a disaster, the volume of chemical euthanasia solution or compressed CO in cylinders on hand may be exhausted early. Should this occur, there are acceptable alternate euthanasia methods recommended by the American Veterinary Medical Association that will be selected by licensed veterinarians. Records will be kept on euthanized animals. Citizens who are missing an animal will have access to those records that may help identify their animal. Animal carcasses will be rendered according to established Animal Control procedures or buried in the landfill and/or designated burial sites.

Appendix G: Animal Burial Guidelines During a Declared Emergency

Introduction

Proper burial and disposal will prevent potential public health problems resulting from large numbers of dead and decaying animals including the spread of harmful pathogens, ground and surface water contamination, and pest control. In certain situations, burial of dead animals may be the best alternative for immediate disposal. These guidelines are designed to insure burial is done in a safe and effective manner.

Legal Authority

Disposition of dead domesticated animals states that is generally the responsibility of the owner or person in charge of his domesticated animals to bury dead animals appropriately within 24 hours after knowledge of the death. It is the responsibility of the municipal or county government to designate appropriate persons to dispose of any domestic dead animals whose owner cannot be identified The State Health Director and by extension the Local Public Health Director (in coordination with the County Attorney's Office) in each county is charged with preventing health risks and disease and promoting a safe and healthful environment according to. To the extent that dead animals become a threat to human health, the State and Local Health Director has broad authority to investigate and act on matters to protect health.

Scope

While it is recognized that there are multiple types and degrees of emergencies that could create the need for dead animal burial, these guidelines focus on the most common causes. For example, guidelines for managing dead animals during a foreign animal disease emergency may differ and would be managed through the State Veterinarian. These guidelines are intended to address dead animal disposal during a declared emergency and therefore do not take the place of the dead animal disposal that occurs under the normal permitted operation of a farm.

Emergency Planning

Each farm operation shall make specific plans for animal disposal in the event of an emergency. When burial is determined to be the disposal method of choice, an attempt should be made first to bury the dead animals according to guidelines on the owner's farm. If proper burial is not possible on the farm then plans should be made for alternative sites.

Burial Standards

1. The bottom of the hole where dead animals are to be buried should be 3 feet above the seasonal high water table and must be at least 12 inches above the seasonal high water table in an area of well-drained soil. (Farm owners may contact the local soil conservation agency or the local health department for assistance in determining the seasonal high water table.)
2. Standing water in the hole does not preclude animal burial as long as the bottom of the hole is at least 12 inches above the seasonal high water table, not in an area of standing water, and the other conditions for proper burial are met.
3. There must be at least 3 feet of soil covering any buried animal. This can be interpreted to mean soil mounded over the animals above the adjacent ground level.
4. The burial site must be at least 300 feet from any existing stream or public body of water.
5. The burial site must at least 100 feet from any presently existing well.
6. The burial site must be at least 300 feet from any existing public water supply well.
7. The burial site cannot include any portion of a waste lagoon or lagoon wall.
8. In the case where the burial site is in a waste disposal spray field, the burial site is not available for subsequent waste spraying until a new viable crop is established on the site.
9. The burial site shall be located so as to minimize the effect of storm-water runoff.
10. Burial is not permitted in the tiled area of an under-drained field.

11. A record of the location of the approved site (GPS latitude and longitude coordinates if available), the burial history of each burial site to include the date, species, head count and age must be kept by the owner and reported to the Local Health Director who will in turn report this information to the appropriate State agency.
12. Farm owners and operators are encouraged to consider measures that could be taken prior to an eminent emergency that could reduce the impact on the farm and the environment.

Collective Burial Site

A collective burial site may be designated to serve one or more counties in the event of a large-scale emergency whereby individual farm sites are not available. The responsibility for disposal of dead animals remains with the owner, lessee, or person in charge of any land upon which any domesticated animals die. The county or municipality should identify an appropriate burial site(s) with the capacity to bury up to 5% of the steady state live weight of livestock in that jurisdiction. The use of an existing county or municipal landfill as a dead animal burial site is legal and preferred.

Burial Site Approval

Best farm practices suggest that a burial site with the capacity to handle the type and number of animals most likely to be needed during an emergency for each farm operation be identified and pre-approved prior to the emergency. It is recommended that the emergency burial contingency plan be incorporated into the farm's existing farm plan and duly reported to the appropriate state and local agency.

Appendix H: New York State Department of Agriculture and Markets Zoonotic Program Diseases

Anthrax
Avian Chlamydiosis (Psittacosis and Ornithosis, *Chlamydophila psittaci*)
Avian Influenza
B Virus (Cercopithecine Herpesvirus 1)
Bovine Brucellosis (*Brucella abortus*)
Botulism
Caprine and Ovine Brucellosis (excluding *B. ovis*)
Equine encephalomyelitis (Eastern (EE) and Western (WE))
Glanders (*Pseudomonas mallei*)
Hendra virus infection
Japanese Encephalitis
Nipah virus infection
Ovine epididymitis (*Brucella ovis*)
Plague
Porcine Brucellosis (*Brucella suis*)
Q Fever
Rabies
Rift valley fever
Tuberculosis
Tularemia
Venezuelan equine encephalomyelitis (VEE)
Viral hemorrhagic fevers
West Nile virus infection

Appendix I: Bioterrorism Diseases / Agents by Category

Category A - Diseases/Agents

The U.S. public health system and primary healthcare providers must be prepared to address various biological agents, including pathogens that are rarely seen in the United States. High-priority agents include organisms that pose a risk to national security because they

- Can be easily disseminated or transmitted from person to person;
- Result in high mortality rates and have the potential for major public health impact;
- Might cause public panic and social disruption; and
- Require special action for public health preparedness.

Anthrax (Bacillus anthracis)

Botulism (Clostridium botulinum toxin)

Plague (Yersinia pestis)

Smallpox (variola major)

Tularemia (Francisella tularensis)

Viral hemorrhagic fevers (filoviruses [e.g., Ebola, Marburg] and arenaviruses [e.g., Lassa, Machupo])

Category B - Diseases/Agents

Second highest priority agents include those that:

- Are moderately easy to disseminate;
- Result in moderate morbidity rates and low mortality rates; and
- Require specific enhancements of CDC's diagnostic capacity and enhanced disease surveillance.

Brucellosis (Brucella species)

Epsilon toxin of Clostridium perfringens

Food safety threats (e.g., Salmonella species, Escherichia coli O157:H7, Shigella)

Glanders (Burkholderia mallei)

Melioidosis (Burkholderia pseudomallei)

Psittacosis (Chlamydia psittaci)

Q fever (Coxiella burnetii)

Ricin toxin from Ricinus communis (castor beans)

Staphylococcal enterotoxin B

Typhus fever (Rickettsia prowazekii)

Viral encephalitis (alphaviruses [e.g., Venezuelan equine encephalitis, eastern equine encephalitis, western equine encephalitis])

Water safety threats (e.g., Vibrio cholera, Cryptosporidium parvum)

Category C - Diseases/Agents

Third highest priority agents include emerging pathogens that could be engineered for mass dissemination in the future because of

- Availability;
- Ease of production and dissemination; and
- Potential for high morbidity and mortality rates and major health impact.

Emerging infectious diseases such as Nipah virus and Hantavirus

Appendix J: CART Business Directory

Saratoga County

Animal Lovers & Switchplate Covers
76 Washington St, Saratoga Springs, NY 12866 (518) 584-3804

Thoro-Bred Feed Sales
259 East Ave, Saratoga Springs, NY 12866 (518) 584-4900

Crown Hay and Feed Inc
118 Jefferson St, Saratoga Springs, NY 12866 (518) 584-4414

Cheshire Horse of Saratoga
402 Geyser Rd, Saratoga Springs, NY 12866 (518) 584-5566

Greenfield Animal Hospital
3100 Route 9N, Greenfield Center, NY 12833 (518) 893-6228

Country Knolls Animal Hospital
379 Ushers Rd, Ballston Lake, NY 12019 (518) 877-7481

Mechanicville Country Living
133 N Central Ave, Mechanicville, NY 12118 (518) 664-7661

Hoosac Valley Farmers Exchange
212 S Main St, Mechanicville, NY 12118 (518) 753-6911

Sloppy Kisses A Btq For Dogs
22 Clifton Country Rd, Clifton Park, NY 12065 (518) 383-0103

Benson's Pet Shop
3083 Route 50, Saratoga Springs, NY 12866 (518) 584-7777

Sloppy Kisses
493 Broadway Ste 1, Saratoga Springs, NY 12866 (518) 587-2207

Dawgdom
441 Broadway Ste A, Saratoga Springs, NY 12866 (518) 306-6600

PetSmart
3033 Route 50, Saratoga Springs, NY 12866 (518) 580-9374

PETCO
3065 Route 50, Saratoga Springs, NY 12866 (518) 581-0149

Wild Birds Unlimited
3084 Route 50, Saratoga Springs, NY 12866 (518) 226-0071

Marlie's Healthy Pet Products
432 Broadway, Saratoga Springs, NY 12866 (518) 583-2783

Doggie Fortune Cookie
151 Jefferson St, Saratoga Springs, NY 12866 (518) 871-1614

Paw Lickers Bakery & Boutique
2526 Route 9N, Greenfield Center, NY 12833 (518) 893-2112
The Pet Zone
35 Kendall Way, Ballston Spa, NY 12020 (518) 899-9011

Cynthia's Hounds
1502 Saratoga Rd, Ballston Spa, NY 12020 (518) 885-6655

Pampered Pooch & Pals
2134 Doubleday Ave, Ballston Spa, NY 12020 (518) 363-0396

Everything Pets
800 State Route 50, Burnt Hills, NY 12027 (518) 399-1567

Hoochie Poochies
220 S Central Ave, Mechanicville, NY 12118 (518) 664-4939

The Dog Cabin
14 Beach Rd, Lake Luzerne, NY 12846 (518) 668-3251

Betty's Doggie Day Care and Boarding
361 W Maple St, Corinth, NY 12822 (518) 654-8509

Pet Zone
578 Aviation Rd Ste 27, Queensbury, NY 12804 (518) 761-6979

Happy Hadley's Pet Fun
91 Stony Creek Rd, Hadley, NY 12835 (518) 696-3848
:
Puppy Love Pet Salon
418 Geyser Rd, Ballston Spa, NY 12020 (518) 587-1575

Pet PDC
308 Allen Rd, Porter Corners, NY 12859 (518) 893-2800

Milton Manor Pet Spa & Resort
612 Route 29, Middle Grove, NY 12850 (518) 584-1212

Dog Guard
Ballston Spa, NY 12020 (518) 885-0175

WhiskersWatchers
Clifton Park, NY 12065 (518) 383-4605

Lucky's Pet Services
Serving the Saratoga Springs Area. (518) 490-1225

Pooch Palace
5 Katherine Dr, Burnt Hills, NY 12027 (518) 240-6117

Country Acres Farm & Pet Center
730 Saratoga Rd, Burnt Hills, NY 12027 (518) 399-1592

Warren County

Name	Address	City	Zip Code	Phone
Dogs By Helene	48 Lawrence St.	Glens Falls	12801	518-793-7221
Yankee Clipper	2199 Canada St. B	Lake George	12845	518-668-2547
The Dog Cabin	14 Beach Rd.	Lake Luzerne	12846	518-668-3251
Agway	1071 State Route 9	Queensbury	12804	518-792-3377
Benson's Pet Center	118 Quaker Rd.	Queensbury	1284	518-793-6655
Classy Clip Grooming Salon	Mark Plaza 63 Quaker Rd.	Queensbury	12804	518-792-3150
Kelly's Emerald Feeds	672 County Line Road	Queensbury	12804	518-793-5474
North Country Veterinary Referral Center	454 Queensbury Ave.	Queensbury	12804	518-480-4230
Petco	756 Upper Glen St.	Queensbury	12804	518-792-3960
PetZone	Aviation Mall, 578 Aviation Rd.	Queensbury	12804	518-761-6979
The Glens Falls Kennel Club	474 Corinth Rd.	Queensbury	12804	518-743-0304
Tractor Supply Company	751 Upper Glen St. #1	Queensbury	12804	518-792-7777
Bella Dog Grooming	4408 State Route 9	Warrensburg	12885	518-623-3046
Nemec's Sport Shot & Farm	4036 Main St.	Warrensburg	12885	518-623-2049
Schroon River Animal Hospital	150 Schroon River Rd.	Warrensburg	12885	518-623-3181

Washington County

Sutherland's Petworks
1161 Dix Ave, Hudson Falls, NY 12839 (518) 747-3060

Walker's Farm Home & Tack
5565 State Route 4, Fort Ann, NY 12827 (518) 639-5223

Crown Hay and Feed Inc
118 Jefferson St, Saratoga Springs, NY 12866 (518) 584-4414

Cargill Animal Nutrition
4186 State Route 29, Salem, NY 12865 (518) 854-7417

Pet Foods & Supplies
7 Thomas St, Salem, NY 12865 (518) 854-7414

Charisma Pet Supplies
46 Dean Rd, Hudson Falls, NY 12839 (518) 792-5104

Wild Birds Unlimited
3084 Route 50, Saratoga Springs, NY 12866 (518) 226-0071

PETCO
Serving the Greenwich Area. (877) 513-3105

Hoosick Aquarium
130 Church Street, Hoosick Falls, NY 12090 (518) 892-8533

Infinity Pet Svc Inc
54 Old State Rd S, Eagle Bridge, NY 12057 (518) 686-8888

Appendix K: Pet Boarding Facilities

Saratoga County

Name	Address	City	Zip Code	Phone
Clifton Park/ Country Knolls Vet Hospital	379 Ushers Road	Ballston Lake	12019	518-874-0045
Ballston Spa Vet Clinic	365 Saratoga Ave.	Ballston Spa	12020	518-882-8937
The Haven Animal Hospital	2686 Route 9	Ballston Spa	12020	518-583-7865
Ronly's Kennels	427 Hop City Road	Ballston Spa	12020	518-885-1684
Burnt Hills Boarding Kennel	290 Lake Hill Road	Burnt Hills	12027	518-399-5218
Burnt Hills Vet Hospital*	145 Goode Street	Burnt Hills	12027	518-240-6117
E's Pooches Palace	5 Katherine Drive	Burnt Hills	12027	518-240-6117
Animal Care Hospital	1245 Route 146	Clifton Park	12065	518-383-6254
Canine to Five	1534 Route 9	Halfmoon	12065	518-579-0211
Animal Health Center	1656 Route 9	Halfmoon	12065	518-387-9943
Pet Lodge	1868 Route 9	Clifton Park	12065	518-877-9663
Pink Dog Parlor and Resort	662 Plank Road	Clifton Park	12065	518-371-5118
Liberty Canine Care Center	2108 Route 9	Round Lake	12151	518-899-5098
Waggs and Woofs	229 County Route 76	Stillwater	12170	518-441-6499
Absolute Best Care Pet Motel	480 Hudson River Road	Waterford	12188	518-235-2103
Bellyrubs Doggie Care & Boarding	1089 Saratoga Road	Gansevoort	12831	518-747-6815
Greenfield Animal Hospital	3100 Route 9	Greenfield Center	12833	518-893-6228
Paws N Claws (Saratoga Vet Hospital)	693 Route 9	Wilton	12831	518-836-5575
Milton Manor Pet Spa & Resort	612 Route 29	Middle Grove	12850	518-587-6673
Glamour Paws	426 Maple Ave.	Saratoga Springs	12866	518-584-1560
M & E Kennels	544 County Route 76	Saratoga Springs	12866	518-584-5095

*CLIENTS ONLY

Washington County

Known Animal Boarding Facilities

Name	Address	City	Zip Code	Phone
MYNE Training and Boarding	511 Pleasant Valley Rd	Argyle	12809	518-638-5488
Carriage Hill Pet Cottages	851 Dean Rd	Hudson Falls	12839	518-761-1124
Bellyrubs Doggie Daycare	44 Feeder St	Hudson Falls	12839	518-747-6815
Windy Mountain Kennels	87 Hulett Rd	Granville	12832	518-642-3046
Granville Small Animal Hospital	9928 NY 22	Middle Granville	12849	518-642-1283
Darrling Farm	699 Co Rd 61	Cambridge	12816	518-677-7075

Warren County

Name	Address	City	Zip Code	Phone
For Pet's Sake Veterinary Center	500 Glen St.	Glens Falls	12801	518-745-1177
GFK9	121 Warren St.	Glens Falls	12801	518-250-6959
Rondac Pet Services	216 Ridge St.	Glens Falls	12801	518-798-6882
Adirondack Animal Hospital	462 Ridge Rd.	Queensbury	12804	518-793-6663
Clendon Brook Pet Care Plus	20 Cone Mountain Dr.	Queensbury	12804	518-792-0303
Countryside Veterinary Hospital	270 Queensbury Ave.	Queensbury	12804	518-793-7083
Glens Falls Animal Hospital	66 Glenwood Ave.	Queensbury	12804	518-792-6675
North County Cat Hospital	13 Main St.	Queensbury	12804	518-793-0994
Quaker Animal Hospital	324 Quaker Rd. #4	Queensbury	12804	518-761-9299
Room for Paws	414 Corinth Rd.	Queensbury	12804	518-321-3633
Tails Wag Inn	21 Blind Rock Rd.	Queensbury	12804	518-744-4872
The Country Kitty B&B	1195 Ridge Rd.	Queensbury	12804	518-792-6369
Maple Lawn Bed & Biscuit	544 Warrensburg Rd.	Stony Creek	12878	518-696-4376
Schroon River Animal Hospital	150 Schroon River Rd.	Warrensburg	12885	518-623-3181

Appendix L: Pet Friendly Accommodations

Saratoga County

Name	Address	City	Zip	Phone	Fee	Restrictions
Cocca's Motel	2524 Route 9	Ballston Spa	12020	518-587-1000		Fees may apply
Hyatt Place	20 State Farm Pl.	Malta	12020	518-885-1109	$75	One time cleaning fee; max 2 dogs
Hampton Inn (CP)	620 Plank Rd	Clifton Park	12065	518-373-2345	$50	Per stay/ 100lbs. or less
Park Manor	7 Northside Dr	Clifton Park	12065	518-373-2255	$20	Dogs only/declared emergency
Residence Inn by Marriot	1740 Route 9	Clifton Park	12065	518-374-4444	$100	Per stay/ 50lb. max
McConchies Heritage Acres	2501 Northline Rd.	Galway	12074	518-882-6605	NONE	Shot Records
Alpine Lake RV Resort	78 Health Rd	Corinth	12822	518-654-6260	NONE	Shot Records
Rustic Barn Campground	4748 Route 9N	Corinth	12822	518-893-3177	$3	Shot Records/ Restricted Breeds/no cabins
Adirondack Gateway RV Resort	427 Fortsville Rd.	Gansevoort	12831	518-792-0485	NONE	Shot Records
Cold Brook RV Resort & Campground	385 Gurn Springs Rd	Gansevoort	12831	518-584-8038	NONE	Shot Records
Saratoga RV Park	4894 Route 50	Gansevoort	12831	518-798-1913	NONE	Shot Records
Autumn Moon Campground	7165 Kilmer Road	Middle Grove	12850	518-882-1858	NONE	Shot Records/ can't leave dogs in RV/tents
Adirondack Inn	230 West Ave.	Saratoga Springs	12866	518-584-3510	NONE	
Best Western Park Inn	3291 So. Broadway	Saratoga Springs	12866	518-584-2350	$15/20	Dogs under/over 50 lbs.
Comfort Inn and Suites	17 Old Gick Rd	Saratoga Springs	12866	518-587-3900	NONE	Dogs Only
Community Court Motel	248 Broadway	Saratoga Springs	12866	518-587-3900	NONE	Dogs Only
Gideon Putnam	24 Gideon Putnam Rd.	Saratoga Springs	12866	518-512-7748	$50	Per night
Holiday Inn	232 Broadway	Saratoga Springs	12866	518-584-4550	NONE	
Residence Inn by Marriot	295 Excelsior Ave	Saratoga Springs	12866	518-584-9600	$75	
Saratoga Downtowner	413 Broadway	Saratoga Springs	12866	518-584-6160	NONE	
St. Charles Motel	188 Broadway	Saratoga Springs	12866	518-584-2050		Fee for damage only
St. Francis Motel	195 Broadway	Saratoga Springs	12866	518-584-2050		Fee for damage only
Schuyler Yacht Basin & Marina Campground	1 Ferry St. Route 29	Schuylerville	12871	518-695-3193	NONE	Shot Records

Warren County

Name	Address	City	Zip	Phone	Fee	Restrictions	Year Round
Colonial Court Motel	4623 Lake Shore Dr.	Bolton Landing	12814	518-644-2145		Fees may apply	May-Oct
Timberlane Cottages	Lake Shore Drive	Bolton Landing	12814	518-644-5901	$50	Per pet/shots records	June-Sept
Twin Bay Village	4804 Lake Shore Dr.	Bolton Landing	12814	518-644-9777		Fees may apply	June-Sept
Pine Tree Motel	5537 State Route 8	Chestertown	12817	518-494-3429	$25	Per pet	Apr-Nov
Rancho Pines Campground & Cottages	2854 Schroon River Rd.	Chestertown	12817	518-494-3645		Fees may apply	May-Oct
Riverside Pines Campsites & Cabins	1 Carl Turner Rd.	Chestertown	12817	518-494-2280	$5/$35	Per day/Per week Crate & Records	May-Oct
Twin Pine Lodge	28 Sequettes Rd.	Chestertown	12817	518-494-4355	$35		YR
Adirondack Adventure Resorts	969 E Schroon River Rd.	Diamond Point	12824	518-623-3954		Fees may apply	May-Oct
Beckley's Cottages	3950 Lake Shore Dr.	Diamond Point	12824	518-668-5225		Fees may apply	Mar-Nov
Hillview Cottages	3647 Lake Shore Dr.	Diamond Point	12824	518-668-5539	$25	Fee per pet/2 pets only up to 50lb each	May-Oct
Trout House Village Resort	9115 Lake Shore Dr.	Hague	12836	518-543-6088	$25	Per night/pet Off season only	YR
Adirondacks Cabins at Mill Creek	117 Washer Hill Rd.	Johnsburg	12843	917-254-1151		Fees may apply	YR
Amber Lantern Motel & Cottages	3601 Lake Shore Dr.	Lake George	12845	518-668-4613	$15	Per night	May-Oct
Cedarbrook Motel & Cottages	3141 Lake Shore Dr.	Lake George	12845	518-755-1726		Fees may apply	May-Sept
English Brook Cottages	2888 State Route 9	Lake George	12845	518-527-8584	$25	Per day plus $100 security deposit. One dog only 30lbs max	May-Oct
Green Haven Resort Motel	3136 Lake Shore Dr.	Lake George	12845	518-668-2489		Shot records/Fees apply	YR
Lake George Inn	444 Canada St.	Lake George	12845	518-668-2673		Fees may apply	Apr-Oct
Lake George RV Park	74 State Route 9	Lake George	12845	518-636-4597	None		May-Oct
Lake Haven Motel	442 Canada St.	Lake George	12845	518-668-2260		Fees may apply	May-Oct
Lake View Inn	5 Canada St.	Lake George	12845	518-668-4400		Fees may apply	May-Sept
O'Sullivan's Motel	410 Canada St.	Lake George	12845	518-668-5424	Varies	Up to 2 small pets/Fee varies with weight. $50 failure to clean fee	May-Oct
Roaring Brook Ranch & Tennis Resort	22016 State Route 9N	Lake George	12845	518-668-5767	$10	Per pet/per night	May-Oct
Super 8 Lake George	3619 State Route 9	Lake George	12845	518-623-2811		Fees may apply	YR

The Balsam Motel & Cottages	430 Canada St.	Lake George	12845	518-668-3865		Dogs Only/Fees may apply	May-Oct
The Blair House	2734 State Route 9	Lake George	12845	518-668-2871	$15	Per night	May-Oct
Travelodge	2011 State Route 9	Lake George	12845	518-668-5421		Fees may apply	May-Oct
Woodbine Motel	75 Dieskau St.	Lake George	12845	518-668-3048		Fees may apply	May-Oct
Elms Waterfront Cottages	1 Bay Rd.	Lake Luzerne	12846	518-696-3072		Fees may apply	May-Oct
Hide-A-Way Waterfront Cottages	138 Hidden Valley Rd.	Lake Luzerne	12846	518-696-2248	$25/ $125	Per day/Week Must bring own blankets	YR
Luzerne Court	508 Lake Ave.	Lake Luzerne	12846	518-696-2734	$25	Per night Fee Pets up to 30lbs	May-Oct
Villa Marina Inn	1420 Lake Ave.	Lake Luzerne	12846	518-696-6057		Fees may apply	Mar-Oct
Black Mountain Lodge	2999 State Route 8	North Creek	12853	518-251-2800		Fees may apply	YR
Garnet Hill Lodge	39 Garnet Hill Rd.	North River	12856	518-251-2444	$75 $75	Per room/2 dogs max Per night horse boarding	YR
The “N” on Mountain Spring Lake	105 Nichols Rd.	Pottersville	12860	518-494-3873	None		June-Sept
Alpenhaus Motel	851 State Route 9	Queensbury	12804	518-792-6941		Fees may apply	YR
Red Roof Inn	931 State Route 9	Queensbury	12804	518-745-4000	None	One pet per room	YR
Super 8 Queensbury/Glens Falls	191 Corinth Rd.	Queensbury	12804	518-761-9780		Fees may apply	YR
Stony Creek Inn	6 Roaring Branch Rd.	Stony Creek	12878	518-696-2394		Fees may apply	May-Dec
Stony Creek Ranch Resort	465 Warrensburg Rd.	Stony Creek	12878	518-696-2444		Fees may apply	May-Oct
Budget Inn	4046 Main St.	Warrensburg	12885	518-623-2955		Fees may apply	YR
On the Way Bed & Breakfast	2021 Route 28	Wevertown	12886	518-251-2900	$15		YR

Appendix M: Animal Control Contact Information

Saratoga County

Jurisdiction	Name	Phone
Ballston	Tom Shambo	518-885-8706
Village of Ballston	Mark Hersh	518-857-6606
Village of Ballston	Dave Brown	518-376-8035
Charlton	Gary Banks	518-365-8271
Clifton Park	Terri Cook	518-371-6756
Corinth	Alicia Floud	518-748-2616
Day	Francis Allen	518-696-3617
Edinburgh	Bill Vannostrand	518-863-4880
Galway	Tom O'Brien	518-882-6237
Greenfield	Channon Emigh	518-893-0163
Hadley	Jim Jenkins	518-696-3757
Halfmoon	Beth Abramson	518-348-0196
Malta	Dave Brown	518-376-8035
Malta	Anthony Pieronne	518-288-5061
Mechanicville	Joe Lecuyer	518-321-1433
Milton	Amber Tonkin	518-885-9220 ex. 158
Moreau	Dexter Baker	518-232-3912
Northumberland	Ed Cross	518-587-0792
Providence	Bill Schwab	518-883-5981
Round Lake	John Stevenson	518-587-5830
Saratoga Springs	Denny Butler	518-584-1800
Saratoga	Ed Cross	518-587-0792
Stillwater	Clayton Russom	518-253-4663
Waterford	Jeff St. Dennis	518-237-3341
Wilton	Ron or Joan Stunzi	518-587-2291
Village of South Glens Falls	Ed Robbins	518-743-0148

Warren County

Jurisdiction	Name	Phone
Town of Bolton	George Mumblow	518-848-6143
Town of Chester	Florence Converse	518-494-2163
Town of Hague	Daniel Steitz	518-543-6161
Town of Horicon	Darian Granger	518-494-9675
Town of Johnsburg	William Mosher	518-251-4423
Town of Lake George	Warren County SPCA	518-793-4048
Town of Lake Luzerne	Warren County SPCA	518-793-4048
Town of Queensbury	Warren County SPCA	518-793-4048
Town of Stony Creek	Maxine Zwartkay	518-696-5991
Town of Thurman	Warren County SPCA	518-793-4048
Town of Warrensburg	Warren County SPCA	518-793-4048
Village of Lake George	Warren County SPCA	518-793-4048
City of Glens Falls	SPCA of Upstate New York	518-798-3500

Washington County

Jurisdiction	Name	Phone
Town of Argyle	Ed Holland / Nancy Quell	518-692-2840
Village of Argyle	Ed Holland / Nancy Quell	518-692-2840
Town of Cambridge	Ed Holland / Nancy Quell	518-692-2840
Village of Cambridge	Ed Holland / Nancy Quell	518-692-2840
Town of Dresden	George Ferguson	518-499-0298
Town of Easton	Ed Holland / Nancy Quell	518-692-2840
Town of Fort Ann	Todd Humiston	518-812-6898
Village of Fort Ann	Todd Humiston	518-812-6898
Village of Fort Edward	Todd Humiston	518-812-6898
Town of Fort Edward	Todd Humiston	518-812-6898
Town of Granville	Ed Holland / Nancy Quell	518-692-2840
Village of Granville	Ed Holland / Nancy Quell	518-692-2840
Town of Greenwich	Ed Holland / Nancy Quell	518-692-2840
Village of Greenwich	Ed Holland / Nancy Quell	518-692-2840
Town of Hampton	Larry Carmen	518-926-9753
Town of Hartford	Ed Holland / Nancy Quell	518-692-2840
Town of Hebron	Ed Holland / Nancy Quell	518-692-2840
Town of Jackson	Ed Holland / Nancy Quell	518-692-2840
Town of Kingsbury	Todd Humiston	518-812-6898
Town of Putnam	Steve Peters	518-547-8444
Town of Salem	Ed Holland / Nancy Quell	518-692-2840
Village of Salem	Ed Holland / Nancy Quell	518-692-2840
Town of White Creek	Ed Holland / Nancy Quell	518-692-2840
Town of Whitehall	Ed Holland / Nancy Quell	518-692-2840
Village of Whitehall	Ed Holland / Nancy Quell	518-692-2840

Appendix N: Emergency Management Checklist

Phase 1

Call CART Leader – to notify rest of Team
Situation –Quantity and type of animals; details (HAZMAT, injured, dead)
Location – Incident, Staging Area, Command Post
Contact at Scene – Incident Command, Access to Scene

Notify Ag & Markets – Roger Ellis
Beth Holmes

Phase 2

Request additional help through State or IMAP

Assumptions

EOC is already open or not needed
DHSES is aware of the situation – NY Responds open an incident
CEO has already issued a State of Emergency
Shelter is open or not needed

Appendix O: References

Websites

https://www.empiresart.com/
http://www.usaha.org/
http://vet.purdue.edu/index.php
https://www.saratogacart.org/

Smartphone Applications

 ERG