Community Animal Disaster Response Planning Guide

Utah Department of Agriculture and Food

Division of Animal Industry

Utah Community Animal Response Program

bit.ly/ucarp

Community Planning Guidance
Contents

Part 1 - Why Plan For Animal Issues in a Disaster?

I. Why plan for animal issues in a disaster?

In a disaster, the most important function of emergency services is to save human lives. So why should you use precious and limited resources to evacuate and shelter animals in a disaster? Why spend time planning for animal issues? There are two main reasons: first, emergency managers have a legal requirement to have a plan for managing household pets and service animals during a disaster. Second, saving animals saves human lives. We know that people will risk their own lives (and those of responders) to save the lives of their own pets or other animals, and loose animals and animal carcasses present a public health risk that can delay recovery efforts.

Comprehensive planning efforts for animal issues before a disaster strikes will save lives, reduce risky search and rescue efforts, reduce recovery costs by utilizing volunteers and available community resources, and prevent a public relations nightmare like was seen after Hurricane Katrina. This guide is designed to help your county or city develop a practical and functional Animal Emergency Response Annex for your Emergency Plan, as well as to identify volunteers and resources that are already available in your community.

A. Legal Requirement

During Hurricane Katrina and its aftermath, there were many stories about residents who died because they refused to evacuate without their pets, and people leaving their pets behind without food or water. The most famous story is of a young boy whose dog Snowball was forcibly taken from his arms as he was being evacuated from the Superdome; it is unlikely that he ever was reunited with his dog again.

As a result of Hurricane Katrina, in 2006 Congress passed the Pet Evacuation and Transportation Standards Act, or PETS Act. This act has four components.

1. It requires state and local emergency preparedness operational plans to take into account the needs of individuals with household pets and service animals before, during, and after a disaster.
2. It grants FEMA the authority to approve the standards of those plans, and to assist state and local communities in developing plans for household pets and service animals.
3. It allows FEMA to provide financial assistance to state and local authorities for animal emergency preparedness issues. This funding can be used for procurement, leasing, construction, or renovation of emergency shelter facilities and materials.
4. It allows FEMA to provide assistance to individuals with household pets and service animals during a federal disaster.

As you can see above, the focus of the PETS Act is on household pets and service animals. There is no legal requirement to develop plans for horses, livestock, or other non-traditional pets. However, the needs of these animal owners are of equal importance to those with dogs and cats, and a comprehensive animal emergency plan should address all species.

B. Animal Numbers

Depending on the size of a disaster, evacuation orders may affect hundreds to thousands of animals. The most commonly used statistics for estimating pet numbers come from the American Veterinary Medical Association. In their 2017-2018 U.S. Pet Ownership & Demographics Sourcebook, the AVMA reported the estimated percent of households with dogs, cats, birds, and horses, and the average number of animals per household, seen in the table below.

	Dogs	**Cats**	**Birds**	**Horses**
% households owning	38.4%	25.4%	2.8%	0.7%
Average # per household that owns that species	1.6	1.8	2.1	2.1
Average # per household for all households	0.614	0.457	0.058	0.015

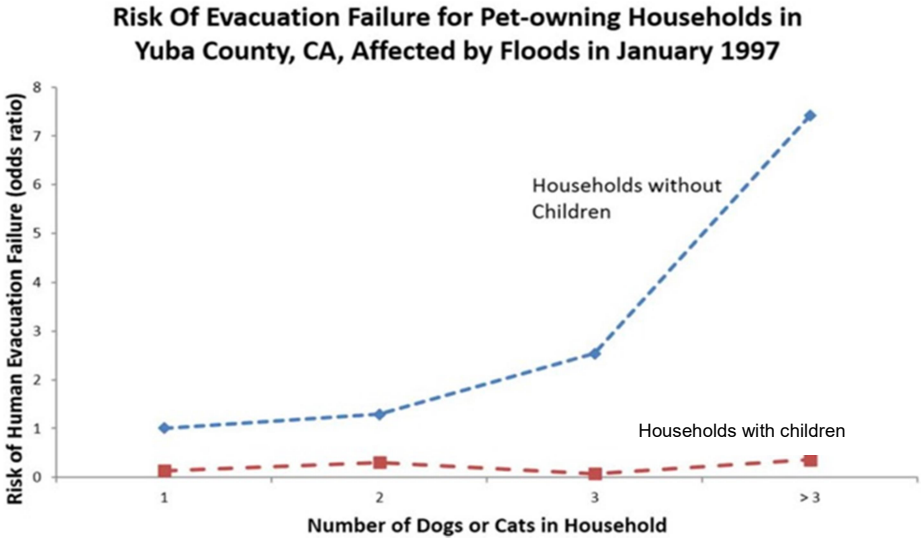
Using these statistics, we can estimate that for every 100 households that need to be evacuated, there will be 61 dogs, 46 cats, 6 birds, and 1-2 horses affected. Based on studies of previous disasters, approximately ten percent of those affected animals will require sheltering.

The American Pet Products Association has even higher estimates for the number of pet-owning households. They estimate that 63% of households own a dog, and 43% own a cat. Because of differences in demographics and methods of estimating the number of pets, any method you use may over- or under-estimate the number of pets in your jurisdiction. However, these estimates can be a useful starting point to identify resource and volunteer needs, as well as determine potential locations for emergency animal shelters.

The Utah Department of Agriculture and Food (UDAF) puts out yearly statistics on the number of livestock in the state and by county (except where there are only one or two producers in a county). These statistics often do not include hobby farmers, 4H or FFA project animals, and people who own livestock as pets.

C. Refusal to Evacuate

Studies from previous disasters indicate that up to 25 percent of pet owners (or ten percent of all evacuees) will refuse to evacuate because of their pets.[1] This is the single highest reason given for refusing to evacuate. The risk of evacuation failure is the highest in households with no children and multiple pets. For every additional pet, households without children were twice as likely to fail to evacuate. For dog-owning households, having multiple dogs or outdoor dogs were most linked to evacuation failure; for cat-owning households, the lack of a cat carrier and having multiple cats were the most linked. Planning and outreach to these households prior to a disaster and provision of evacuation resources like pet carriers or leashes can reduce these numbers and save lives.



D. Pets left behind

Other studies of disasters have found that 20 to 50% of pet-owning households will leave animals behind when ordered to evacuate, even with advance notice of a disaster[2,3]. There are many reasons given for failure to evacuate pets, including:

- Owners thinking they would not be gone for long
- Greater concern for the safety of family members
- Inability to transport the pet
- Inability to catch the pet
- Instructions to not evacuate their pet

In the studies of animal abandonment in both rapid-onset and slow-onset disasters, pet evacuation failure was significantly associated with low pet

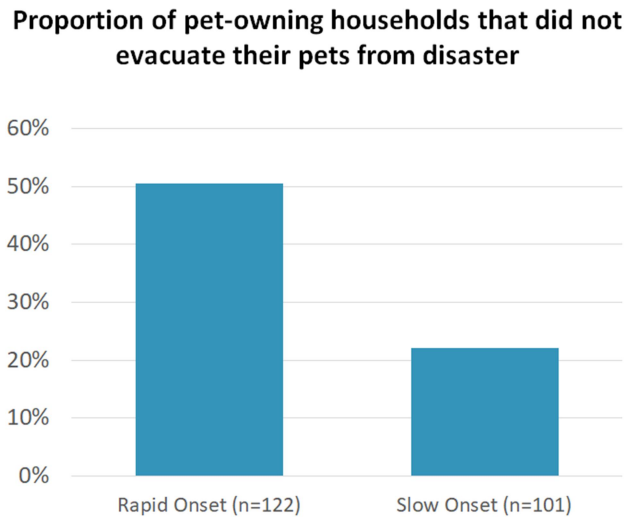
[1] Sebastian E. Heath, Philip H. Kass, Alan M. Beck, Larry T. Glickman, Human and Pet-related Risk Factors for Household Evacuation Failure During a Natural Disaster. American Journal of Epidemiology, Volume 153, Issue 7, 1 April 2001, Pages 659–665, https://doi.org/10.1093/aje/153.7.659

[2] Sebastian E. Heath, Alan M. Beck,; Philip H. Kass, Larry T. Glickman. Risk factors for pet evacuation failure after a slow-onset disaster. J Am Vet Med Assoc 2001;218:1905–1910.

[3] Heath SE, Voeks SK, Glickman LT. Epidemiologic features of pet evacuation failure in a rapid onset disaster. J Am Vet Med Assoc 2001;218:1898–1904.

attachment scores, outdoor dogs, and not having cat carriers. These low pet attachment scores were associated with pets that had not visited a veterinarian in the year prior to the evacuation, dogs that were not licensed, animals that are not spayed or neutered, and animals without personal identification. The characteristics of households that left pets behind are the same characteristics in households that relinquish pets to humane societies and animal shelters at other times. It is thought that disasters may simply accelerate the process of pet abandonment among these pet owners.

Efforts to encourage responsible pet ownership, improve the human-animal bond, and emphasize spaying/neutering pets, permanent identification, and regular veterinary care may help reduce the risk of pet evacuation failure during a disaster and pet relinquishment at other times. Also, assistance with providing cat carriers and catching outdoor dogs as well as public messaging about evacuation of pets at the time of evacuation may decrease the number of abandoned animals. Animal control officers should be included in evacuation assistance teams because of their experience in handling aggressive and loose animals.



E. Early Return to Unsafe Areas

Approximately 50 to 70 percent of pet owners who fail to evacuate their animals will attempt to re-enter secure areas to rescue their animals. Others will see stories about abandoned animals on the news or social media and will self-respond to rescue the animals. Obviously this is not only extremely dangerous for those individuals, but also for emergency personnel who may be called upon to rescue them if they are trapped or injured. Animal search and rescue teams that investigate reports of abandoned animals may help reduce this risk.

F. Animal Carcasses - Public Health Risk

Disasters may kill large numbers of animals, especially livestock. In 1997 in California, flooding killed 218 dairy cattle that were unable to be evacuated. Decaying carcasses, whether livestock or pets, can contaminate water sources or lead to outbreaks of disease. Timely carcass removal and disposal is critical. There are limited methods for environmentally-acceptable disposal of animal carcasses, especially when there are large numbers of livestock carcasses.

G. Economic Impact on Agriculture

Animal agriculture in Utah is valued at more than $1 billion per year. In 25 of Utah's 29 counties, animal agriculture is the dominant agricultural sector. While only one in 50 Americans is directly employed in agriculture, one in 12 Americans is employed in an agriculture-related field. The loss of a large farm or ranch due to a disaster will not only affect the owners and employees of that farm, but also truck drivers, nutritionists, feed mills, and local restaurants and stores.

H. Self-Responders

Two types of self-responders may show up when animals are impacted by disasters. The first is untrained and emotionally driven individuals. These individuals mean well, but can be very disruptive and create challenges for emergency managers and law enforcement.

The second is "rescue groups". Some of these groups are very well-trained and helpful, and some are not. Even among the well-trained groups, there have been issues of misappropriation of donations and resources. During Hurricane Katrina, the Humane Society of the United States raised $34.6 million for animals, but only spent $18 million locally. Noah's Wish raised $8 million and only spent $1.5 million locally. Other groups have taken donated items for their own use without permission.

Effective control of self-responders is critical, but can only occur when a well-coordinated disaster response effort is in place. A county or city animal plan allows for appropriate identification of resources and training of individuals within the structure of the plan, and can minimize the number of untrained and unsolicited volunteers during disaster response.

I. Public Relations

Animals and animal issues attract media attention, which invites public scrutiny. Pictures of abandoned animals and heroic rescues abound in almost every disaster. The failure to adequately manage animal transportation, evacuation, and sheltering in a disaster may result in higher resource requirements, place additional human lives at risk, and result in significant public outcry and negative media coverage.

Part 2 - The Planning Process

I. Characteristics of an Effective Planning Process

Effective planning for animal issues in a disaster will help ensure successful response efforts. The following characteristics are needed for an effective and comprehensive planning process:

1. The planning process is used to reduce unknowns in the anticipated needs of animals affected by disasters.
2. The plan is based on what is likely to happen and what people are likely to do. They are not based on worst-case scenarios.
3. The plan is based on facts, including the number of animals in the jurisdiction and people's typical behaviors..
4. The plan includes public information and awareness programs to educate animal owners about preparedness activities, evacuation procedures, and sheltering activities.
5. The plan includes training for emergency responders, including volunteers.
6. The plan has been validated through exercises, review, or real world incidents.

II. Definitions of animal groups

A. Household Pets

The PETS Act of 2006 only requires disaster planning for household pets and service animals. It further defines household pets as "a domesticated animal, such as a dog, cat, bird, rabbit, rodent, or turtle that is traditionally kept in the home for pleasure rather than commercial purposes. Household pets do not include reptiles (except turtles), amphibians, fish, insects/arachnids, farm animals (including horses), and animals kept for racing purposes." (FEMA, 2007, p. 1-2)

B. Service Animals

"Service animal means any dog (or miniature horse) that is individually trained to do work or perform tasks for the benefit of an individual with a disability, including a physical, sensory, psychiatric, intellectual, or other mental disability. Other species of animals, whether wild or domestic, trained or untrained, are not service animals for the purposes of this definition. The work or tasks performed by a service animal must be directly related to the handler's disability. Examples of work or tasks include, but are not limited to, assisting individuals who are blind or have low vision with navigation and other tasks, alerting individuals who are deaf or hard of hearing to the presence of people or sounds, providing non-violent protection or rescue work, pulling a wheelchair…. The crime deterrent effects of an animal's presence and the provision of emotional support, well-being, comfort, or companionship do not constitute work or tasks for the purposes of this definition." (ADA 2010).

C. Non-Commercial Livestock

To many people, pets are any animal that a person will not part with in times of danger because the animal is considered part of their family. This may include non-traditional pets like goats, chickens, or alpacas. Non-commercial livestock are animals that do not traditionally live in the house; they live in barns, fields, or corrals and are raised for companionship as well as utility. During a disaster, responders and shelter managers may be presented with a wide variety of horses, chickens, sheep, goats, llamas, and alpacas. Owners of these animals expect that county or city animal response plans will also cover care and sheltering for these types of animals.

D. Commercial Livestock

Commercial livestock are those raised for production purposes, whether meat, milk, eggs, or fur. Because of the large number of animals at most farms or ranches, evacuation and transportation may be impractical or impossible for an area with limited resources. Also, livestock trailers on evacuation routes may hinder human evacuation efforts. Owners of farms or ranches must work with county or city planners to develop their own disaster response plans.

III. The County or City Animal Coordinator

At the beginning of the planning process, it is important to have a single individual to lead the process, called the County (or City) Animal Coordinator (CAC). The CAC has several important job responsibilities:

- Ensure that the appropriate stakeholders are included in the planning process
- Ensure that the Animal Emergency Response Annex is completed
- Develop Standard Operating Procedures and other planning materials
- Ensure that volunteers are recruited and trained
- Conducts exercises to test the plan
- Coordinates animal response activities in the EOC during a disaster

The CAC should be someone who has experience with animals and volunteers and understands emergency management, the unique characteristics of the jurisdiction, and the jurisdiction's needs and available resources.

Suggestions for the CAC include:

- Animal control directors
- Community veterinarians
- Humane Society directors
- Animal rescue directors
- Kennel or breed club directors
- County or city planners
- County Extension Agents
- CART coordinators

IV. The Planning Team

While the County Emergency Manager bears the responsibility to plan for and respond to animal issues in disasters, effective planning and response is best done by a team of stakeholders. Emergency planners should take advantage of the experience and knowledge of others, including those outside of government agencies.

Think outside the box when choosing people for your planning team. You will not only need people with expertise in emergency management and animal handling skills, but also those with expertise in legal issues, logistics, administration, transportation, and communication. While there may be hundreds of individuals with applicable expertise in your area, a small steering committee of no more than ten individuals will allow the most efficient use of planning time.

Potential committee members include:

Government Agencies

- County Emergency Services
- Local Health Department
- Animal Control
- Law Enforcement
- Fire/Rescue
- Parks and Recreation
- Waste Management
- Social Services
- Utah Department of Agriculture and Food (UDAF)
- Utah Department of Emergency Management (DEM)
- Neighboring counties

Volunteer Organizations

- Local Veterinary Medical Associations
- Utah Veterinary Medical Association
- Humane Societies
- Rescue Groups
- School Groups (4H, FFA)
- Wildlife Rehabilitation Groups
- Local Food Banks
- Red Cross and Salvation Army
- Kennel clubs

Industry Groups and Businesses

- Cattlemen's, Dairy, or Horse Associations
- Animal Transporters
- Pet Food and Supply Businesses

- Farm Supply Stores
- Stables
- Boarding or breeding kennels
- Horse Tracks
- Utility Companies
- Local Zoos or Animal Parks
- County Fair Organizations
- Hardware Stores

Other Individuals or Organizations

- Local Veterinarians/Veterinary Clinics
- Agricultural producers
- Farriers
- Lawyers
- Utah State University School of Veterinary Medicine
- County Cooperative Extension Agents
- University/college professors
- Public Information Officers
- Pet trainers or groomers
- Pet sitters
- Large property owners
- HAM radio operators
- Realtors
- Elected and Community Leaders

V. Conduct Research

A. Laws and Regulations

Before any planning can be done, it is important to review any federal, state, local, and tribal laws that may regulate response efforts or the ownership, handling, or daily care of animals. For example, many counties have laws regulating licensing, permitting, vaccination, and treatment of animals. The term "pet" or "service animal" may be defined differently between jurisdictions. Also, whether an animal in a disaster is considered a "stray" or a "displaced owned animal" can have major impacts on what can be done in terms of treatment, vaccination, or euthanasia of that animal without the owner's consent.

B. Historical Incidents

Previous disaster response efforts may have included response to animal issues, including evacuation or sheltering. The responding organizations should have after-action reports, as well as contact information for individuals with experience from that disaster. Review the reports for information about equipment that was used, who responded, mobilization processes, and the set-up and demobilization of shelter facilities.

C. Existing Plans

Your jurisdiction should already have an Emergency Operations Plan in place, as well as hazard mitigation plans and other planning documents. Review of these plans may provide a great deal of information about hazard risks and vulnerability, placement of human shelters, evacuation procedures, and public information.

D. Animal Statistical Data

Each jurisdiction should create a profile of their animal population. The AVMA statistics in the previous section can be used for an initial estimate of pet numbers. Other sources of information on animal locations and populations may include:

- Local animal control
- Local business owners
- Veterinarians/Veterinary Clinics
- Humane societies/animal shelters
- Rescue groups
- Special needs organizations (for service animals)

E. Existing Data and Resources

The people on your planning committee and other stakeholders may be of great use in identifying what animal-related resources and plans already exist in your area. Some may have information on effective methods for response operations, such as emergency shelters.

VI. Integration with NIMS/ICS

The National Incident Management System (NIMS) is a common framework for managing disaster response at all levels of government from the local level to the federal level. Local authorities use the NIMS framework to create their Emergency Operations Plans to create the structure under which they respond to disaster events. The Incident Command System (ICS) is then used to manage the on-the-ground response to disasters.

Emergency Operations Plans are documents that describe who will do what, when, with what resources, and by what authority before, during, and after a disaster. The EOP assigns responsibilities for specific actions to organizations and individuals, sets forth lines of authority and organizational relationships, describes protection of people and property, identifies available resources, and identifies steps to mitigate concerns during response and recovery.

An Animal Emergency Response Annex is a formal document that outlines specific plans, agreements, and organizations or individuals responsible for the evacuation, rescue, and shelter of animals in an emergency. The Animal Emergency Response

Annex is included in the Emergency Operations Plan and must follow the NIMS and ICS framework. Generally, the Animal Emergency Response Annex is included with Emergency Support Function 11: Food and Water. However, animal issues often require coordination with multiple ESFs, including Transportation, Communications, Mass Care, Search and Rescue, and Public Affairs.

While the Animal Emergency Response Annex is the formal document, additional planning documents, including Standard Operating Procedures and forms, should be developed to cover detailed actions to be taken when completing response activities such as distributing evacuation supplies to individuals or setting up animal shelters.

VII. Identification of hazards

It is important to identify the events that are most likely to occur in your jurisdiction and will have the most impact on your community's animal population. Consider each hazard and the level of risk it has to your area. In some cases, you may need to identify the specific area most likely to be affected. Your jurisdiction may have already completed a hazard analysis for the Emergency Operations Plan. Some of those hazards may have an impact on people or businesses, but not on animals, so consider each hazard's impact on your animal population.

Following is a checklist of hazards and risks that may apply. Add any hazards that are not listed. For each hazard, mark the ones that are possible in your jurisdiction and list the level of risk as low, medium, or high.

Hazard	Hazard Presence	Potential Risk
Tornado		
Flood		
Blizzard		
Wildfire		
Severe weather		
Ice storm		
Nuclear Radiation		
Hazardous Chemical Spill		
Terrorism		
Infrastructure failure		
Mudslide		
Urban fire		
Earthquake		
Avalanche		
Other:		
Other:		
Other:		

VIII. Identification of needs

Using the hazards list you developed, develop a few disaster scenarios that could occur in your jurisdiction. For each scenario, make a list of what resources and supplies you will need to be able to successfully address animal needs.

You may also wish to identify locations for potential animal shelters in this step. Work with your mass care team to identify locations of human shelters and determine potential locations nearby (or within the same building) for an animal shelter. There is more information in the sheltering section on facility requirements for animal shelters.

Below is a partial checklist of potential resources and supplies that will be needed in a disaster. There are more detailed lists in each section.

Examples of Resources/Supplies	✓	Notes
Animal Cages		
Dog food		
Potable Water		
Cat litter		
Leashes		
Food and water dishes		
Horse halters		
Pitchforks		
Microchip Scanner		
Office supplies		
Document scanner		
Cat carriers		
Medications		
Rabies Vaccine		
Bandages		
Gloves		

IX. Identification of resources

Once you have identified your list of needs, determine what resources are available in your jurisdiction. Many resources may already be available for emergency response, such as animal control vehicles or microchip scanners. Compare the available resources to what is needed. For example, if your disaster scenario indicates that you will need to shelter 200 animals, and you only have 50 cages, you have a shortfall of 150 cages. Your planning must address how you will close that shortfall.

Resources may need to be purchased, or you may ask local businesses to donate supplies during a disaster. Work with your emergency manager to determine if FEMA grants may be available to help you close any resource gaps prior to or during an emergency. Also check with animal or community-oriented charitable organizations for possible grant opportunities.

Be honest when assessing the capabilities of your community. There may be resource shortfalls that have no current way to be filled. Be aware of these shortfalls and think about how to work around them in the planning process. It may take time to develop

some resources, like Community Animal Response Teams (CARTs). You may need to create formal agreements with neighboring jurisdictions to share resources.

X. Writing the plan

After creating your planning committee, identifying needs, and identifying resources, you now have the background information necessary to develop your jurisdiction's animal emergency response plan. The plan is a formal document that includes who will do what and when, with what resources, and by what authority before, during, and after the disaster.

A. Structure of a basic plan

A basic plan includes the following components:

- Introduction
- Purpose, Scope, Situations, and Assumptions
- Concept of Operations
- Organization and Assignment of Responsibilities
- Direction, Control, and Coordination
- Information Collection and Dissemination
- Communications
- Administration, Finance, and Logistics
- Plan Development and Maintenance
- Authorities and References

In most jurisdictions, the animal emergency response plan is an annex to the Emergency Operations Plan. The Emergency Manager will determine what format the plan should take. A City/County Animal Emergency Response Annex template is available on the Utah CARP website at bit.ly/ucarp.

B. Components that should be considered

There may be many separate components to consider when writing your animal emergency response plan. Many of these components are listed below. These will be covered in more detail in their individual sections.

1. **Rapid needs assessment**
    a) Rapid assessment of evacuation and sheltering needs
    b) Rapid assessment of shelter-in-place needs
    c) Rapid assessment of animal search and rescue
    d) Rapid assessment of animal decontamination needs
    e) Rapid assessment of animal disease issues
    f) Rapid assessment of at-risk animal populations, veterinary hospitals, animal shelters, stray animals, wildlife
2. **Evacuation and transportation**
    a) Support owners in the evacuation of their animals
    b) Evacuation of pets for owners relying on public transportation

c) Evacuation of animal facilities
d) Transportation of evacuated animals

3. **Sheltering**
    a) Pet sheltering operations
    b) Livestock/horse sheltering operations
    c) Shelter-in-place support
    d) Owner-animal reunion operations
4. **Search and rescue**
    a) Urban search and rescue animal support
    b) Primary animal search and rescue operations
    c) Technical animal rescue
    d) Animal control/stray management
    e) Dead animal documentation and disposal
5. **Veterinary care**
    a) Veterinary triage
    b) Clinical care
    c) Animal and public health response
    d) Euthanasia
6. **Decontamination**
    a) General decontamination (floodwaters, debris, etc.)
    b) Oil spill/hazardous chemicals
    c) Biological decontamination
    d) Radiological decontamination

C. Assign Responsibilities

Once you have determined what actions your plan will cover, you need to assign responsibilities to individuals or organizations for those actions. For example, what individual or organization will be responsible for opening and managing a pet shelter? Who will be responsible for coordinating transportation of injured or sick animals to a veterinarian for clinical care? Who will provide coordination between owners who have left animals behind and search and rescue teams? Who has responsibility for decisions regarding euthanasia if the owner cannot be found?

There may be more than one individual or organization involved in each component. The lead organization/agency should be specified as such, with other agencies/organizations listed as support agencies. A planning matrix that lists the missions or key tasks on one axis and the agencies/organizations on the other axis may be helpful. An example from NASAAEP is below.

Animal Emergency Annex Planning Matrix **SIMPLE EXAMPLE** Across the top: Missions Below: Responsible agencies/organizations	Animal plan development and maintenance	Rapid needs assessment	Animal evacuation – pets	Animal evacuation – livestock	Animal sheltering - pets	Animal sheltering – livestock	Veterinary medical care	Animal search and rescue	Animal decontamination
Emergency management agency	L	S							
Animal Control	S	U	L	S	S	S	S	L	S
Law enforcement agency	S	S	S	S		S		S	
Animal Shelter	S		S		L		S		S
Fire department	S	S	S	S		S		S	S
Veterinary association/veterinarians	S	S	S	S	S	S	L	S	L
Cooperative Extension	S	U		L		S	S	S	S
Livestock association	S			S		S		S	
Local VOAD/Red Cross	S				S	S			
Local search and rescue organization	S							S	S
Fairgrounds and Fair Board	S			S		L			
School district	S				S				
Local businesses (CO-OP, kennels, pet stores)	S				S	S	S		
L=lead agency S=Support agency U=Unified (shared) lead *Note: This is only an example, actual tasks and agencies/organizations will vary widely with the community*									

D. Plan Review and Approval

Each jurisdiction will have its own approval process that may require approval from the county emergency manager, local emergency planning committees, and elected officials. The CAC must work with the emergency manager to determine the review and approval process.

Once the plan is approved, responding agencies may be held to the assignments detailed in the plan, even when flexibility is needed. It may be best to create a clear and concise base plan, with details and supporting information in attachments or SOPs that do not require approval.

E. Updates and Enhancements

It is important to update and enhance your animal emergency management plan so that it remains accurate and relevant. Emergency managers regularly update their community Emergency Operations Plans. The CAC should find out the schedule for EOP updates and work with the emergency manager to update the animal plan at the same time. Be sure to keep contact information and agency/organization assignments current.

XI. Training and Exercises

An animal emergency management plan is only effective if the participating volunteers, agencies, and organizations are trained and ready to assist in a disaster. It is important to hold regular training for all responders and practice the plan through table-top or hands-on exercises.

Exercises for your volunteers may include:

- Completing intake paperwork
- Feeding and exercise routines
- Owner-pet reunions
- Animal handling
- Cleaning protocols
- Setting up a shelter

Table-top exercises are a facilitated discussion that guides responders through solving a set of problems in a group setting. The goals of a table-top exercise are to:

- Coordinate with other organizations
- Identify and prioritize response activities
- Identify available resources
- Identify mission essential tasks
- Identify gaps in your plan prior to an actual disaster.

Part 3 - Developing a Community Animal Response Team and Managing Volunteers

I. Volunteers

Many volunteers will appear during a disaster. However, it can be difficult to train volunteers on the spot with everything they need to know about the Incident Command System, sheltering, or animal handling. Identification of volunteers prior to a disaster, followed by training and exercises, allows for more effective response to animal issues during a disaster. Formation of those volunteers into a team with established tasks and a leadership structure allows for more rapid deployment.

During the planning phase, the City/County Animal Coordinator should identify areas of responsibility where volunteers will be needed and develop volunteer job descriptions, liability waivers, identification badges, and standards of conduct. During a disaster, a volunteer manager should be appointed to oversee all volunteers and document any just-in-time training. Volunteers should understand their specific roles and responsibilities and understand how they fit in the chain of command.

II. What is a Community Animal Response Team?

A Community Animal Response Team (CART) is a community-based disaster response team composed of trained and vetted local volunteers that is integrated with local government emergency response. A CART can save human and animal lives by assisting animal control and the public before, during, and after natural or man-made disasters.

III. Utah CART Program

The CART program in Utah is made up of local teams with state-level oversight of registration and training standards. The State CART Coordinator, based at the Utah Department of Agriculture and Food, sets the training standards for all local CARTs, provides training materials and public resources to CART leaders, maintains a website for more information at ag.utah.gov (and linked to BeReadyUtah.gov), and maintains a list of all registered CART teams within the state.

A CART may be sponsored by a city, county, school, workplace, or other organization. There may be multiple CARTs within a county or city. Any business or organization could create a CART, but they must meet the requirements below to be considered an official program.

An official CART program must:

- Be registered with the State CART Coordinator.
- Be approved by the local emergency manager.
- Be endorsed by the local Whole Community Coalition.
- Designate a CART Team Coordinator as the program point-of-contact

- Conduct or participate in CART in-person training once per year and a CART exercise or drill at least once every five years.
- Maintain all program and training records.

CART programs may:

- Specify the animal species they are willing to work with.
- Coordinate with other cities or counties within their region.
- Become a 501c3 organization to accept donations.

IV. Local Oversight

It is important that CARTs be integrated with local emergency management and be approved by the local emergency manager. A CART that does not coordinate with the City/County Animal Coordinator or the local Emergency Operations Center may create confusion or interfere with other emergency services. The roles and responsibilities of a CART should be defined in the Animal Response Plan, and the CART should be included in local planning, training, and exercises to ensure a seamless integration with the local Emergency Response Plan.

V. Goals and Structure

A. CART Coordinator

Every CART needs a CART Team Coordinator. This person is responsible for overseeing the team and its development. General responsibilities for a Team Coordinator include:

- Meeting with the City/County Animal Coordinator or local emergency manager on a regular basis to seek guidance and share ideas concerning training opportunities, especially those that could include both local animal and human health responders.
- Registering the CART with the State CART Coordinator
- Working with the City/County Animal Coordinator to identify local resources that could be utilized as part of an emergency response involving animals.
- Leading the team effort to recruit and retain volunteers
- Working with other CARTs or support agencies to coordinate activities

Depending on your jurisdiction's needs, the CART Team Coordinator may also be the City/County Animal Coordinator. During a disaster, the City/County Animal Coordinator should be in the Emergency Operations Center, so additional leaders may be needed to coordinate efforts in the field.

B. Considerations

Once a CART is approved by the local emergency manager and a CART Team Coordinator is selected, it is important to decide on the goals and the structure of the CART. The CART must be structured to meet the needs of the community. Some considerations when defining the goals and structure are:

- Should the CART focus on all animals or specialize in household pets or livestock?
- What function of response should the CART participate in (e.g. evacuation or sheltering)?
- If more than one focus or function, what leadership roles are needed for each focus/function?
- If a youth CART, what roles can the participants safely fill?

VI. Recruitment and Retention

Volunteers are often eager to help in the aftermath of a disaster, but they often lose interest over time when there is no disaster. Recruitment and training are best done shortly after a disaster in the area while the community's interest is peaked. A CART Team Coordinator must be creative to keep volunteers interested, trained, and reliable. They must regularly communicate with volunteers, promote a sense of teamwork, and keep members informed of events and plans. Regular practice will also keep volunteers engaged and ready for deployment.

Consider the following groups for volunteer recruitment:

- 4-H groups
- High school FFA
- College agricultural clubs
- Humane societies and animal shelters
- Veterinarians and veterinary technicians/assistants
- Kennel clubs
- Local cattlemen
- Farriers
- Local horse owners
- Pet store employees
- Local charities
- Local churches

VII. Training

A. CART Volunteer Training

CART volunteers not only need a desire to work with animals, but also training in the Incident Command System, animal handling skills, and practice in setting up and running an animal shelter. In Utah, the training requirements to become a certified CART volunteer are:

- FEMA Courses:
    - ICS-100: Incident Command System
    - ICS-700a: National Incident Management System
    - IS-10a: Animals in Disaster: Awareness and Preparedness
    - IS-11a: Animals in Disaster: Community Planning
    - CERT Animal Response Module I and II
- American Red Cross Pet First Aid

This is by no means an exhaustive list of the training courses available. Additional training may be needed at the local level on animal handling, search and rescue, technical animal rescue, and sheltering. The Utah CART Coordinator has links to resources for additional training. All the FEMA courses listed above can be found at https://training.fema.gov/is/

B. Just-In-Time Training

While, ideally, volunteers will be trained and have participated in exercises prior to a disaster, just-in-time training (JITT) may be required for volunteers during a disaster. Determine what would be required for JITT for each job description. It is best to use a "buddy" system for JITT by assigning the new volunteer to someone on staff that has already been trained. Just-in-time volunteers should receive a manual which includes an organization chart, policies and procedures, expectations, and an outline of what volunteers are and are not allowed to do.

A volunteer application should be utilized for all new volunteers. The application should list what training the volunteer has had, their areas of expertise, their vaccination history, medical or physical concerns, emergency contact information, and any other information you need for participation. Volunteers should have a current tetanus vaccination, and rabies vaccination is recommended for volunteers who will be working with aggressive or quarantined animals.

For more information, the Humane Society of the United States has a volunteer management guide at www.humanesociety.org/assets/pdfs/hsp/volunteer.pdf.

VIII. Assignments and Accountability

A. Tasks, Scope of Work, Job Descriptions

When deploying a CART, it is important to have clearly defined team tasks or a scope of work as well as individual job descriptions. Some of these tasks may be defined in the Animal Response Plan, but many will not. For example, you may wish to have CART members take reports of animals that were not evacuated and relay that information to animal search and rescue teams. Or in an

emergency animal shelter, you may need to assign CART members to intake, triage, feeding, exercise, donation management, transportation, or cleaning and disinfection. Having clearly defined tasks or job descriptions, as well as forms or checklists, will minimize confusion and improve response.

You may wish to create a Memorandum of Understanding between your jurisdiction and the CART, especially if the CART is part of an existing organization like 4-H or a humane society. The Memorandum of Understanding will lay out all the expected roles and responsibilities of that CART in the event of a disaster and may include community pre-disaster education and outreach efforts.

B. Volunteer Deployment

During a disaster, volunteers who have completed CART training may deploy as an unaffiliated volunteer or as one affiliated with a locally recognized team. The basic CART training enables individuals to safely respond of their own accord to help themselves and those around them when professional responders are not immediately available. An unaffiliated volunteer is acting in good will and is responsible for their own actions.

If the local government permits, CART-trained individuals can become affiliated with a locally-approved team. If individuals are acting within a deployed team, it is recommended that the sponsoring agency or local emergency manager put in place codes of conduct and operation guidelines and/or enact liability waivers for those volunteers.

C. Identification of Volunteers

Credentialed volunteers should have ID badges, t-shirts, or other markings to clearly indicate that they are volunteers or members of a CART. ID badges may be issued after completion of all the required and recommended training.

D. Youth CART Considerations

Some of your most fervent volunteers may be children or teenagers. It is important to remember that during a disaster, animals are frightened and may be more prone to bite, scratch, or kick. If your jurisdiction allows youth CARTs, carefully consider what job positions they may be allowed to fill. For liability purposes, you may wish to restrict children to positions that do not have contact with the animals or that minimize the risk of injury.

E. Legal Considerations

A volunteer application should be utilized for all new volunteers. The application should list what training the volunteer has had, their areas of expertise, their

vaccination history, medical or physical concerns, emergency contact information, and any other information you need for participation.

You will need to determine if Good Samaritan laws will cover actions that volunteers take in emergency response. Ensure that you have documented that personnel have the appropriate training and expertise to perform the activities they are assigned. You may also want to ask volunteers to sign a liability waiver in case of injury, illness, or death.

IX. Zoonotic Disease and Injury Safety

There are several hazards that volunteers working with animals may face. Zoonotic diseases are diseases that can be spread from animals to people. This can include diseases ranging from rabies to cryptosporidosis. People working with animals may also be bitten, scratched, crushed, kicked, stuck by a needle, or injured in other ways. It is important to make volunteers and disaster workers aware of the risks of working with animals and develop protocols for personal protective equipment (PPE) and infection control, and responders should be encouraged to receive some pre-disaster vaccinations, such as rabies and tetanus, to protect them in the event of a disaster.

A. Routine Infection Control Practices

The National Association of State Public Health Veterinarians (NASPHV) has put together a list of "Veterinary Standard Practices", which are routine practices that veterinarians and veterinary clinics can use to help prevent the transmission of zoonotic diseases from animals to people. These include hand washing, PPE, cleaning and disinfection, isolation, laundry, management of medical waste, and avoiding needle injuries. The document can be found at: http://www.nasphv.org/Documents/VeterinaryStandardPrecautions.pdf

If you plan to provide field veterinary treatment or a veterinary area within an animal shelter, it is important to include infection control practices in any Standard Operating Procedures. These should be developed in consultation with local veterinarians, the local or state Department of Health, and other experts. The UC Davis Shelter Medicine Program also has resources for shelters at www.sheltermedicine.com/.

B. Personal Protective Equipment

The type of PPE needed in a disaster depends on the type of animals and the hazards faced. If the disaster involves a chemical spill or another hazard requiring decontamination of people and animals, much more PPE may be required than for an earthquake or wildfire evacuation. In the event of a disaster, the state Zoonotic Disease Epidemiologist and State Veterinarian may be able to assist you in determining the level of PPE required for responders, both in the field and in a shelter.

The National Institute for Occupational Safety and Health (NIOSH) recommends the following for responders working with animals:

- Gloves - thick nitrile or PVC
- Protective eyewear
- Durable clothing - coveralls or long sleeve pants and shirts
- Lightweight waterproof garments if decontamination is required
- Protective footwear
- N95 mask

C. Vaccinations For Responders

While PPE is important for protecting disaster responders, some diseases may also be prevented through vaccination. Work with your local health department to develop a list of recommended vaccines for responders. It is up to the responders if they receive the vaccines. The CDC recommends the following vaccines for all disaster responders:

- Tetanus
- Hepatitis B

While not recommended by the CDC, the following vaccines may be recommended by your local health department:

- Hepatitis A
- Typhoid
- Pre-exposure rabies vaccine series

People who are exposed to potentially rabid animals should be evaluated and receive post-exposure prophylaxis. Those who have had the pre-exposure rabies vaccine series still need post-exposure prophylaxis. However, it makes the process simpler and may be protective in cases where the post-exposure prophylaxis is delayed or in cases of unrecognized rabies exposure.

D. Animal Bites

There are almost 5 million dog or cat bites every year in the United States, with most of those bites being caused by dogs. Pets, no matter how friendly they are normally, may become more fearful or aggressive during a disaster. Only responders with experience handling fearful or aggressive animals should handle animals, especially in a veterinary setting.

Animal bites can also lead to infections, some very serious. Cat bites tend to be small deep punctures that seal over, and commonly cause septicemia (or infection spreading through the blood). Dog bites tend to cause more tissue trauma, but can also cause infections. All bites should be reported, and anyone bit by an animal should seek medical treatment.

According to rabies experts and Utah Code R386, any pet that bites a person or another animal must be kept in strict isolation for at least 10 days and observed daily for signs of rabies. Animals that show signs of rabies must be euthanized and tested. The vaccination status of animals who are bit by a potentially rabid animal determines what happens with that animal.

Vaccine Status of Bit Pet	**Actions**
Vaccinated animals (up to date on vaccine)	● Assessment ● Wound cleansing ● Rabies booster ● Owner observation for 45 days
Overdue on vaccination	● Assessment ● Wound cleansing ● Rabies booster within 96 hours ● Owner observation for 45 days (longer if booster given after 96 hours)
Never vaccinated	● Immediate euthanasia OR ● Rabies booster within 96 hours ● Strict quarantine (no contact with animals or people) ○ 4 months dogs and cats (6 months if booster given after 96 hours) ○ 6 months ferrets
Unknown vaccination status	● Treat as unvaccinated OR ● Prospective serologic monitoring at Kansas State Rabies Laboratory

Part 4 - Rapid Needs Assessment

I. Rapid Needs Assessment

In the Incident Command System, the County (or City) Animal Coordinator (CAC) may be tasked with rapid needs assessment. The CAC should have contacts and communication networks in place to rapidly assess:

- Evacuation needs
- Sheltering needs
- Triage and veterinary medical care
- Shelter-in-place needs
- Animal search and rescue, including technical rescue
- Animal decontamination or hazardous materials
- Disease issues
- Carcass management
- At-risk animal populations
- Veterinary clinics, animal shelters, and kennels
- Livestock facilities
- Fairgrounds or other large animal sheltering locations
- Animal feed and supply retailers
- Stray animals
- Wildlife
- Damage to animal shelters and businesses

By having these contacts in place and a means to rapidly assess needs and infrastructure during a disaster, resources can be more rapidly mobilized to where they are most needed. For example, if a disaster is threatening the veterinary clinic that would ordinarily be used to treat injured or sick animals, the CAC must rapidly act to not only evacuate the animals already in that clinic to a facility adequate to meet their medical needs, but also identify a new veterinary clinic or makeshift clinic location to triage and treat animals.

The CAC must work with other ESFs before and during a disaster to save both animal and human lives. Some ESFs crucial to work with prior to a disaster to ensure consistent messaging and co-located sheltering include:

- 1 - Transportation
- 2 - Communications
- 6 - Mass Care
- 9 - Search and Rescue
- 15 - Public Affairs

Part 5 - Animal Evacuation

I. Animal Evacuation

The goal of evacuation planning is to maximize the number of people evacuated from a dangerous area. By having plans and resources in place for animal evacuation, a jurisdiction will reduce the resistance to evacuation, reduce the number of animals being abandoned, reduce the motive of animal owners to return to an evacuated area to rescue their animals, and increase public safety.

Previous studies have shown that up to ten percent of people ordered to evacuate, or 25 percent of pet owners, will refuse to evacuate because of their pets. Another 20 to 50 percent of pet owners will leave their animals behind when they evacuate, either because they were not home at the time of evacuation or they abandoned their animals. And five to 20 percent of evacuated people as well as untrained self-responders will attempt to re-enter an evacuated area to rescue animals that were left behind.

A. Support owners in the evacuation of their animals

1. Pre-Event Messaging

Before a disaster, the CAC and local CARTs should encourage pet owners to plan for disaster. Many groups find it effective to emphasize the human-animal bond, or to recommend planning for the "whole" family. This may include having a plan to evacuate to a pet-friendly hotel in a neighboring community, having a pet evacuation kit, or microchipping their pet for easy identification.

a) Family Evacuation Plans

Pet owners should be encouraged to develop evacuation plans for the "whole" family. Jurisdictions may wish to provide lists of pet-friendly hotels and boarding facilities.

b) Evacuation Kits

Pet owners should also be encouraged to put together evacuation kits for their pets. These are very similar to human evacuation kits, and some are commercially available. Pet evacuation kits for dogs and cats may include:

- Food and water
- Food and water bowls
- Leash
- Carrier or crate
- Cleaning supplies
- Cat litter or puppy pee pads
- Toys
- Blankets or towels

There are evacuation kit lists for dogs, cats, horses, livestock, and other species available on the Utah CARP website at bit.ly/ucarp.

c) Microchipping

Pet owners should be encouraged to microchip their pets and register the microchip. Microchipping is the most widely accepted form of permanent identification for pets and horses. Microchip scanners are widely available, and every jurisdiction should have a scanner or an agreement with an agency with a scanner in case of rescued animals or strays with no obvious owner.

During Hurricane Katrina, more than 400 horses had to be evacuated and sheltered when the levees broke. Because Louisiana requires permanent identification of horses (via microchip, lip tattoo, or brand) for their annual Equine Infectious Anemia (Coggins) test, shelter managers were able to reunite 95% of horses with their owners. However, they were only able to reunite 15% of the dogs and cats with their owners.

2. Identification of at-risk animal owners

Owners who may have a difficult time evacuating their animals should be identified prior to a disaster. These may include the elderly, the disabled, animal hoarders, and those with non-traditional pets, including livestock or horses. Some jurisdictions allow people to pre-register for assistance during evacuation. There may be agencies or organizations in your area that already have lists of people who may need assistance.

You can use AVMA demographic information, local animal control estimations, and special needs surveys to estimate the number of pets that may need assistance in evacuating. Pet-related businesses, including pet stores, veterinary clinics, boarding facilities, animal shelters, breeders, and kennels, may also need assistance.

3. Evacuation of pets on public transportation

Some pet owners may be relying on public transportation for their own evacuation, and it may be possible or even preferable for small pets to accompany their owners on public transportation. Transporting pets with their owners reduces stress and is less-labor intensive than having separate vehicles. However, these animals should be small enough to fit on the owner's lap or in a carrier under the seat. Considerations must be made for people with allergies to pets who also need public transportation. Pets should never take the place of a person.

Larger pets may need to be transported in a separate vehicle. It may be difficult to load and secure large crates in public transit vehicles. In

addition, the maximum number of seats must be available for human evacuation, and fighting between animals may result in injuries to animals and people.

If pets are to be allowed on public evacuation vehicles, personnel assisting with the evacuation must be clear on which pets are allowed and how they are to be transported. Also, it must be clear in the agreement for the vehicle that it may be used to transport pets.

If animals and their owners must be separated during the evacuation process, it is crucial that animals are properly identified to allow reunification with their owners after the disaster. In Louisiana, each owner must present an ID card, and each animal is given a unique ID number that is on all paperwork, a temporary collar for the pet, and a wristband for the owner. Some regions microchip every animal, and the microchip number becomes the unique ID.

4. **Livestock and horses**

Livestock and horses require extra consideration to minimize the risk of injury to the animals and their handlers. While smaller livestock like some sheep, goats, and pigs may be able to be transported in dog crates and personal vehicles, larger livestock like alpacas, horses, and cattle require trailers with adequate footing to prevent injury during transport. It is important for owners and emergency planners to develop a network of neighbors, haulers, farmers, producers, and others who have livestock or horse trailers to provide transportation in the event of an emergency.

Some evacuation routes may be restricted for human evacuation only. Identify routes that can be used for those evacuating animals in trailers, and communicate those alternate routes to all people directing evacuation traffic and any volunteers evacuating animals.

Owners should be encouraged to have permanent identification on their animals, an evacuation kit, and an evacuation plan. Owners should also do their best to keep buildings in good repair and minimize debris in pastures and corrals. They should keep a list of all their animals, their locations, and their favorite hiding spots. Forms of permanent identification include:

- Brands
- Tattoos
- Microchips or RFID tags
- Ear tags
- Ear notches (pigs)

Temporary forms of identification that can be used in the event of disaster include:

- Halter tags
- Neck collars
- Leg bands
- Mane clip
- Permanent marker on hooves
- Livestock marking crayon

It is also crucial to identify sheltering locations for evacuated livestock and horses, and communicate those locations to owners ordered to evacuate. For more information, see Part 7 - Animal Sheltering. If evacuation of livestock or horses is impossible, find the safest living area for those animals and make sure they have a supply of feed and clean water. Do not rely on automatic watering systems, because power may go out during a disaster.

5. **Non-traditional pets**

People may ask for assistance with evacuation of a wide variety of species, including backyard poultry, snakes, rabbits, and pocket pets (e.g. guinea pigs and hamsters). Ideally, pet owners will be responsible for evacuation of their own animals, and they will have cages or other temporary housing available for their pets. But, it is important to consider these other pets during the planning process.

The National Alliance of State Animal and Agricultural Emergency Programs (NASAAEP) has a comprehensive document for evacuation of non-traditional pets that may be a useful resource as you develop your evacuation plans.

B. Transportation of Groups of Evacuated Animals

After an animal shelter is set up, changing conditions or demobilization may necessitate that the animals in the shelter be moved to a different location. In a co-located shelter, the owners may be responsible for relocating their animals to the new location. In other cases, emergency services or the CAC may need to identify vehicles capable of safely transporting multiple animals.

C. Modes of Transportation

1. **Types of potential vehicles**

There are many potential modes of transportation for evacuation of animals, ranging from private cars to specially outfitted trucks. No mode of transportation will guarantee animal health and safety, and each has its own strengths and weaknesses.

The most important issue when transporting animals is environmental conditions during transport. Adequate airflow, temperature control, and the ability to monitor air quality are crucial when considering your transportation options, especially if long-range transport is needed.

The vehicles most commonly used in large-scale transportation of animals are:

- Personal vehicles
- Climate controlled cargo vans
- Box vans
- Farm/agricultural vehicles
- Public transportation
- Animal control units
- Modified animal welfare units
- Purpose-built animal transporters
- Transport refrigeration units

A description of each of these types of vehicles and their strengths and weaknesses can be found in the NASAAEP document "Animal Evacuation and Transportation: Best Practices".

2. Recommendations

No matter what type of vehicle is selected to be used for animal evacuation, NASAAEP has the following recommendations for emergency planners:

a. Provide transport groups with handheld radios so they can communicate directly with emergency services.
b. Establish contact information between drivers, senders, and receivers.
c. Have transporters provide specifics on the vehicles including: size, configuration, capacity, monitoring capability, water, exterior lighting, temperature control, etc.
d. Have a safety officer perform a safety check of vehicles and crates before and during operation.
e. Have contact information for emergency repair services in case a vehicle breaks down.
f. Have contact information for veterinary services along the projected route if a long-range haul.
g. Provide emergency food and water supplies.
h. Identify loading and unloading sites that offer loading docks suitable for ramp-style loading.
i. Assign a dedicated team to oversee animal loading, care, and inventory.

j. Check ingress and egress routing, weight restrictions, and bridge heights to ensure vehicles will be able to access sites.
k. Secure transportation management contracts prior to a disaster.
l. Ensure that only licensed and qualified drivers are operating vehicles, especially for vehicles exceeding 26,000 lbs.
m. Determine availability of vehicles from other agencies/jurisdictions and establish mutual aid agreements for the provision of vehicles and personnel.
n. Thoroughly clean the inside bays of vehicles transporting livestock and horses.

Part 6 - Animal Search and Rescue

I. Purpose of Animal Search and Rescue

The role of animal search and rescue is to coordinate with human search and rescue and public safety functions to locate, stabilize, extricate, and evacuate animals believed to be in distress, lost, abandoned, sick, stranded, trapped, or injured in a disaster. Search and rescue functions include both urban search and rescue and technical animal rescue, which is the use of specialized equipment and techniques to extract animals from hazardous circumstances such as vehicle accidents, swift water, or treacherous terrain.

Up to 50 percent of animal owners who did not evacuate their animals may attempt to enter an evacuated area to rescue their pets. Also, well-meaning members of the public may attempt to rescue animals, especially if they have seen reports of abandoned animals on TV. This creates risks for not only the animal owners, but public safety personnel and possibly the animals themselves. An effective search and rescue team with the proper equipment and trained personnel may reduce the number of people attempting to enter dangerous areas and save the lives of pets, horses, and livestock that were not evacuated.

II. Functions

Search and rescue personnel may be called upon to:

- Provide resources and expertise for animal rescue operations
- Conduct assessments
- Provide situational awareness to assist in coordination of animal rescue efforts
- Capture, confine, and transport animals to a shelter or veterinary facility
- Triage and provide emergency veterinary treatment
- Collaborate with shelter-in-place and feeding teams to deliver supplies
- Document actions and animal sightings

III. Authorities and Resources

Many agencies may have primary authority for search and rescue functions. These may include animal control, emergency management, public safety agencies, code enforcement, or public health. In the case of livestock, the state department of agriculture may have authority.

Many agencies and organizations may provide support for animal search and rescue. These include animal control, fire and rescue, trained animal or technical search and rescue teams, local or state agricultural personnel, CART, veterinarians and veterinary technicians, and Cooperative Extension.

IV. Planning

During the planning process, the CAC should work with human search and rescue agencies and organizations to ensure that any animal search and rescue is coordinated

with their efforts in a disaster. It may be important to have mutual aid agreements in place between agencies or jurisdictions prior to a disaster.

V. Training and credentialing

There is no national standard for training and credentialing animal search and rescue personnel. However, there are training programs available from several different organizations. It is up to the emergency manager or CAC to determine what level of training should be required for search and rescue personnel. In the future, it is possible that the Utah CARP will have a standardized training course or training requirements for animal search and rescue personnel.

The Douglas County Sheriff's Department in Colorado has the following proposed Animal Search and Rescue Responder Certification levels:

ASAR Operations	ASAR Technician	ASAR Specialist
FEMA ICS 100, 200, 700, 800	ASAR Operations certification	ASAR Technician certification
FEMA IS 10, 11	ICS 300	ICS 400
Animal Control, Capture and Behavior (NACA) (8 hrs) (or 1 year as an ACO)	Swiftwater Rescue (24 hrs)	Experience as a Team Leader/Command (Task Book)
Awareness Level HAZMAT course	High/Low Angle Rope Rescue (24 hrs)	OSHA HAZWOPER (24 hr) or equivalent
Animal handling experience (or min 1 year in shelter/clinic setting)	Awareness Level of Large Animal Rescue (8 hrs)	Operational Level Large Animal Rescue (24 hrs)
Introduction to SAR (available online, SARTECH III or equivalent)	Introduction to Assessment (4 hrs)	Wilderness First Responder (WFR)
Animal Emergency Sheltering (NARSC-endorsed)	Fundamentals of SAR (47 hrs)	Advanced SAR (19 hrs)
Human First Aid and CPR	Wildfire Operations for the Animal First Responder	
Pet First Aid	Compromised Structure Rescue	
Safe Boat Handling (USCG-approved)	Wilderness First Aid (NOLS WMLA - 16 hrs)	
Slackwater (16 hrs)		
Wildland Fire Safety Awareness for the Animal First Responder		
Animal Decontamination		

VI. Forms and Documentation

Forms or documents that may be useful for animal search and rescue include:

- Animal status form
- Animal response form
- Equipment list
- Organization charts
- Evacuation manifest
- Premises Searched notice
- Animals Removed notice
- Notice of Animal Shelter Location
- House Marking Procedures
- Rescue Request Form

VII. Search and Rescue Activities

A. Develop and maintain plans, procedures, and resources
   1. Incorporate search and rescue plans and procedures into the EOP annex
   2. Identify resources
   3. Develop resource allocation processes and procedures for search and rescue resources that are also used for other capabilities/functions
   4. Identify resources from other agencies/organizations
   5. Develop a plan for search and rescue volunteers or teams
   6. Develop plans, procedures, or protocols for logistical support for search and rescue assets

B. Develop and maintain training and exercise programs

C. Direct search and rescue tactical operations
   1. Receive search and rescue requests/orders
   2. Participate in the search and rescue planning process and operations briefings
   3. Plan and coordinate animal search and rescue operations at the incident site
   4. Determine the need for deployment of additional resources
   5. Provide situational awareness and response information
   6. Establish and maintain a chronological log of events in the field
   7. Document and collect operations information, including the chronological log for after-action reviews
   8. Reassign and rotate technical specialists
   9. Maintain the accountability of animal search and rescue personnel
   10. Develop a team reassignment or demobilization plan

D. Activate search and rescue teams in response to notification
   1. Initiate the mobilization procedure
   2. Assemble personnel and equipment at the designated location
   3. Deploy resources

4. Transport the team to the incident scene
5. Collect and analyze incident information to assist deployment

E. Provide support
   1. Establish a base of operations
   2. Maintain accountability of team equipment and supplies

F. Conduct reconnaissance
   1. Assess the incident site to determine the best course of action
   2. Assess the site for hazardous materials/other environmental conditions
   3. Create a map of the search area
   4. Communicate findings and priorities to Incident Command/the County Animal Coordinator

G. Search for animals
   1. Ensure scene/site safety
   2. Ensure personnel have appropriate protective clothing and equipment
   3. Conduct an area search
   4. Identify and record potential/actual animal locations (alive and dead)
   5. Take animals to a safe point for transport to a shelter or veterinary facility
   6. Report progress on a regular basis to the search and rescue lead
   7. Maintain accountability for personnel, equipment, and supplies

H. Extricate trapped animals

I. Provide veterinary treatment
   1. Triage and stabilize animals
   2. Transfer injured or sick animals to a veterinary facility

J. Ensure personnel, equipment, and animals are properly decontaminated

K. Demobilization/Redeployment
   1. Repackage equipment
   2. Demobilize base of operations
   3. Provide transportation for personnel and equipment
   4. Debrief personnel

Part 7 - Animal Sheltering

I. Determining the Size and Type of Shelter

In a disaster, both evacuated animals and abandoned animals may require food, water, and shelter. People who cannot evacuate their animals to a shelter may refuse to evacuate or abandon their animals. Because of the resources and manpower required to establish an emergency animal shelter, it is critical to plan for animal shelters in advance of a disaster and to have trained personnel to set up, man, and close the shelter.

A. Estimated population that will need sheltering

It is estimated that ten percent of evacuees will require human sheltering, with slightly lower levels in affluent and very rural areas. You can estimate the number of animals that will require sheltering based on the number of houses being evacuated using AVMA statistics or other sources of pet ownership information.

Based on the AVMA statistics, for every 100 households that need to be evacuated, there will be 61 dogs and 46 cats affected. If 10% of those need to be sheltered, you would need to shelter 6 dogs and 4-5 cats. For example, in the Pole Creek Fire in 2018 in Juab, Sanpete, and Utah counties, 2000 households were evacuated, which should have affected 1,230 dogs and 910 cats and required sheltering of approximately 200 pets.

B. Types of shelters

1. Co-Located Shelter

In a co-located shelter, animals are sheltered with their owners. Owners are responsible for confining their animals, as well as feeding and exercise. Shelter staff may assist at night or if the evacuee is unable to care for their animal. This type of shelter has the lowest staffing needs. Many human shelters, however, will not accept animals other than service animals.

2. Nearby Shelter

In this type of shelter, the owners are housed in one facility and the animals are housed in a nearby facility or another part of the same facility. Owners would have access to their animals and, ideally, would assist in caring for them. Feeding, cleaning, exercising, and monitoring the animals' health and condition would fall more on shelter staff, so staffing needs would be greater.

3. Open Shelter

An open shelter may house owned animals, rescued animals, relinquished pets, dislocated shelter animals, and strays. Primary

responsibility for animal care will fall on shelter personnel and volunteers, so these have the highest staffing requirements. These types of shelters may require isolation and quarantine areas for sick animals and strays, and may require more veterinary care.

4. **Examples of Possible Shelter Locations**
   Work with the organizations that set up human shelters (usually the Red Cross or Salvation Army) to identify possible shelter locations in the same building or in a nearby building. Examples of possible shelter locations include:
   - Fairgrounds
   - School gymnasiums or hallways
   - Dog training centers
   - Pet daycare centers
   - Animal hospitals
   - Boarding facilities
   - Airplane hangars

5. **Large Animal Shelter**
   Dogs and cats are not the only animals affected by disasters. Horses, camelids, and livestock may all require evacuation and sheltering as well. Work with Utah State University Extension agents, stables, and ranch owners in your area to determine potential shelter locations and identify shelter personnel. Possible large animal shelter locations include:
   - Race tracks
   - Fairgrounds
   - Pastures
   - Stables
   - Equestrian centers
   - Livestock corrals
   - Auctions
   - Feedlots
   - Slaughterhouses
   - Utah State University (or other colleges/universities with animal science programs)

C. Types of animals

Be clear about what animals your animal shelter will accept in the event of a disaster. Birds, pocket pets, and reptiles may be difficult to care for in a shelter setting, especially if the shelter is too cold or too hot for the animals. Horses and livestock may require transport to facilities outside the area that can properly confine and care for them. The capability to house and care for different species depends on:

- The experience and expertise of shelter personnel
- Legal considerations
- Facility design and construction
- Capability to provide appropriate environmental and housing needs
- Health and safety concerns for humans and other animals

II. Resources and Donations

Each disaster may have unique needs, but having at least the minimum resources on hand will allow you to rapidly set up an emergency shelter. Acquiring outside resources will take time and may delay the establishment of a functional shelter.

A. Determining needs

Many organizations have compiled lists of commonly-needed items for small animal emergency shelters. Before a disaster, determine what particular resources you might need, and whether they are needed immediately or can be acquired during the response. Work with local businesses to build relationships so that you can purchase items through them or perhaps have materials and services donated. You may want to work with other organizations that are experts in disaster warehouse management to ensure that supplies are stored properly and to help track purchases, donations, and borrowed items.

PetSmart Charities and major pet food companies often contribute supplies or pet food to assist in emergency animal shelters. Most major pet food companies have regional representatives who may be contacted in the event of a disaster. It is important to minimize the number of brands of pet food being donated because a too-abrupt shift between brands or types can cause stomach upset and diarrhea.

As the disaster progresses, your needs for personnel and supplies will likely change. Stress and costs can be reduced if needs can be planned from 72 to 96 hours out. Road closures or other factors may impact shipped goods, so purchase supplies locally when possible. Try to schedule shelter staff and volunteers as far ahead as possible; personnel may have their own needs to cover.

B. Donations

In every disaster, and especially when animals are affected, people will want to help. Many people will try to donate “things”, such as pet food, blankets, and other supplies. The donations may be inappropriate or overwhelming. For example, disaster workers requested halters for horses in Hurricane Andrew. Four tons of halters were donated, and many were unusable.

If asking for donations, it is best to ask for donations of cash and/or gift cards. This will allow you to purchase exactly what you need. If you have specific

needs for items, use social media and stay on top of the request and replies, or you could find yourself overwhelmed. You may also be able to set up accounts with local stores or veterinary clinics that have not been directly affected by the disaster and have people donate directly to those accounts.

You should have a system in place to receive and acknowledge donations, especially if significant, and to manage those donations and other resources.

C. Volunteers

During a disaster, the shelter manager needs to determine the number of volunteers required, their roles and responsibilities, and the number of shifts based on the scope of the disaster and the type of emergency animal sheltering needed. A volunteer manager should be appointed for every shift of the operation to oversee all volunteers and document any just-in-time training. Volunteers should understand their specific roles and responsibilities and understand how they fit in the chain of command. For more information on volunteers, see Part 3: Developing a CART and Managing Volunteers.

III. Safety and Security

Your shelter may need to put in place safety and security policies to protect the animals, workers, owners, and others who come through the shelter.

A. Facility Security

Consider putting in safeguards to protect the facility. These may include:

- Have a log or other mechanism to manage and track all staff, volunteers, and visitors
- Designate a point of contact to coordinate all security
- Define roles and responsibilities for local law enforcement, building security, or others who may provide safety and security resources.
- Determine if any areas of the shelter will be considered completely off-limits, such as administration offices, meeting rooms, storage areas, or eating areas
- Determine if any areas of the shelter will require restricted access or surveillance, such as veterinary areas, animal isolation, drug storage, kennel areas, or communications/computer areas
- Ensure that the facility meets local fire/safety codes
- Post fire extinguisher and emergency exit signs if needed
- Establish a plan to evacuate or relocate shelter personnel
- Plan for service outages such as water, electrical, garbage, sewer, and climate control

B. Animal Health and Safety

To protect animal health and safety, consider:

- Photo IDs of all animals in the shelter kept in a secure location
- Perimeter fencing to prevent escapes
- Secure caging of animals to prevent dogs digging or climbing out
- Protocols to prevent animal theft
- Animal handling training
- Disease control/biosecurity protocols
- Cleaning and disinfection protocols
- Vaccination protocols
- Shift checks of animals and supply inventory

C. Human Safety and Security

To protect human safety and security, consider:

- How incidents are documented and tracked
- Preventing slips and falls
- Protocols for dog or cat bites or scratches, including rabies protocol
- Restricting access to drug/medical supply storage
- Identifying and addressing stress among shelter personnel and animal owners
- Establishing first aid protocols
- Addressing inappropriate behavior and illegal activities

IV. Shelter Set-up and Site Plan

It is important to develop protocols for and to practice setting up and breaking down a shelter before a disaster. Practicing setting up a shelter will give you a good idea how long it might take during an actual disaster, and will also help you determine ways to more efficiently set up a shelter and to determine if you need additional supplies, equipment, or training. Set-up protocols should be understood by all shelter personnel to minimize confusion during set-up.

A site plan is the layout of the shelter. It shows where different areas of the shelter are located (such as intake, isolation, and feeding areas), as well as entrances, exits, storage, and safety systems. Some EOCs may require a site plan, and it is recommended that the plan is posted in the shelter for personnel to reference.

Prior to setting up a shelter, the shelter manager or their designee should inspect the site, note any equipment, furniture, or other materials that are already present, and document the cleanliness of the site. The facility must have operational water, sewer, and power, adequate lighting and ventilation, a secure perimeter, and non-carpeted flooring for animal housing areas. Make sure that the shelter includes adequate space for cleaning, waste disposal, and storage. Depending on the type of shelter, you may also need administrative space, a visitation area for owners, or quiet areas for eating or resting.

A. Job responsibilities

1. Shelter Management

Shelter management can be set up in accordance with the ICS. The Shelter Director would be the Incident Commander. Other General Staff may oversee finance, logistics, operations, and planning. Command Staff may include a Public Information Officer, Safety Officer, and Liaison. Other supervisory positions may include Donations Manager, Supply Manager, Shelter Supervisor, Rescue/Transport Supervisor, and Veterinary Care Supervisor.

A "human resources manager" may be designated to oversee recruitment, orientation and training, record-keeping of personal data, and evaluations. Their top priority will be to make sure all personnel are placed in the right areas based on their level of expertise.

2. Shelter Staff/Volunteers

In the planning stage, develop job descriptions and responsibilities for emergency shelter staff and volunteers. Sample job descriptions can be found in the NASAAEP document "Emergency Animal Sheltering Best Practices" (www.thenasaaep.com/workshp-resources). Some critical job responsibility areas include:

- Animal intake and identification
- Animal-owner reunification
- Biosecurity, isolation, and quarantined animals
- Animal mortality management (carcass management)
- Animal or facility security
- Animal care
    - Feeding
    - Cleaning
    - Exercise
- Volunteer management
- Supply intake, organization, tracking, and utilization

Rules and policies regarding shelter personnel, including a code of conduct, should be clear and clearly communicated to every person working within the shelter. An organizational chart should be regularly updated and posted. Proper attire should be required, such as long pants and closed-toe shoes. All personnel should sign in and out. No personnel should interact with the media or post to social media unless authorized to do so.

B. Legal issues

Many legal issues may arise during a disaster. Legal personnel should be included on planning committees to address any questions or issues. Documentation of shelter activities is key, and all important documents should be stored in a safe and secure location for at least a year following the disaster.

1. Animals

During a disaster, animals in an emergency shelter without a known owner are considered “displaced owned animals”, and not strays. This may limit what treatments, vaccinations, or other care can be given to those animals without the owner’s permission. Protocols for bites must follow local and state reporting and quarantine requirements. It is also important to determine who has the authority to make euthanasia decisions for sick or injured animals.

Unclaimed animals must be held in accordance with local laws. You must determine when the hold period begins and whether a longer hold period is required in the event of a disaster. If the hold period has not yet expired when the shelter closes, you may need to use local fosters to care for the animals until they are eligible for adoption.

2. Volunteers

Determine if Good Samaritan laws will cover actions that shelter personnel (including volunteers) take on behalf of the animals in the shelter’s care. Ensure that you have documented that personnel have the appropriate training and expertise to perform the activities they are assigned. You may also want to ask volunteers to sign a liability waiver in case of injury, illness, or death.

3. Facilities

A written lease should be documented for any facility used as an emergency animal shelter, and should cover all activities, liabilities, expectations, and responsibilities of each party. Be sure to inspect wiring, plumbing, and other utilities of a facility to ensure that your use of that facility will not overload its capacity. Make sure that the facility meets OSHA requirements for safety and health.

4. Worker’s Compensation/Liability Insurance

During the planning process, the CAC should determine which agency or organization is responsible for liability insurance and workers compensation. Does their general liability insurance cover emergency sheltering activities? If not, are “riders” or alternate insurance available to cover the agency or organization during the duration of the shelter? Will Worker’s Compensation insurance cover injured volunteers?

V. Intake and Identification

The intake process of the shelter will allow you to capture vital information about the animals in the shelter and track their progress through the facility. The process will allow you to verify the ownership of the animals and gather health history and other information about owned animals.

Some information you should capture during intake includes:

- Species
- Breed or type
- Color/pattern
- Size
- Hair length
- Sex
- Name
- Spayed/neutered
- Approximate age
- Owner contact information (if owned)
- Vaccination status
- Microchip number
- Photograph (preferably with the owner)
- Distinguishing marks
- Physical/medical status

You may need several people doing intake, preferably with good penmanship or good typing skills. Intake personnel should be able to explain the process and respond to any questions or concerns that owners have. Each animal should be given a unique identification number during the intake process, and that number should be given to the owner as well. Some organizations use barcodes on intake paperwork, cage cards, ID collars, and bracelets for the owners to match up owners with their pets.

If the animals are being brought in by rescuers instead of the owners, try to get good information about where the animal was found. The more information you can get on rescued animals, the easier it will be to reunite them with their owners. Always scan rescued animals for a microchip.

When possible, animals should be triaged at intake. Triage may include a physical exam, basic vaccinations, parasite treatment, injury treatment, and microchipping. For more information on triage, see Part 8 - Veterinary Care.

If owners bring their own crates or other supplies, note that on the intake form and, if possible, put the animal's identification information on the supplies so they are returned to the owner when they pick up their animals. Keep the supplies near the animal's cage so they do not get mixed up with general supplies.

VI. Animal Needs

A. Housing needs

It is recommended that you use the largest cages you can, especially if animals are to be confined for more than a few days. Larger housing allows for more movement, and can be less stressful for the animals. Animals that are confined to small spaces with minimal enrichment, human contact, or opportunities to exercise and play will become stressed, depressed, and unhealthy.

Some things recommended by NASAAEP include:

- Crates at least meeting AVMA minimum humane standards. When purchasing crates, get the majority in Large or Extra Large if possible.
- Barriers between crates to minimize stress and the spread of disease
- Placement of animals with like breeds (i.e. large breeds together, small breeds together)
- Isolation and quarantine of animals when appropriate
- An opportunity for animals to play and use their intelligence
- Consistency of care for feeding, watering, and cleaning
- “Lights Out” time when lights are turned off and quiet is enforced
- Placement of nursing animals in an isolated, quiet area providing privacy
- Use of enrichment chew toys
- Laundering or disposal of bedding
- Protocols for catching escaped dogs and cats
- Protocols for reporting behavioral issues
- Hiding spaces for cats (cardboard box, towel, etc.)

B. Sanitation

Because of stress, mixing of animals from varied environments, and other factors, it is more likely that shelter animals will shed or be exposed to infectious agents and parasites or other pests than in their normal environment. Emergency animal shelters must meet Federal OSHA standards on sanitation, and precautions must be taken to minimize the risk of disease spread. Diseases can be spread through feces, saliva, urine, air, insect or animal bites, and inanimate objects such as clothing, shoes, feed bowls, and toys.

Cleaning and disinfection protocols should be established and communicated regularly to shelter personnel. The protocols should be clearly posted in the shelter and should be included in orientations or shift briefings. Personnel should wear disposable gloves or wash their hands after touching each animal or enclosure. Animal waste should be removed from housing areas regularly and immediately if in common areas. This may be considered hazardous waste, and appropriate precautions must be taken to ensure it is disposed of properly.

Appropriate cleaning materials should be used, and products should be used according to their label to ensure proper disinfection. Use bleach or other disinfectants to wash any cement or solid surfaces after picking up feces. Products ending in "-sol", such as Pine-Sol or Lysol, should not be used around pets because they contain phenol, which is toxic for cats and dogs. Material Safety Data Sheets (MSDS) should be available for every substance used in the shelter.

If an isolation or quarantine area is established, then only designated personnel should be in those areas or healthy animals should be cared for first and then animals in isolation. Any PPE such as gloves should be changed, hands should be washed, and footbaths may be used when moving from one area to another. Separate equipment should be used for each area to limit cross-contamination.

C. Feeding Protocols

The food prep area should be kept clean and neat at all times. Food should be stored in vermin-proof containers and properly labeled. If multiple brands of food are being used (such as for donated foods), try to mix them together to avoid frequent changes in diet. Any special diets or foods designated for specific animals should be clearly labeled, and written feeding instructions and animal ID should be attached to the container. If using dry food, adult dog and cat food as well as puppy/kitten food should be available. A manual can opener and plastic lids may be needed for canned food.

An area should be designated for cleaning food and water bowls. Bleach may be used for disinfection. Stainless steel flat-bottomed bowls are preferred for dogs, while cats can be fed with paper plates or trays. Any bowls used in quarantine or isolation areas should be washed separately to avoid cross-contamination of bowls for other animals. Never scoop fresh food on top of old food; clean bowls of fresh food and water should be provided for each animal at each feeding.

Personnel should observe each animal's behavior at feeding time. Always be cautious and aware of an animal's body language when feeding. Animals may be food-aggressive, and any aggression towards personnel or other animals should be noted and immediately reported to a supervisor. Any animals that are not eating should be reported to a supervisor.

You may need to consult with a veterinarian if feeding species other than cats or dogs to ensure an adequate diet.

D. Common Signs of Illness

Animals should be monitored daily for signs of disease, and any signs of disease should be immediately reported to a supervisor and noted on an Animal Care Sheet. Some common signs of illness in dogs and cats include:

- Eyes that are watery, swollen, or show discharge
- Ears are red, inflamed, show discharge, or have a foul odor
- Nose shows discharge or is crusty, congested, or blocked
- Gums are swollen or inflamed, teeth are loose, or mouth has a foul odor
- Sneezing, coughing, or wheezing
- Fleas or ticks
- Skin swelling, lesions, wounds, abscesses
- Limping
- Animal is excessively thin or obese
- Abnormal body temperature

VII. Recordkeeping

There are many types of records that may need to be maintained while operating an emergency animal shelter. For each type of record, consider who is responsible for creating the record, how it will be stored, and when it can be destroyed. Your county may already have record retention schedules that govern the destruction of records.

Some possible types of records include:

- Intake and discharge records
- Animal treatment records
- Bite records
- Financial records of purchases, veterinary care, or travel
- Shelter supply inventory
- Shelter operation times (time shelter opened and closed)
- Personnel sign-in logs or time sheets
- Personnel work assignments
- Leases, contracts, utilities, or services contracted or paid
- Donations

VIII. Closing the Shelter

A. Planning for closing the shelter

Planning for closing the shelter should begin early in the sheltering process. Owners should understand that emergency animal shelters are just a temporary resource. There are several questions that should be thought through for the demobilization plan. These include:

- How will the closing of the shelter be communicated to owners and stakeholders?
- How will the closing be coordinated with the organizations running the human shelter or other disaster groups?
- If animals cannot be returned to their owners, are those animals considered relinquished?
- Do you have written agreements for owners to relinquish animals?
- Has the hold period for unclaimed animals expired?

- Are health certificates required for interstate movement, if needed?
- If animals end up in foster care, who is responsible for the animal, who makes medical decisions, and who pays for medical care?
- Where can you relocate sick and injured animals?
- When are sheltering expenses no longer reimbursable?
- How are you going to disburse unused supplies or durable equipment?
- Do you have enough personnel to thoroughly clean and dismantle the shelter facility?
- Are there transport issues that need to be considered?

B. Reuniting Animals With Their Owners

1. Owned Animals

Owners who brought their animals into the shelter should have documentation that links them to their animals. Some shelters use barcodes or unique identification numbers on the animals to easily reunite them with their owners. You may wish to take a photo of each animal with their owner at intake to more easily determine proper ownership.

If an owner is unable to care for their animals after the disaster, you may need to have contact information for rescue groups, boarding facilities, or others who are able to provide extended foster care until the owner can safely care for their animals.

If the owner designates someone else to pick up the animal from the shelter, request that that designation be in writing. The person picking up the pet should have the identification number for the animal and provide their personal ID at the time of pickup.

2. Rescued Animals

If an owner comes to the shelter to find their animal, make sure you do an initial interview with the person before allowing them to view animals in the shelter. Ask the owner if they have a photo of their animal, ideally one with the owner in it. If they do not have a photo, ask for any verification they have to prove ownership before relinquishing the animal. Have a staff member accompany the owner at all times, and do not allow them to “shop” for animals other than those matching the description provided by the owner. If any medical conditions were noted or treatments given during the animal’s stay, make sure that information is conveyed to the owner.

IX. Communications

There are three levels of communication that may occur during a disaster:

- External communications with the EOC or others in the chain of command
- Internal shelter communications (instructions, directions, guidance, and feedback)
- Media or public messaging to the community

A. External Communications

It is important that the shelter maintain communications with the CAC and others in the chain of command, especially to communicate its operational status and needs. All communications with the CAC need to be made through the shelter director or their designee to provide continuity and coordination. If the shelter is being run by multiple organizations, communication channels and relationships should be clearly defined.

B. Internal Communications

An internal communications plan defines how people will communicate information and updates within the shelter. This is especially important if there are multiple shifts or multiple organizations involved in the shelter. Many methods may need to be used, such as shift briefings, posted notices, in-person meetings, orientation briefings, and written flyers or other information.

C. Public Information

Determine how information will be released to the public and who will release that information. All public information should be coordinated with the CAC and the EOC PIO to ensure consistent and clear information is disseminated. If the shelter needs its own PIO, make sure one is designated for each shift or operational period. If multiple organizations are involved in the shelter, determine what information each organization can release and how that information is coordinated between the organizations.

Determine what information the general public needs, such as the location of the shelter, the allowed species, expectations, shelter hours and restrictions, or an explanation of the services being offered. For example, if owners are expected to bring their own cages or medical records, or the shelter will only take dogs and cats, how will you communicate that information to the public? If you are accepting donations, where and when should they be delivered and what donations will be accepted?

There are many methods of communicating information to the general public, including press releases/briefings, website updates, social media, and e-mail. Do you need to set up websites or social media accounts before or during a disaster? Do you have e-mail lists that you can use to send out e-mail blasts, and who is responsible for maintaining those lists?

D. Social Media

While social media can be extremely useful for disseminating information to the general public, you may also want to develop a social media policy for all staff and volunteers in a shelter. Improper social media posts may cause confusion or cause negative publicity for the shelter.

RESOURCES

National Alliance of State Animal and Agricultural Emergency Programs Best Practices Documents - www.thenasaaep.com/workshp-resources

ASPCA Sample Plans for Evacuation and Sheltering - https://www.aspcapro.org/resource/disaster-cruelty-disaster-response/sample-plans-evacuation-and-sheltering

Kansas Animal Shelter Plan - http://kansastag.gov/KDEM.asp?PageID=187

Illinois All Disaster Animal Evacuation and Emergency Sheltering Plan - https://nationalmasscarestrategy.files.wordpress.com/2013/06/localpetevacshelteringplan_feb_2008.pdf

Rhode Island Animal Shelter Manual - http://www.dem.ri.gov/animals/heac03.pdf

Humane Society of the United States Suggested Minimal Shelter Set-Up Needs for 100 Animals

Housing and Feeding

100-150 wire crates
25-50 airline crates (small & large)
200-300 Stainless steel bowls (various sizes)
1000 2# Dixie paper food trays
1000 Puppy Pads
Litter
100+ clip boards
300-500 shower hooks

Intake/Identification

1000 ID bands (large & small)
Animal Intake forms (triplicate)
Digital or Instant camera w/film

Volunteers/Staff

Volunteer Sign-In/Out Roster
Volunteer Release of Liability

Office Supplies

Pens
Copy paper
1 printer/copier
1 doz. Legal pads
Permanent markers
Stapler & extra staples
Small and large paper clips
Binder clips
2-3 pair Scissors
File box w/folders
1-2 binders with index tabs
3-hole punch
Dry erase boards and markers

Sheltering Tools and Supplies

50 slip leads
Animal Care Sheets
Soft muzzles (various sizes)
3 rolls 55-gallon garbage bags
Large garbage cans
5-10 buckets
Duct tape (silver, lime, orange, pink)
1000 zip ties
500 gallon-size zip lock bags
Paper towels
1 doz. Spray 32-oz. bottles
2 bottles Dawn
1 case Bleach
Can opener
Broom and dust pan
Minimum 2 folding tables
Tool box
3 50’ electrical cords
6 large tarps
2 first aid kits
3 flashlights with backup batteries
Crank or battery-operated weather radio
Portable generator(s) with fuel
1000 pairs of latex exam gloves
Stethoscope
Syringes
Gauze
Bandaging
Newspaper

Part 8 - Veterinary Care

I. Considerations

Veterinary care may be crucial during a disaster or other emergency to not only treat individual injured and sick animals, but to prevent a disease outbreak in a shelter. In smaller emergencies, a single local animal hospital may be able to treat and house all affected animals. However, in a larger disaster, it may be necessary to provide care in an emergency animal shelters.

There are many laws covering veterinary care of animals, and it is important to understand how those laws may impact your ability to provide veterinary care to animals in need of treatment or to use vaccinations or other medications to prevent a disease outbreak. It is also important to assess your available resources to determine if animals can safely be provided veterinary care at a shelter, or if local veterinary hospitals will be needed, and to establish those relationships prior to a disaster.

A. Personnel

1. Classification

There are two main positions in veterinary response: veterinarian and animal technician. There may be multiple categories of animal technicians, because under the Utah Veterinary Practice Act there are certain procedures that may be performed by licensed veterinary technicians, but not by unlicensed technicians. There may also be duties that can be performed by volunteers with little to no technician experience.

2. Professional licensure

Veterinarians, except for federal veterinarians, cannot practice veterinary medicine in states in which they are not licensed. For example, a veterinarian licensed in Colorado cannot practice veterinary medicine in Utah without having a current Utah veterinary license issued by the Division of Occupational and Professional Licensing (DOPL). The State Veterinary Medical Board may have the discretion to grant temporary licenses in the event of an emergency.

3. DEA licensure

Certain pharmaceuticals are considered “controlled substances” by the DEA, and those pharmaceuticals can only be used by a DEA-licensed veterinarian. (In some cases those pharmaceuticals can be used by animal technicians under the direct supervision of a veterinarian.) DEA licenses are site- and state-specific, so a veterinarian may only be allowed to use those drugs at their veterinary clinic. If asking a veterinarian to provide service at a location other than their clinic, it is

important to ensure that all laws regarding controlled substances are followed.

4. **Liability**
   Veterinarians should check with their liability insurance provider prior to providing any veterinary treatment to determine if they are covered for actions outside of their clinic and to what extent they are covered. Some volunteers may be covered under Good Samaritan laws.

   Some states have legislated liability coverage for responders when they are deploying with a state-sponsored organization such as a registered Medical Reserve Corps unit.

B. Storage and Inventory Management

If you plan to have a veterinary treatment area in a shelter, you will need to ensure that there is adequate storage for pharmaceuticals and other necessary supplies. Refrigeration capabilities may be required for certain medications and vaccines. A lockbox may be required for any controlled substances.

An inventory system should be developed to track the use of medications and other supplies. It is especially important to carefully log all use of controlled substances. For livestock, it is essential to carefully track all dosages of medications given and their appropriate withdrawal times for meat and milk to prevent antibiotic or other residues.

C. Availability and source of supplies

Before a disaster, determine where you will source veterinary supplies. Will they come from local veterinary hospitals? From other local sources? From national distributors? Have supply lists ready and contacts in place prior to a disaster to ensure rapid acquisition of needed products.

II. Triage

Triage is sorting animals by their immediate medical needs according to the available medical resources. The goal of triage is to do the greatest good for the largest number of patients. Field triage generally consists of a rapid exam or assessment followed by classification into the following categories:

- Likely to survive regardless of care
- Critical, but may survive with lifesaving measures
- Dead or likely to die regardless of care

In a shelter intake setting, the categories may include:

- Healthy
- Minor injury or simple treatment
- Greater care required

- Infectious disease
- Intensive care

During triage, four things are generally assessed: respiration (breathing rate and depth), heart rate, pulse character, and neurologic status. Those doing triage should also note any signs of infectious disease, including nasal discharge, skin diseases, or diarrhea. Animals with signs of infectious disease at triage should be kept separate from the general population until it is determined that they are not a risk to the health of the other animals.

Behavior assessment is often included as part of the triage process. Aggressive animals should be kept away from the general population, and only specified responders, usually animal control officers, should be allowed near those animals.

For non-household pets, similar categories can be used for triage. However, many responders may not be familiar with non-household pets, so it may be difficult to place them into the correct categories. For example, sheep often do not show signs of disease unless very sick, and the wool coat may hide parasites or poor body condition. If horses or livestock are evacuated, it is good to have an “on-call” large animal or mixed animal veterinarian who is familiar with the species. In the same way, an exotics veterinarian may be needed for non-traditional pets such as rabbits, birds, pocket pets, or reptiles.

All triage findings, whether in the field or in a shelter, should be recorded on a triage form, and that form should stay with the animal until it is returned to its owner. The triage form, along with daily assessment forms, can be used to document progress of the disease or injury. There are many triage and intake forms available; the RedRover Emergency Animal Rescue Services form is often recommended.

III. Intake

Triage may take place in the field or during intake. However, there are many more things that can take place during shelter intake to help identify animals in need of veterinary care and to protect the health of all animals (and people) in the shelter.

During intake, all animals should be scanned for a microchip. Universal scanners are best as they can detect a number of brands of microchips. In a study, 13% of microchips were detected on a second scan, but not on the first scan. A proper and thorough scan must be done on every animal that does not have proof of ownership. Animals without a microchip should have individual ID that remains attached to the animal the entire time it is in the shelter such as a collar or leg band; cage cards may not move with the animal.

A. Physical examination

The physical examination may also serve as triage or it may be more thorough than the initial triage. The goals of a physical examination are to limit or prevent a widespread disease outbreak, properly group animals, confirm the accuracy of the description (e.g. confirm that an animal is neutered or use the teeth to determine age), and to initiate an accurate medical record.

The diagnostic equipment required for physical examination depends on the health status of the animals and the thoroughness of the exam:

Basic	Otoscope (ears) Ophthalmoscope (eyes) Stethoscope Thermometer
Mid-Level	Microscope Parvovirus test Refractometer FeLV/FIV tests Heartworm test Glucometer Urinalysis dipsticks Scales
Advanced	Chemistry analyzer Digital x-rays Centrifuge Microhematocrit centrifuge Giardia snap test

A standardized protocol and forms that allow consistent reporting of physical exam findings can help ensure consistency of veterinary care across shifts and shelters during a disaster. In addition, there should be a plan of action for reporting problems and tracking the response.

B. Vaccination and Parasites

Unless an owner can provide clear proof of current vaccination of their pets, experts recommend that all animals entering a shelter receive core vaccines and treatment for internal and external parasites. Even in cats that are current on their vaccinations, a booster of feline calicivirus and herpesvirus may be beneficial. These vaccines should be provided as early as possible, because a delay in administration could lead to outbreaks. Live vaccines are preferred because they provide more rapid immunity than killed vaccines. For many vaccines, the effect on pregnant animals is unknown, so a veterinarian should be consulted prior to vaccination of pregnant animals. All vaccinations should be recorded in the animal's medical record, and any reactions should be recorded.

Recommended core vaccines for animals in a shelter:

Species	Core Vaccines
Dogs	Distemper Adenovirus Parvovirus Parainfluenza Bordetella (intranasal) Rabies
Cats	Panleukopenia Calicivirus Herpesvirus Rabies
Ferrets	Distemper Rabies (Imrab 3)

Internal and external parasites can be common in pets, so all animals should be treated at intake for species-specific common parasites (e.g. roundworms, hookworms, fleas, and ticks). Heartworm is not common in Utah, but treatment with heartworm preventative may be beneficial in certain areas.

C. Nutrition

If possible, all animals should be weighed and assigned a body condition score at intake. The proper amount of food should be calculated for each animal and that amount should be carefully measured out for each meal. Animals should be monitored for any changes in weight or BCS and energy needs reassessed Some animals are ok with free choice feeding, but others require meal feeding. All special diets should be noted, and those meals should be recorded.

IV. Euthanasia

In a disaster, animals may be suffering and require euthanasia. In Utah, euthanasia may only be performed by a licensed veterinarian or an animal control officer under the indirect supervision of a veterinarian. Animals must be held for at least five days unless they are suffering due to serious injury or disease (Utah Code 11-46-103). According to Utah animal cruelty statutes (Utah Code 76-9-301), euthanasia of a suffering animal can only be performed based on:

- The judgement of a veterinarian of the animal's nonrecoverable condition
- The judgement of two other persons called to view the unrecoverable condition of the animal
- The consent of the owner, OR
- A reasonable conclusion that an animal's suffering is beyond recovery if the person is in a location or circumstance where the person cannot contact another person.

Before an animal is euthanized without the consent of the owner, it must be clear in the medical record that the animal is suffering and beyond hope of recovery. In the case of an animal with identification, all possible efforts must be made to reach the owner prior to euthanasia. Trained personnel may be needed to provide counseling to owners.

Euthanasia must be carried out humanely, and should be performed according to the AVMA Guidelines for Euthanasia. The euthanasia should be thoroughly documented, including a photograph of the deceased animal with a written description of the location, date, time, and animal's identification number. Disposal of animal carcasses should be determined by the shelter manager after discussion with animal control or state authorities. Some landfills will not accept large animal carcasses, and rendering plants may not accept carcasses of livestock euthanized by barbiturates or other chemical means.

Recommended Veterinary Supply List

The list below is a recommended veterinary supply list developed by NASAAEP. The actual supplies needed in an emergency situation depend on the type of disaster, the type of animals that need to be treated, and the preferences of the veterinary staff. Before a disaster, identify local or national suppliers or contract with local veterinarians to provide the needed supplies.

Personal Equipment

Paper Pad
Medical record forms
Animal Identification Neck Bands
Formulary
Permanent Markers
Document Wallet
Calculator
Muzzles
Leashes
Tourniquet
Stethoscope
Ferric Subsulfate cauterizing agent
Exam Gloves
Flashlight with extra batteries
Headlamp
Penlight
Cordless Clippers with extra blades
Digital Thermometer
Cold Packs
Otoscope/Ophthalmoscope
Otoscope Cones
Pet Piller device

Medications

Dexamethasone
Diphenhydramine
Heparin
Acepromazine
Cefazolin
Ampicillin 1g vials
Medetomidine 1000 ug/ml
Atipamezole
Lidocaine 2% 20 mg/ml
Epinephrine
Sodium Pentobarbital
Ketamine
Diazepam
Hydromorphone
Enrofloxacin
Atropine Sulfate 0.54 mg/ml
Lactated Ringer's Solution
Hetastarch 6% Sol
Injectable antiemetic (e.g. Cerenia)
Topical flea/scabies treatment
Cephalexin capsules
Oral flea control
Oral pain control (NSAID) of choice
Oral anthelmenthic (e.g. Pyrantel)
Metronidazole
Oral antiemetic
Oral Steroid (Prednisone)
Eye Irrigation Solution, 4oz
Artificial Tears
Ophthamic Neo Poly Bac
Ophthalmic Neo Poly Bac w/Hydrocortisone
Flurorescein Strip

Vaccinations

Distemper/Parvo combo
Rabies
Feline Upper Respiratory
Feline Leukemia
Bordetella Intranasal/Parenteral

Vascular Access/Blood Collection

Butterfly catheters
Catheters
Syringes
Needles
Prep Pads, Isopropyl Alcohol 70%
Towelette, Antiseptic, Benz-Chloride
Prep Pad, Povidone Iodine
Blood tube, Serum Separator 4cc
Blood tube, EDTA, 3cc
Port, Injection
Infuser Cuff, Pressure
IV Catheter plugs

IV Supplies

Fluids
IV drip sets
IV extension set

Surgical Supplies

Laceration Tray 4 piece (disposable)
Suture, Vicryl 2-0
Suture, PDS 2-0
Skin Stapler, disposable
Nexaband
Gloves, sterile 6.5
Gloves, sterile 7.5
Gloves, sterile 8.5
Brush, Scrub w/PCMX
Surgical Blades, #10

Bandaging

Non-Adherent Bandage, Telfa 3” x 4”
Gauze, Roll 3”
Cast Padding 2”
Cast Padding 4”
Tape, Porous 1”
Tape, Porous 2”
Tape, Cohesive Flexible 2”
Tape, Cohesive Flexible 4”
Tape, Elastic 2”
Gauze, 4x4 nonsterile
Gauze, 4x4 sterile
Cotton Tipped Applicators
Applicators, Cotton Tipped
Splint, Spoon small
Splint, Spoon medium
Splint, Spoon large
Scissors, Bandage Lister 5 ½”
Pack, Thomas Transport
Vet Wrap/Adhesive Wrap

Special Consideration: (Refer to State Vet Board and DEA)

Euthanasia solution

Part 9 - Animal Decontamination

I. Introduction

In some emergencies, animals and their owners may become contaminated with biological, chemical, or radiological substances that pose a risk to the animals, the humans handling them, or the food supply. There are currently substantial knowledge gaps when it comes to managing contaminated animals, and different agencies with oversight of hazardous materials or animal groups should be consulted in the event animal decontamination is needed.

II. Types of Hazards

A. Biological

Biological hazards include naturally occurring and intentionally introduced infectious diseases caused by viruses, bacteria, fungi, protozoa, or biologically produced toxins. Sources of biological hazards include soil, water, insects, plants, animals, or humans. Floodwaters contaminated with manure or sewage are common sources of biological contamination.

During the COVID-19 outbreak, the virus was identified on the fur of pets in the homes of COVID-19 infected owners. It is unclear if that could be a source of COVID-19 for other people who handle those animals such as veterinarians or groomers. However, it may not be practical to bathe every animal coming into an emergency shelter.

B. Chemical

Chemical hazards are any chemical substance that can cause physical injury (flammable or explosive agents) or health hazards (acute or chronic effects on one or more organ systems. Examples of chemical hazards include pesticides, herbicides, heavy metals, asbestos fibers, and carbon monoxide. There have been many man-made disasters involving petroleum products, and the research on petroleum decontamination is the strongest.

C. Radiological

Radiological hazards result from the accidental or intentional release of ionizing radiation such as from a nuclear power plant, transportation accident, or nuclear weapon.

D. Floodwater and debris

Floodwater may contain a mixture of biological and chemical hazards including manure, sewage, and household or commercial fertilizers and pesticides. Some may cause physical injury to the skin due contact with floodwater, and others may be absorbed through the skin or accidentally consumed, leading to illness.

Debris can cause physical injuries that allow biological or chemical hazards to enter the animal's body through puncture wounds or lacerations.

III. Planning

A. Regulatory authorities

There may be multiple local, state or federal agencies with authority in emergency situations involving hazardous materials. Planners should consider what agencies have authorities for various hazards and scenarios and include them in the planning process. For example, counties near the proposed Blue Castle Project may want to involve the Nuclear Regulatory Commission and the FEMA Radiological Emergency Preparedness program in the planning process. Other agencies may have authorities pertaining to animals, such as animal control, the Utah Department of Agriculture and Food, and the Utah Division of Wildlife Resources.

B. Animal Groups

1. Pets and Service Animals

Service animals, in accordance with the ADA, are considered an extension of the person they serve. If a service animal and its owner both require decontamination, they must be performed simultaneously to prevent the animal or owner from re-contaminating the other. A separate decontamination plan may need to be developed for service animals.

Household pets may also require decontamination. The CAC should develop plans and acquire resources to manage decontamination for the likely hazards in their communities. Pet animal facilities, such as veterinary hospitals, animal shelters, and boarding kennels, should be encouraged to develop their own emergency plans.

2. Working Animals

Working animals for emergency functions, such as search and rescue or law enforcement, are a part of the emergency response community and should be treated as responders. Response agencies that utilize animals need to include decontamination SOPs for these animals within their overall SOPs.

3. Livestock and Poultry

Contamination of livestock and poultry intended for food may result in them being unfit for human consumption. If feed or livestock are contaminated, UDAF, USDA, and FDA are charged with protecting the human food and animal feed supply. Contaminated animals may need to

be humanely depopulated, milk and eggs may need to be discarded, and meat animals may have to be held before they can go to slaughter.

4. **Wildlife**
   Free-ranging wildlife may be impacted by hazardous materials. The Utah Division of Wildlife Resources is the primary authority for wildlife issues in the state, and should be involved in planning efforts and response. Contamination of wildlife may affect species conservation efforts, hunting and fishing, the food chain, and the environment.

5. **Research and Wildlife Facilities**
   Biomedical research facilities and wildlife facilities such as zoos or aquariums may present complex challenges. Facility operators should have contingency plans for their facility, and larger facilities should coordinate their plan with the community emergency plan. The staff and resources at research or wildlife facilities could provide assistance in developing decontamination procedures for their animals.

IV. Operations

A. Triage

Triage for decontamination issues should occur at the same time as triage for veterinary care or shelter intake. In some cases, animals may need to be stabilized prior to decontamination, so all personnel should be aware of contamination risks, and protocols to protect workers prior to decontamination should be developed.

1. **Behavioral Issues**
   Even without contamination issues, animals in an emergency may be frightened, ill, or confused. Some animals may need to be physically restrained or sedated to proceed with decontamination. If sedation is required, a veterinarian must evaluate each animal, provide the appropriate dosage of sedatives, and provide adequate supportive care during decontamination and recovery.

   Having owners restrain and decontaminate their own animals may work in some cases, but the risk of decontamination failure, escape, and animal or human injury increases dramatically.

2. **Personal Protective Equipment**
   All personnel working anywhere in the animal decontamination line should be in at least the same PPE as the personnel conducting the decontamination. The HAZMAT team, Safety Officer, or Incident Commander will determine the level of PPE needed.

B. External Contamination

Removal of external contamination is the first priority so that the animal does not contaminate itself, other animals, people, or the environment. Depending on the hazard, the animal may need to be decontaminated several times before it can be handled by unprotected people. Animals should be reassessed after decontamination to determine if they are “clean” enough to leave.

C. Internal Contamination

Depending on the type of hazard, animals may need to be monitored for signs of internal contamination by the owner, shelter, or veterinary clinic. Some animals may require testing prior to being reunited with their owner, especially in radiological incidents.

Part 10 - Community Education and Outreach

I. Before a Disaster

The more animal owners are prepared to take care of themselves and their animals during a disaster, the greater the ability of emergency responders to target resources to help those with special needs or those who are more severely impacted. A consistent set of public messages along with resources can help owners prepare for their animals' needs and reduce confusion when disaster strikes.

Some suggested outreach efforts prior to a disaster include:

- Informing the community about the Animal Emergency Response Plan
- Distributing lists of suggested items for animal disaster kits
- Encouraging animal owners to have disaster supplies for "the whole family"
- Distributing educational materials with links to websites for pet-friendly hotels or encouraging pet owners to identify pet-friendly lodging prior to a disaster.
- Encouraging businesses with animals, including pet stores, veterinary clinics, farms/ranches, and zoos to develop emergency plans and coordinate with the CAC.
- Distribute evacuation supplies including cardboard pet carriers or stickers that indicate the number and type of animals on a property.

The method of communication may vary based on your target population or the needs of your community. Social media, brochures in animal businesses, or tables at animal or community events may all be effective means of distributing the message. You may want to coordinate outreach efforts with local emergency management, the Red Cross, or other volunteer organizations.

You may also want to recruit volunteers for local CARTs prior to a disaster. The best time to recruit volunteers is immediately following a disaster. Social media and community outreach events may help keep volunteers engaged between disasters.

II. During a Disaster

During a disaster, animal owners should receive clear guidance on how to evacuate their animals, locations and types of emergency animal shelters, and what resources may be available to help them, including animal rescue, feeding, and veterinary care. People wishing to volunteer or donate items need clear messages on how and where to volunteer, what donations are being accepted, and where donations can be dropped off.

Communications during a disaster should be coordinated with the Incident PIO. Social media, radio, and television may all be effective means of getting information to the public. In addition, if animal evacuation assistance or animal sheltering is available, that information needs to be provided to the responders directing evacuation and managers of the human shelters.

Part 11: Additional Resources

- **American Red Cross**
  - **Pet Disaster Preparedness and Recovery -** https://www.redcross.org/get-help/how-to-prepare-for-emergencies/pet-disaster-preparedness.html
  - **Pet Sheltering: Building Community Response -** http://www.ready.gov/sites/default/files/documents/files/ARCPetsandSheltering_3pg.pdf

- **Big Bend DART Emergency Pet Shelter Manual -** https://flsartt.ifas.ufl.edu/pdf/countyFiles/Leon2.pdf

- **CDC Pet Safety in Emergencies -** https://www.cdc.gov/healthypets/emergencies/index.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Ffeatures%2Fpetsanddisasters%2Findex.html

- **Creating a Community Animal Disaster Plan -** Colorado State Extension - http://veterinaryextension.colostate.edu/menu1/disaster/animal-disaster-toolkit.pdf

- **DANR Guide to Disaster Preparedness** - University of California Division of Agriculture and Natural Resources Veterinary Medicine Extension - http://www.wifss.ucdavis.edu/wp-content/uploads/documents/disasterPreparedness/DANRGuide2.pdf

- **Disaster Response Training** (List of resources for disaster response training with links) - https://www.aspcapro.org/resource/disaster-response-training

- **Douglas County, Colorado Animals in Disaster Resources for Emergency Managers, CART's and Animal Emergency Responders -** https://www.dcsheriff.net/sheriffs-office/divisions/emergency-management/county-animal-response-team-cart/animals-disaster-resources-emergency-managers-carts-animal-emergency-responders/

- **Emergency and Disaster Relief and Preparedness for People With Disabilities Partnered With Assistance Dogs** - International Association of Assistance Dog Partners - https://www.iaadp.org/disaster.html

- **FEMA**
  - **Pets and Animals -** https://www.ready.gov/pets
  - **Shelter Operations: Pet-Friendly Shelters** - http://www.ready.gov/sites/default/files/documents/files/FEMAPetShelteringbestpractices2007.pdf

- **FEMA Training Courses:**
  - IS-10a: Animals in Disasters: Awareness and Preparedness - http://training.fema.gov/EMIWeb/IS/is10a.asp
  - IS-11a: Animals in Disasters: Community Planning - http://training.fema.gov/EMIWeb/IS/IS11a.asp
  - IS-111a: Livestock in Disasters - http://training.fema.gov/EMIWeb/IS/is111a.asp

- **Humane Society of the United States**
  - Disaster Relief - https://www.humanesociety.org/disaster-relief
  - Disaster Preparedness Tips for Shelters and Rescue Groups - https://www.animalsheltering.org/trainings/disaster-preparedness-tips-shelters-and-rescue-groups
  - Volunteer Management Guide - www.humanesociety.org/assets/pdfs/hsp/volunteer.pdf

- **Kansas Animal Shelter Plan -** http://www.kansastag.gov/AdvHTML_doc_upload/LOCAL%20ANIMAL%20SHELTER%20TEMPLATE.doc

- **Louisiana State Animal Response Team (LSART)**
  - **Household pet evacuation and sheltering manual** - https://lsart.org/sites/site-1707/documents/LSART_MANUAL_JUNE_2010.pdf
  - **Animal Disaster Planning for Emergency Operations Officials A Presentation for Parish Emergency Operations Planners** - LSART - https://www.lsart.org/refId,27754/refDownload.pml
  - **LSART Worksheet for Animal Disaster Planning for Emergency Operations Officials** - https://www.lsart.org/refId,27742/refDownload.pml

- **Marion County, FL Shelter Resources**
  - Pet Friendly Shelter - https://vs-prod.sequred.net/sites/site-1707/refs/5eae731e-7f00-0001-26bd-f6cde1dcdfe4.pdf
  - Procedural Plan - https://www.lsart.org/sites/site-5439/refs/5eaf56ab-7f00-0001-1c0b-c3b52b62df0f.doc
  - Emergency Purchase List - https://www.lsart.org/sites/site-5439/refs/5eb08b31-7f00-0001-0dc0-7891d73bb494.doc
  - Sheltering Regulations and Agreement - https://www.lsart.org/sites/site-5439/refs/5eb0157f-7f00-0001-7344-88d4e3eef1ca.doc

- **National Alliance of State Animal and Agricultural Emergency Programs (NASAAEP)** - https://www.thenasaaep.com
  - Best Practices Documents - https://www.thenasaaep.com/workshp-resources

- **North Carolina Animal Disaster Sheltering Resources -** http://www.ncagr.gov/oep/Sheltering/manuals.htm

- **North Valley Animal Disaster Group -** https://www.nvadg.org/
    - **Forms** - https://www.nvadg.org/volunteers/general-forms

- **Petco Foundation Disaster Relief -** https://www.petcofoundation.org/relief/

- **Petswelcome.com** (pet-friendly lodging and other pet-related travel services and information) - http://www.petswelcome.com/

- **Providing for Pets During Disasters: An Exploratory Study -** University of Colorado - https://hazards.colorado.edu/uploads/basicpage/qr171.pdf

- **Red Rover (redrover.org)**
    - **Community Animal Emergency Planning Resources** - https://redrover.org/resource/community-animal-emergency-planning-resources/

- **Rhode Island Shelter Manual for the Disaster Animal Response Team -** http://www.dem.ri.gov/animals/heac03.pdf

- **Saving Pets Saves Lives: ensuring the safety and well-being of household pets during a disaster** - USDA APHIS Animal Care - https://www.aphis.usda.gov/publications/animal_welfare/content/printable_version/SPSL-factsheet-FINAL.pdf

- **Saving The Whole Family: Disaster Preparedness Series - American Veterinary Medical Association** - https://ebusiness.avma.org/files/productdownloads/STWF_English.pdf

- **Service Animal/Pet Identification Form** - University of Kansas Research and Training Center on Independent Living - https://rtcil.drupal.ku.edu/sites/rtcil.drupal.ku.edu/files/images/galleries/Service%20Animal%20and%20Pet%20ID%20Form.pdf

- **The National Animal Rescue and Sheltering Coalition (NARSC)** - http://thenarsc.org/

- **Utah Community Animal Response Program** - bit.ly/ucarp