National Alliance of State Animal and Agricultural Emergency Programs (NASAAEP) **Current Best Practices in Animal Emergency Management** 

# Equine Evacuation and Transportation





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# **Preface**

The evolution of disaster response over the last decade was the catalyst for revising animal emergency management practices. The United States Department of Agriculture's (USDA) Animal and Plant Health Inspection Service Animal Care funded a cooperative agreement with the University of Kentucky.

This agreement was to collaborate with the National Alliance of State Animal and Agriculture Emergency Programs (NASAAEP), the National Animal Rescue and Sheltering Coalition (NARSC), the American Veterinary Medical Association (AVMA), and other key stakeholders to update, consolidate, and create animal emergency management best practices.

The 2023 NASAAEP Current Best Practices in Animal Emergency Management documents are the result of extensive work by subject matter experts (SMEs) over a 24month period. Document topics and content development were guided by the Best Practices Working Group (BPWG) Steering Committee and subjected to a rigorous external peer review process. The documents include:

- Incident Command and Coordination
- Planning and Resource Management
- Community Engagement and Outreach
- Animal Search and Rescue
- Disaster Veterinary Medical Response
- Decontamination
- Household Pet Evacuation and Transportation
- Equine Evacuation and Transportation
- Mass Care and Sheltering

The core planning team gratefully acknowledges the significant contributions of everyone who provided time, expertise, and resources for the development and review of these documents.

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NOTE: Links to external resources are denoted by underlined text.

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# Introduction

According to the American Horse Council's survey, there are approximately seven million horses in the United States (AVMA, 2018). Horses serve many purposes in society, ranging from working horses on ranches and in law enforcement, racing, breeding, show/competition, and pleasure riding/companionship. This document focuses on non-commercial horses, for which the owners may feel a deep attachment. The Evacuation and Transportation Best Practices Working Group was tasked by the National Alliance of State Animal and Agricultural Emergency Programs (NASAAEP) to develop this document.

This document is for emergency planners and animal response groups. It will identify the best practices associated with the evacuation and transportation of equids. Equine businesses are expected to have evacuation plans in place for animals in their care.

The working group reviewed existing state and local evacuation plans, met with recognized subject matter experts, and collaborated with other groups and agencies to develop these best practices. Horses, because of their unique relationship with their human owners, are, in many cases, considered companion animals. Because of this relationship, these owners and the evacuation and transport of these animals need to be considered in any comprehensive plan.

Experience in previous disasters has demonstrated that people might not evacuate if they cannot take their household pets, equids, and service animals with them. Those who are forced to evacuate without their animals might attempt to re-enter the evacuated area and rescue their animals before it is safe to do so. Or they might release the equids and jeopardize public safety.

In either case, this places a greater burden on the first responders who are tasked with the safety of people as well as equids in the impacted area. Therefore, pre-planning for the evacuation of equids and service animals is paramount. The ideal situation would be one where people and their animals are evacuated together to pre-designated shelters. People are more apt to evacuate their animals if there is a designated shelter to take them to.

The responsibility to safely evacuate equids and service animals is with the owner. In addition to service dogs, the ADA has a separate provision for miniature horses that have been individually trained to do work or perform tasks for those with disabilities. The average height of miniature horses is 24 inches to 34 inches, measured to the shoulders. They generally weigh between 70 and 100 pounds (ADA, 2011). Entities covered by the ADA must modify their policies to permit miniature horses where

reasonable. Businesses that house equine species are expected to have an evacuation plan for the animals in their care.

Regardless of the type or number of animals, owners should have a plan in place to evacuate and shelter their equids. Owners should be encouraged to evacuate sooner. Previous experience has shown that equine owners who leave earlier are less apt to encounter logistical issues, such as fuel and traffic. To facilitate the evacuation of owners and equids, emergency management planners should consider developing a list of specialized equine transport and shelter resources.

# **Evacuation Planning**

Facilitating the orderly evacuation of owners and their equids will maximize the number of people getting out of harm's way before an event, prevent the premature return to an unsafe area as well as decrease the impact of the large equine transports on the overall evacuation process.

In certain emergencies such as wildfires, flooding, or other no-notice events owners may not be able to implement their evacuation plan for their animals. In these situations, the emergency managers may want to consider creating a plan to assist with equine evacuation. This would entail engaging stakeholders to identify equine transport and sheltering resources in your jurisdiction that can be deployed through emergency management to evacuate the animals. When owners are not able to implement their evacuation plan consider public messaging on sheltering in place. Equine owners should not release their animals from their property.

In flood events, equids should be left out of stalls but still confined in pastures. During previous incidents including fires, floods, and similar disasters loose equids have impacted public safety and first responders' ability to do their jobs.

#### **Best Practice**

Communicate with state animal health officials to determine if surrounding states will waive health certificates and equine infectious anemia test requirements for interstate movement as well as identify any animal quarantines in place.

# **Public Messaging**

Public messaging should encourage owners to develop a comprehensive family evacuation plan that includes their equids and any other animals in their care. Coordination of public messaging between local, state, tribal, and federal agencies is essential.

#### **Pre-Incident Public Messaging**

Public messaging should be a coordinated, consistent message about the impending threat. This information should include evacuation routes, sheltering locations, entry requirements and required equine supplies such as feed, water, etc. to self-sustain for five to seven days.

Equine owners should also be encouraged to permanently identify their animals with a microchip, brand, or tattoo and register it with a national database. Photos of the animals with the owners and showing any special markings are also recommended.

One striking example of how well microchips work is the example of the horses removed from New Orleans and the surrounding area after Hurricane Katrina. Over four hundred horses were removed from the area after the levees were breached. In Louisiana, horses are required to be permanently identified either with a microchip, brand, or lip tattoo when tested annually for equine infectious anemia. Because all the horses were permanently identified (the majority with microchips), over 95% were reunited with their owners.

This is in marked contrast with the household pets rescued after the levee breeches. Most household pets were not microchipped and registered to their owners. According to the Louisiana Society for the Prevention of Cruelty to Animals (LASPCA), the highest estimates were only that 15% of household pets were reunited with their owners.

#### **Best Practice**

Emergency managers should have a designated contact for equine owners who cannot implement their evacuation plan. These designated contacts' information should be disseminated through public messaging.

#### **Public Messaging During the Incident**

Public messaging should be a coordinated, consistent message about the current evacuation situation, transportation, and other supporting resources.

#### **Best Practice**

Emergency managers should identify an agency or individual point of contact (POC) who will communicate with owners and give information on when it is safe to return or if there is assistance for animals left behind. The public message should include information or steps to secure the ownership and identity of the animals.

#### **Post-Incident Public Messaging**

Post-incident public messaging should inform owners of the resources available that will be used for evaluating or evacuating equids left in the affected area. Owners need to be reminded that by returning to unsafe areas to retrieve their animals, they may put themselves in danger, along with responders who may assist them.

#### **Best Practice**

As soon as it is safe to do so, allow re-entry for equine owners who sheltered their animals in place so they can care for their animals.

# **Developing an Equine Evacuation Plan**

## **Define Roles and Responsibilities**

At the local, state, tribal, and federal levels, identify the agency or individual responsible for equine issues. The responsible agency or individual at the local level should be familiar with the jurisdiction's laws regarding the equine species. This agency or individual should be included in all phases of planning, training, and exercises.

If the community has an agency that has jurisdictional authority for equids in nonemergency times, it is recommended to designate that agency as the lead agency during an incident. Examples of lead agencies include emergency management, animal control, or the sheriff's office. In some cases, a community may not have an agency with jurisdiction for equids or the agency with jurisdiction may be tasked with other duties during an incident such as a sheriff's office.

The lead agency at the state level should be identified. In many cases this may be the state department of agriculture, the state veterinarian's office, or the board of animal health. Discuss before a disaster or emergency if this state agency can offer assistance and what type of assistance is available when local communities are overwhelmed.

### **Develop an Equine Species Evacuation Planning Committee**

Ideally, an evacuation planning committee should consist of the lead agency or point of contact for equine issues for the community and other members with expertise in equine facilities management, large animal or equine veterinary medicine, equine transportation specialists, emergency services (both fire and police) and emergency management.

Consider including owners or representatives from the equine industry such as racetracks, boarding, training facilities, or transport companies. Consider including local or statewide equine associations, equine rescue organizations, or any group that transports and/or houses equine.

- 1. Establish the goals of the committee
- 2. Evaluate issues identified during previous incidents
- 3. Identify equine businesses and facilities in the community
- 4. Create a resource list of equine businesses, facilities, evacuation, transportation, and sheltering resources
- 5. Identify types of disaster likely to affect this community
- 6. In some communities, especially communities prone to wildfires, develop evacuation credentialing and training protocols
- 7. Determine how the resources are deployed to assist equine evacuation

Equine businesses in the community include equine boarding or training facilities, large equine farms, equine therapeutic riding facilities, equine veterinary facilities, large animal arenas, fairgrounds and racetracks, and equine supply stores such as feed stores. Equine businesses can also assist with the dissemination of information to owners, and some may be included in sheltering resources. Identifying these resources pre-incident and verifying their status post-incident will help determine when residents can return with their animals.

#### **Best Practice**

Contact equine businesses to encourage them to have a facility evacuation plan.

Consider agreements with transport resources, MOU/MAA, or contracts. Pre-incident information collected should include the name of the facility, mailing address, physical address, owner's name and mailing address, manager's name, facility phone, and fax as well as other emergency numbers, types of facility, types of animals at the facility, how the animals are identified, how the animals are transported out of emergencies, destination of evacuated animals and how they are sheltered. Great care needs to be taken to protect the privacy of this kind of information.

Requesting this type of information annually encourages these equine facilities to formulate and maintain up-to-date evacuation plans. Additionally, those in emergency management have updated information to gain information during an incident.

Identifying resources in the community and disseminating the information will enable owners to get out of harm's way with their animals. Previous experience has shown that equine owners in many cases will evacuate sooner if they are aware of possible sheltering resources. Since some owners have trailers that include living quarters, identifying facilities such as show arenas or agricultural facilities commonly used for livestock shows will enable these owners to evacuate and stay close enough to care for their animals.

#### **Best Practice**

Develop any needed memorandums of agreement with businesses or organizations that assist in supporting evacuated equine populations, such as transportation, sheltering, feed, supplies, or amplifying public messaging.

#### **Assisted Evacuation**

Assisted evacuation may be needed especially in fast-moving events such as wildfires or flooding incidents where owners are away from their homes or unable to complete their evacuation process when the event occurs.

#### **Best Practice**

The best practice is to pre-identify equine transportation resources. In many communities where wildfires or flooding are potential hazards, emergency managers have identified local resources for transportation and have developed teams of equine transporters with training requirements that include hazard-specific training.

Separation of equids and owners should be avoided. Having pre-identified equine shelters and a lead agency or contact person for equine issues will enable owners to evacuate their animals and facilitate the reunification of owners with their equids. Evacuating people with their animals will eliminate the motive to return to an unsafe incident site to attempt a rescue. Thus, planning for animal evacuation promotes public safety during incident response and recovery.

Obtain permission (e.g., a signed release) from the owner for entry into their property and the rescue or care of their equids. This step will help prevent people from trying to go back into dangerous areas to retrieve their equids.

For example, In the wildfires in San Diego County in 2003 and 2007, numerous people were away from their homes at the time of the fires and were prevented from entering the evacuation areas by law enforcement.

In such cases, those people were directed to contact the local animal control agency which would dispatch an animal control officer or authorized evacuation team to the owner's residence to rescue the horses. The animal control officers would then arrange to meet with the owner at a roadblock or assembly area to turn the horse/pet over to the owner. Nonetheless, some people still ran the roadblocks or found other roads that were not barricaded and entered the evacuation area. These people not only endangered their own lives and those of the first responders who might be called upon to rescue them.

### **Special Planning Considerations**

When preparing an evacuation/transportation plan, consider the following circumstances:

- Pre-identify evacuation routes that will accommodate the potentially large vehicles and trailers used for equine transport and loading and off-loading sites that are conducive for ramp and dock offloading
- Ensure that the evacuation plan includes a return plan that ensures that all owners are reunited with their animals and returned to their homes or provided shelter within the jurisdiction until reunification
- Disseminate public messaging including multilingual information to evacuate early in the incident
- Review vaccination and health certificate requirements for movement across jurisdictional and state lines as well as state animal health official or state veterinary quarantines currently in place that affect equine species
- Owners with access and functional needs
- Establish the method of linking horses to owners during evacuation
- Prepare for veterinary medical emergencies during evacuations identify local veterinary resources
- Assign a dedicated team to oversee animal loading, care, and inventory
- Prepare for animal mortality and disposal
- Prepare for human injuries from handling animals by identifying human medical resources and encouraging handlers to work in pairs
- Caution should be taken when using spontaneous volunteers because it may be difficult to assess:
  - $\circ$  an unknown spontaneous responder's level of expertise with this species
  - whether equipment such as trucks and trailers are in good working condition
  - $\circ$  willingness to follow an established protocol in the middle of an incident

#### **Best Practice**

The best practice is to establish a credentialing protocol and identify a location for spontaneous volunteers to congregate, identify the spontaneous volunteers' resources, and develop a process to register and integrate them into the response.

# **Modes of Transportation**

Many potential modes of transportation exist for the evacuation of equids. The vehicles most commonly used in large-scale horse transportation operations are:

- Purpose-built animal transporters
- Modified animal welfare units
- Farm/agriculture vehicles
- Commercial hauler
- Privately owned vehicles

Determine the method of acceptable transportation for the entire evacuation process, which may include short and long hauls. It is difficult to use non-purpose-built vehicles for equine transportation.

No mode of transportation guarantees animal health and safety and even the best transport vehicle will only be as good as its operators. The following advantages and disadvantages are based on collective experience and consultation with subject matter experts but weather, time, animal species/breed, terrain, airflow, accessibility, and vehicle operation, among other variables, can affect vehicle effectiveness.

The single most important issue facing transporters is the environmental conditions during transport. Adequate airflow, temperature control, the ability to monitor air quality, and the presence of redundant systems are critical features when considering long-range animal transport options. However, the absence of environmental control systems in a vehicle does not preclude its use in an emergency, especially for short distances; every vehicle listed in this document has been used for emergency transport successfully in recent years because steps were taken to ensure adequate ventilation, airflow, and operational protocols were established.

In summary, the single best practice for emergency planners during transportation is constant monitoring: when in doubt – check it out. In most cases, it is far better to add an hour to the trip than to lose an animal.

### **General Precautions**

- 1. Be aware of weather forecasts for the projected route
- 2. Have contact information for veterinary services along the projected route readily accessible
- 3. Provide emergency food and water supplies. Consider mobile units in case of vehicle breakdowns

- 4. Train equine evacuation teams to ensure that animals are secured properly before and during transport
- 5. To prevent disease contamination, thoroughly clean and disinfect the transport before hauling equids
- 6. Determine if any animal quarantines are in place before any animal movement

### Purpose-Built Equine Transport Vehicles

#### Semi-Haulers

These vehicles are custom-built for the transportation of equids and currently are the best method of large-scale equine transport available. Large equine facilities such as racing barns, show barns and breeding barns may have a semi-hauler as part of their fleet, but semi-haulers are more commonly owned by transport companies.

Semi-haulers provide for the comfort of the equids, but temperature/humidity controls will vary according to rig. Establish MOUs to use commercial semi-haulers for disaster evacuation.

#### Advantages

- 1. Some of the units may provide monitors and alarms to advise the driver if temperature, CO, CO2, or O2 reach dangerous levels
- 2. Relatively large numbers of animals can be moved
- In most cases, it is easier and safer to load animals because purpose-built vehicles typically have lower loading heights and drop-down rear doors that can be used as ramps
- 4. May be cost-effective for larger loads
- 5. Typically have a side door that provides easier access
- 6. These units are often staffed with experienced drivers and handlers who will be able to assist with the loading and care of animals during transport

#### Disadvantages

- 1. Commercial Driver's License (CDL) required
- 2. Most units do not have interoperability (radio communication) with local emergency services.
- 3. There is less ground clearance when compared to other units and care must be taken to avoid situations where the trailer may high center. Many of the custombuilt units also have small living quarters and exposed plumbing under the trailer which adds to clearance challenges.
- 4. Not suitable for narrow, windy roads

Recommendations

- 1. Operators of vehicles exceeding 26,000 lb GVWR should have commercial driver training
- 2. Provide a predetermined route to ensure fuel availability
- 3. Provide transport groups with handheld radios so that they can communicate directly with emergency services
- 4. Establish a two- or three-deep contact information list for drivers, senders, and receivers
- 5. Have the transporter provide specifics on vehicles including size, configuration, capacity, generators, monitoring capability, water, exterior lighting, temperature control, etc.
- 6. Requires pre-planning numbers of equine to ensure cost-effectiveness
- 7. Secure a transportation management contract before an incident
- 8. Perform safety checks of vehicles before and during operation
- 9. Have contact information for emergency repair service in case the vehicle breaks down
- 10. Have contact information for veterinary services along the projected route
- 11. Provide emergency food and water supplies
- 12. Perform safety checks to ensure animals are secured properly before and during transport
- 13. Assign a dedicated team to oversee equine loading, care, and inventory
- 14. Check ingress and egress routing and bridge heights to ensure vehicles will be able to access intake and export sites

#### Flat Floor Semi-Hauler

These trailers are predominantly used as livestock trailers but could be customized to haul horses, especially in an emergency, according to Nicole Watts, an industry expert.

These transports are usually privately owned and are designed to transport large numbers of livestock. The trailers can range from 35 feet to 53 feet in length and require a semi-tractor to pull the trailer. They are based on standard commercial cattle haulers but are single-decked. The design may limit entry to step-up, ramp load, or dock load. Federal law prevents the use of double-decker trailers for transporting equids.

#### Advantages

- 1. Can transport large numbers of equids
- 2. In most cases, it is easier and safer for equine
- 3. May be cost-effective for larger loads

#### Disadvantages

- 1. In most cases will require a Commercial Driver's License (CDL)
- 2. These trailers are usually open to the environment with no intake or exhaust fans. The design provides good ventilation, but not temperature control
- 3. These trailers usually are not equipped with monitors and alarms to advise the driver if temperature, CO, CO2, or O2 reach dangerous levels
- 4. Most units do not have interoperability (radio communication) with local emergency services
- 5. High cost precludes most local jurisdictions from owning
- 6. In cold winter climates and hot summer climates trips may need to be limited
- 7. May require a dock to load and unload
- 8. Require a large area to maneuver in
- 9. With an open compartment, there is more chance for injury to equids
- 10. Flooring may not be skid-resistant

#### Recommendations

- 1. Operators of vehicles exceeding 26,000 lb GVWR should have commercial driver training
- 2. Provide a predetermined route to ensure fuel availability
- 3. Provide transport groups with handheld radios so that they can communicate directly with emergency services
- 4. Establish a two- or three-deep contact information list for drivers, senders, and receivers
- 5. Requires pre-planning at the local level for numbers of animals to ensure costeffectiveness
- 6. Secure a transportation management contract before an incident
- 7. Perform safety checks of vehicles before and during operation
- 8. Have contact information for emergency repair service in case the vehicle breaks down
- 9. Have contact information for veterinary services along the projected route
- 10. Provide emergency food and water supplies
- 11. The transport team must ensure animals are secured properly before and during transport
- 12. Assign a dedicated team to oversee equine loading, care, and inventory
- 13. Check ingress and egress routing and bridge heights to ensure vehicles will be able to access intake and export sites

#### **Farm/Livestock Vehicles**

#### **Open Stock Trailer**

An open trailer with canvas covers provides plenty of ventilation. However, they do not represent best practice for evacuation from a fire where sparks could easily enter the box or ignite the cover.

#### Horse/Stock Trailer

Farm/livestock trailers are used to transport equids and various types of livestock and can range from anything as small as a one-equine trailer to large livestock haulers. Typically, beds are open. They are not climate-controlled though some come with sprinkler systems for summer transport. Ventilation is generally adequate, and as long as the vehicle is moving, conditions in the back are tolerable in summer. However, temperatures can quickly rise in the summer if the vehicle is stopped. Stock trailers are commonly step-up but can be equipped with a ramp.

#### Advantages

- 1. Readily and immediately available
- 2. May be privately or commercially owned
- 3. Cost-effective for transporting large numbers of animals (5-7 mpg)
- 4. May be used for a variety of species
- 5. Horse and small livestock trailers will have better ground clearance than other trailers
- 6. May come with an operator experienced with livestock and other animals.
- 7. Most effective in temperate settings (60-70 degrees F)
- 8. Easy to load for claustrophobic horses
- 9. The box is large enough to allow equids with hock arthritis to turn around to exit, rather than having to back out and down
- 10. Continuous posts along the side wall allow rapid weaving of lead lines instead of tying

#### Disadvantages

- 1. Maintenance records on vehicles may be unavailable
- 2. May need to be cleaned/sanitized before use during incident
- 3. Will likely not have any climate control capabilities
- 4. Lacks protection from the elements
- 5. Ground clearance and height and length issues may limit access to some areas
- 6. Possible traumatic ride conditions
- 7. The tow vehicle must be rated for the size and weight of the trailer
- 8. No communications capabilities
- 9. Unable to monitor the conditions of the animals while driving

Recommendations

- 1. Investigate the local availability of transportation types and any limitations regarding the transport of animals before an incident
- 2. Only licensed, qualified drivers should operate vehicles
- 3. Provide a predetermined route to ensure fuel availability
- 4. Provide transport groups with handheld radios so that they can communicate directly with emergency services
- 5. Establish a two- or three-deep contact information list for drivers, senders, and receivers
- 6. Have the transporter provide specifics on vehicles including size, configuration, capacity, exterior/interior lighting, etc.
- 7. Require pre-planning for numbers of equids to ensure cost-effectiveness
- 8. Secure a transportation management contract before an incident
- 9. Perform safety checks of vehicles before and during operation
- 10. Have contact information for emergency repair service in case the vehicle breaks down
- 11. Have contact information for veterinary services along the projected route
- 12. Provide emergency food and water supplies
- 13. Perform safety checks to ensure animals are properly secured before and during transport
- 14. Assign a dedicated team to oversee equine loading, care, and inventory
- 15. Check ingress and egress routing and bridge heights to ensure vehicles will be able to access intake and export sites
- 16. When in doubt, thoroughly disinfect and sanitize before hauling equids

#### **Horse Trailers**

These trailers are deployed to transport animals and may be associated with preestablished NGO evacuation teams. They may also be available through spontaneous volunteers. Open-top or canvas-top stock trailers are not recommended for equine evacuation teams.

Non-commercial trailers come in a range of sizes: single-horse, 2-horse, 3-horse, and up to 10-horse. Horse trailers come in gooseneck or bumper pull configuration, and straight load or slant load floor plans. Smaller trailers will be able to access roads that are too narrow for larger transports, but their limited capacity will require more trailers or repeated trips.

#### Advantages

- 1. Readily available
- 2. Easy to tow
- 3. Generally, no special license is required beyond a driver's license, though this will depend on the vehicle and trailer weights
- 4. Driver generally aware of maintenance records and truck/trailer limitations
- 5. Easy access to most areas and require less operating space

#### Disadvantages

- 1. These vehicles need to be inspected before use
- 2. May be "self-deployed" (spontaneous volunteer)
- 3. May not be adequately insured
- 4. Proof of ownership may be lacking
- 5. May not be experienced at driving and backing rigs
- 6. Usually, not climate-controlled

#### Recommendations

- 1. Require proof of current driver's license, vehicle registration, and insurance before use
- 2. Perform safety checks of vehicles before and during the operation
- 3. Provide a predetermined route to ensure fuel availability
- 4. Require documentation of the inspection
- 5. Organize in groups with an assigned lead
- 6. Recommended for transport of a small number of equids with special needs that need to be monitored regularly
- 7. Provide transport groups with handheld radios so that they can communicate between units and command
- 8. Establish a two- or three-deep contact information list for drivers, senders, and receivers
- 9. Have contact information for emergency repair service in case the vehicle breaks down
- 10. Have contact information for veterinary services along the projected route
- 11. Provide emergency food and water supplies
- 12. Verify that the truck is rated sufficiently to haul the trailer

#### Modified Livestock Rail Car

Although largely obsolete, with modern technology and materials, rail transport is a feasible way to move large numbers of animals, small or large. Rail transport of livestock virtually ended by the 1980s when it was more economical to move frozen meat in refrigerated trucks on roadways.

#### Advantages

- 1. Alternative transportation
- 2. Gradual and progressive changes in direction and speed on a train allow the animals to balance more easily
- 3. Tier 4 locomotives, with reduced emissions, are available now
- 4. Rail cars can be adapted and retrofitted
- 5. Ventilated or insulated and may be fitted with climate control
- 6. Could be more reliable in bad weather
- 7. Evacuation train may be available

#### Disadvantages

- 1. Not readily available
- 2. Due to high livestock mortality rates in the past (up to 9%), retrofit of trains would need to provide modern systems for hydration and feeding as well as ventilation
- 3. Transport from station to station necessitates a secondary carrier to the destination

### Low Emissions Electric Vehicles

Gas and diesel vehicles are slated to be eliminated by 2035 in California. While not an immediate concern, this trend is something to prepare for. The current vehicles have a very limited operating range and require a source of electricity to recharge, given that in a disaster, electricity is often one of the first things to fail.

### **Air Transport**

Air transport may be considered by owners whose equids are already accustomed to air travel.

- Can be transported entirely out of the disaster zone
- Can be transported long or short distances
- Several companies specialize in air equine transport
- A typical air transport plane might carry 18 20 equids
- Costly
- Availability for flights might be limited
- Need access to the airport
- Need service at both ends of the trip
- Must have alternative means of transportation
- If the weather is too hot or too cold airline may refuse to transport

#### **Double Deck Trailers: Not Acceptable**

USDA Horse Transportation Safety Act. The USDA banned the transport of horses to slaughter in double-deck trailers in 2011. This led to legislation by the House of Representatives HR921 Title 49 The Horse Transportation Safety Act prohibits the transportation of horses in a double deck trailer because they do not provide adequate headroom for equids.

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# References

- ADA. (2011, March 15). *Highlights of the Final Rule to Amend the Department of Justice's Regulation Implementing Title II of the ADA*. Retrieved from: <u>https://archive.ada.gov/regs2010/factsheets/title2\_factsheet.html</u>
- AVMA. (2018). AVMA Pet Ownership and Demographics Sourcebook. Retrieved from: <u>https://www.avma.org/sites/default/files/resources/AVMA-Pet-Demographics-</u> <u>Executive-Summary.pdf</u>

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# Appendix A: Acronyms, Key Terms, and Definitions

### Acronyms

An asterisk indicates the term has a more complete definition in the following section.

AAR	After Action Report
ACO	Animal Control Officer
ADA	Americans with Disabilities Act (defines service animals)
AHJ	Authority Having Jurisdiction
APHIS	Animal and Plant Health Inspection Service (USDA)
ASAR	Animal Search and Rescue
CART	County/Community Animal Response Team*
CBRN or CBRNE	Chemical, biological, radiological, nuclear (explosive)
CERT	Community Emergency Response Team (Citizen Corps program)
CONOPS	Concept of Operations
DHS	Department of Homeland Security
DOD	Department of Defense
DOI	Department of Interior
EIEIO	The chorus from "Old MacDonald Had a Farm"
EMA	Emergency Management Agency
EMAC	Emergency Management Assistance Compact*
EOC	Emergency Operation Center* (also termed Coordination Center)
EOP	Emergency Operations Plan (may be preceded by jurisdictional
	identifier)
ESF	Emergency Support Function*
ESF6	Emergency Support Function 6 (Mass Care, Emergency
	Assistance, Housing, and Human Services)
ESF8	Emergency Support Function 8 (Public Health and Medical
	Services)
ESF9	Emergency Support Function 9 (Search and Rescue, SAR)
ESF11	Emergency Support Function 11 (Agriculture and Natural
	Resources)
FEMA	Federal Emergency Management Agency
HAZMAT	Hazardous Materials
HHS or DHHS	Health and Human Services (U.S. Department of)
HVAC	Heating, Ventilating, and Air Conditioning
IA	Individual Assistance (FEMA)
IAP	Incident Action Plan*
IC	Incident Commander
ICC	Incident Command and Coordination

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ICP	Incident Command Post
ICS	Incident Command System*
IMT	Incident Management Team*
IMAT	Incident Management Assistance Team (FEMA)
IOF	Interim Operating Facility (precursor to Joint Field Office)
IT	Information Technology
JFO	Joint Field Office (FEMA)
JIC	Joint Information Center
JIS	Joint Information System (multiple locations)
MA	Mission Assignment*
MAA	Mutual Aid Agreement
MAC Group	Multi-agency coordination group (policy level)
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MRC	Medical Reserve Corps (a program within Citizen Corps)
NARSC	National Animal Rescue and Sheltering Coalition
NASAAEP	National Alliance of State Animal and Agricultural Emergency
	Programs
NDMS	National Disaster Medical System
NGO	Non-Governmental Organization
NIMS	National Incident Management System
NRCC	National Response Coordination Center
NRF	National Response Framework
NSS	National Shelter System
NVRT	National Veterinary Response Team
OSHA	Occupational Safety and Health Administration
PA	Public Assistance (FEMA)
PAPPG	Public Assistance Program and Policy Guide (FEMA)
PETS Act	Pets Evacuation and Transportation Standards Act (amendment
	to the Robert T. Stafford Act of 1974)
PIO	Public Information Officer
POC	Point of contact
PPE	Personal Protective Equipment
RRCC	Regional Response Coordination Center (FEMA)
RRF	Resource Request Form (FEMA)
RSF	Recovery Support Function
SAHO	State Animal Health Official
SAR	Search and Rescue
SART	State Animal/Agricultural Response Team*

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SME	Subject matter expert
SOG	Standard Operating Guidelines
SOP	Standard Operation Procedures
STT	State, Tribal and Territorial
STTI	State, Tribal, Territorial and Insular
STTL	State, Tribal, Territorial and Local
THIRA	Threat and Hazard Identification and Risk Assessment
USAR or US&R	Urban Search and Rescue
USDA	United States Department of Agriculture
VOAD AND	(National) Voluntary Organizations Active in Disasters
NVOAD	
VERT, VRC or	Veterinary Emergency Response Team, Veterinary (Medical)
VMRC	Reserve Corps
Web EOC	Software platform for EOC management (used by FEMA and
	many other jurisdictions)
ZAHP	Zoo and Aquarium All Hazards Partnership

### **Key Terms and Definitions**

Legal definitions of different types of animals vary across jurisdictions. To provide consistency across the Animal Emergency Management Best Practice Working Group documents, animal classifications and definitions are provided as common-use definitions.

For a specific legal definition, refer to jurisdictional definitions. These definitions are generally accepted in the US and are sourced from global, state, and/or federal guidelines. Other key terms are used in animal emergency practices. This list addresses some common terms used during emergency response.

#### Animal Definitions

- Animals: Animals include household pets, service and assistance animals, working dogs, livestock, wildlife, exotic animals, zoo animals, research animals, and animals housed in shelters, rescue organizations, breeding facilities, and sanctuaries (source: <u>National Preparedness Goal</u>).
- Assistance animals: an assistance animal is not a pet. It is an animal that works, provides assistance, or performs tasks for the benefit of a person with a disability or provides emotional support that alleviates one or more identified symptoms or effects of a person's disability (source: <u>Section 504 of the Fair</u> <u>Housing Act</u>).
  - Note service animal definitions under the Americans with Disabilities Act (ADA) and assistance animal definitions under the Fair Housing

Act only differ by the exclusion of emotional support from the service animal definition.

- Livestock: The term livestock may have a specific definition within individual states and Federal programs. In the broadest use, including general ESF #11 use, livestock includes domestic livestock typically kept on farms and such as cattle, sheep, goats, swine, poultry, and other animals raised for food or fiber, as well as horses, donkeys, and mules. "Alternative livestock" may include wild cervids (elk, deer, etc.) as well as bison, ostrich, emu, or other wild species kept for food production. When discussing "livestock," it is essential for all parties to work from the same definition.
- Non-commercial livestock or "backyard" livestock: This is another flexible term that may have a specific definition in local, State, Tribal, Territorial and/or Insular (STTI) emergency plans. In its broadest use, non-commercial livestock would include animals kept at residences for pleasure, companionship, sport (not commercial racing) or household food production which does not generate food or products intended to enter commerce.
- **Pets/Household pets:** Summarizing from the <u>FEMA Public Assistance</u> <u>Policies</u>, household pets are domesticated animals that:
  - Are traditionally kept in the home for pleasure rather than commercial purposes
  - Can travel in common carriers
  - Can be housed in temporary facilities
  - Examples are dogs, cats, birds, rabbits, rodents, hedgehogs, and turtles
  - FEMA Public Assistance excludes these species as household pets: farm animals (including horses), racing animals, reptiles (other than turtles), amphibians, fish, insects, and arachnids
  - Note: This definition applies to expense eligibility under the FEMA Public Assistance Grant Program and in no way limits STTI, Local, and non-governmental entities from defining and managing all animal types per their own policies.
- Service animals: Under the ADA, a service animal is defined as a dog that has been individually trained to do work or perform tasks for an individual with a disability. The task(s) performed by the dog must be directly related to the person's disability. In addition to the provisions about service dogs, the Department's ADA regulations have a separate provision about miniature horses that have been individually trained to do work or perform tasks for people with disabilities (U.S. Department of Justice Civil Rights Division, 2020).

- Working animals: The term working animal can vary considerably within the situational context, but within an emergency management context, ESF #11 considers this group to include animals (typically dogs and horses) working in law enforcement (detection, patrol, apprehension, etc.) and animals working in search and rescue (primarily dogs used in search and recovery missions). Working dogs may include dogs used in hunting, guarding and for agriculture tasks.
- Animal Emergency Management Annex: A component of a jurisdictional emergency operations plan that provides information on how animals will be managed in disasters, including organizational responsibilities.
- **Biosecurity:** Measures that prevent the spread of disease to, from, or within a premises containing animals.
- **Community or County Animal Response Team (CART):** An organization developed to implement the animal elements of the jurisdictional emergency operations plan. The exact title and format vary considerably (a team of organizations, direct volunteers, etc.) The critical element is that the CART must be under the control of, or have an agreement with, the local government.
- **Coordination Center:** *FEMA EMI ICS Glossary* A facility that is used for the coordination or agency or jurisdictional resources in support for one or more incidents.
- Emergency Management Assistance Compact (EMAC): EMAC is a national interstate mutual aid agreement that enables states to share resources during times of disaster. The thirteen (13) articles of the Compact sets the foundation for sharing resources from state to state that have been adopted by all 50 states, the District of Columbia, the U.S. Virgin Islands, Puerto Rico, and has been ratified by Congress (PL-104-321).
- Emergency Operations Center (EOC): See Coordination Center definition above.
- Emergency Support Function (ESF) (Federal): Some states, but not all, use ESF terminology. Some states use more than 15 ESFs and do not necessarily align with Federal ESFs.
- **Disaster Declaration:** A Disaster Declaration is a formal statement by a jurisdiction that a disaster or emergency exceeds the response and/or recovery capabilities.
- **Disaster/emergency**: An occurrence of a natural catastrophe, technological accident, or human-caused event that has resulted in severe property damage, deaths, and/or multiple injuries. Except for use in certain declarations, the terms are commonly used interchangeably.
- **Emergency manager:** The jurisdictionally appointed position that conducts analysis, planning, decision-making, and assignment of available resources to prevent/mitigate, prepare for, respond to, and recover from the effects of all hazards.

- Emergency Operations Plan (EOP): A document maintained by various jurisdictional levels describing the plan for responding to a wide variety of potential hazards.
- Incident Action Plan (IAP): From the FEMA ICS Glossary An oral or written plan containing incident objectives which reflect the overall strategy for managing the incident. It may include the identification of operational resources and assignments. It may also include attachments that provide direction and important information for management of the incident during one or more operational periods.
- Incident Command System (ICS): From the FEMA ICS Glossary A standardized on-scene emergency management construct specifically designed to provide for the adoption of an integrated organizational structure that reflects the complexity and demands of single or multiple incidents, without being hindered by jurisdictional boundaries. ICS is the combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure, designed to aid in the management of resources during incidents. It is used for all kinds of emergencies and is applicable to small as well as large and complex incidents. ICS is used by various jurisdictions and functional agencies, both public and private, to organize field-level incident management operations.
- **ICS forms:** Nationally standardized forms used to manage or document incident response under the Incident Command System. Forms can be found on FEMA's website.
- Incident Management Team (IMT): The Incident Commander and appropriate Command and General Staff personnel assigned to an incident. Key IMT positions include (source: FEMA ICS Glossary):
  - Incident Commander (IC) assigned by jurisdictional authorities to oversee all aspects of the incident response
  - Command Staff: Safety Officer (SOFR), Liaison Officer (LOFR), Public Information Officer (PIO)
  - General Staff: Operations Section Chief (OSC), Planning Section Chief (PSC), Logistics Section Chief (LSC) and Finance and Administration Section Chief (FASC)
- Isolation: Segregation of animals to prevent disease exposure or spread.
- **Mission Assignment (MA):** A work order issued by FEMA to another Federal agency directing the completion of a specific task, and citing funding, other managerial controls, and guidance. There are two general types of MAs:
  - **Federal Operations Support (FOS)**—Requested by a Federal agency to support Federal operations.
  - Direct Federal Assistance (DFA)—Resources requested by and provided to affected State and local jurisdictions when they lack the resources to provide specific types of disaster assistance.

- **Mutual aid:** emergency assistance provided from one jurisdiction or organization to a peer (local-local, state-state, NGO-NGO, etc.).
- **Quarantine**: Isolation of animals that may have an infectious disease for a specified period to allow for testing or extended observation.
- **Resource typing and credentialing**: Resource typing is defining and categorizing, by capability, the resources requested, deployed, and used in incidents. Resource typing definitions establish a common language and defines a resource's (for equipment, teams, and units) minimum capabilities.
- State Animal/Agricultural Response Team (SART): SART organizations vary considerably in their structure, mission, and nomenclature (many don't use the SART name). In general, SART-type organizations provide a framework for State stakeholders to support the State animal emergency management plan. SART-type organizations generally are under the control of the state or have an agreement with the state.
- State veterinarian/animal health officials (SAHO): The veterinary officer/official for a particular State or territory of the U.S. in charge of animal health activities (exact title varies).
- **Zoonoses:** Disease that can be transmitted between animals and humans.

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# **Appendix B: Resources**

ADA Requirements: Service Animals: <u>https://www.ada.gov/resources/service-animals-</u>2010-requirements/

American Veterinary Medical Foundation (AVMF) Saving the Whole Family Booklet: <u>https://ebusiness.avma.org/ProductCatalog/product.aspx?ID=140</u>

Prepare Your Pets for Disasters website: <u>https://www.ready.gov/pets</u>