



Disaster Preparedness for Small Farms



HALTERProject
ANIMAL DISASTER
PREPAREDNESS + RESPONSE
HALTERproject.org rescue@halterfund.org



Developing Your Small Farm Emergency Action Plan

Your Emergency Action Plan, (EAP), is your roadmap to resilience. The thought and effort you put into planning and preparing for emergency and disaster will enable you and your family, staff, and animals to stay safer and healthier during and after a crisis. It assures your clients that you have planned carefully for the well-being of their animals, and the security of their herd genetics.

This guide contains information to help you assess risks and plan accordingly for all types of emergency situations that could affect your farm and business. It includes sample forms you can use, if needed, including,

- Emergency Action Plan template
- Advance Veterinary Care Directive
- Emergency contact cards
- Animal ID Stall Cards

Key Points

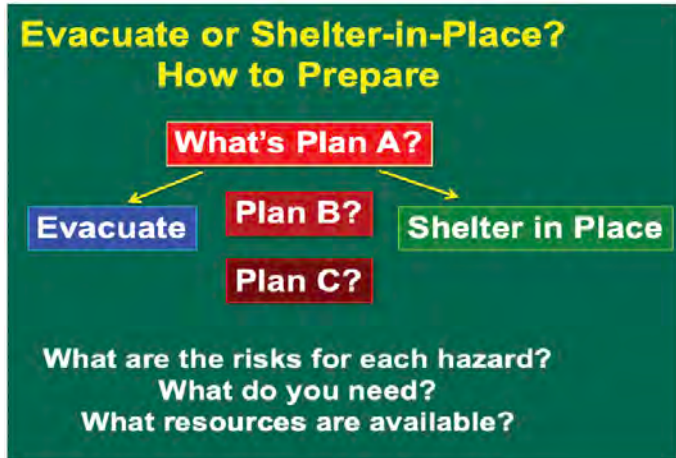
- Make multiple EAP hard copies; give to, and review with, all key staff, and your veterinarian. Put copies in binders, use page protectors.
- Store it electronically along with your other important documents.
- Keep a binder copy with your hard drive to grab when you evacuate.
- Update as often as needed.
- Review with local Ag Advisor, Sheriff Office, and/or Fire agency, if possible.
- Keep a card in your wallet with your animal emergency contacts.
- Keep a copy of animal insurance documents and contacts with animals during transport.

Your Emergency Action Plan: Have a Plan for Everything

YOUR ANIMAL EMERGENCY NETWORK

Develop your own personal network of animal helpers and evacuation locations.

- Include contact numbers and destinations info for your evac, transport and destination resources updated and quickly accessible.
- If you are a registered commercial livestock producer, your county or regional Ag contacts should be in your EAP.
- If your area has an Ag Pass Program, make sure your info and resources are current and registered with the authorizing agency. This may be the Ag Commissioner, Farm Bureau, or Extension Advisor
- If you are not a registered ag producer, local animal control may be the agency authorizing access inside mandatory evac zones.



PREP FOR EVAC AND SIP

Start by making or updating your personal and family Emergency Action Plan (EAP). If you're not safe you can't take care of your animals.

- Include plans for everything that could effect your family, farm, or business.
- Have multiple places to go, ways to get there, and people to help you.
- Have more than one way to get emergency alerts, and to communicate with others.
- Make multiple hard copies
 - » 1 Copy with you.
 - » 1 Copy at home or barn for helpers or responders.
 - » 1 Copy with your vet or trusted out-of-area resources.
- Store all documents electronically.
- Also include a set of all animal insurance documents and Advance Care Directives in your vehicle.

Join or form a regional species-specific Emergency Prep Group

- Learn what training and credentials are required to access your animals if inside a mandatory evacuation zone.
- Collaborate as a group to create a directory of resources including: Communications, safe destinations, panels, and other equipment needs, transport, water, and feed.

Your PPE

- Work boots & gloves
- Helmet & eye protection
- N95 and N100 masks
- Sun & weather protection
- Water
- Meds & cash
- Tool kit

IMPORTANT EMERGENCY CONTACTS

PERSONAL CONTACTS

- ☐ Transport & Hauling Resources
- ☐ Veterinarians
- ☐ Temporary Shelter Destinations- Include names, phone numbers, addresses
- ☐ Animal Control
- ☐ Animal Disaster Hotline Numbers (Where available)
- ☐ CART or Animal Evac Team (If relevant)

AG RESOURCES

If you qualify for access as an ag business, one or more of these will be important to include in your contacts.

- ☐ Ag Commissioner
- ☐ Extension Advisor
- ☐ Farm Bureau State Dept. of Agriculture

ANIMAL EVACUATION PREP TIP SHEET

UPDATE: 2-2025

HALTERProject
HALTERproject.org rescue@halterfund.org

IMPORTANT NUMBERS

Use information provided in Emergency Alerts

ANIMAL CONTROL _____

CART / ANIMAL EVAC TEAM _____

EMERGENCY ANIMAL SHELTER _____

PLANNING FOR EVAC

Plan and Prepare year-round!

- Be **READY** when weather watches are issued.
- **GO** when you receive a Weather Warning, Red Flag, or other severe weather alerts.
- **Do not wait for Evacuation Warnings or Orders.**

FOR ANIMALS YOU CANNOT EVACUATE

- Post signs listing animals & their locations on site.
- Pets - leave lots of water and an escape route.
- Make sure address is clearly identified.
- Leave doors unlocked, hide a key, or take key to Animals Services.
- Disable electric gates & garage doors.

GET CRITICAL INFORMATION

- Sign up for ALL local emergency alerts.
- Have a transistor or weather radio.
- Listen to local TV and news radio.
- Keep devices charged and extra batteries.

HELPFUL APPS

Apps are good backups to local alerts.

- FEMA
- NOAA
- Watch Duty
- USGS Earthquake Pro

YOUR ANIMAL EVAC RESOURCE NETWORK

- Develop your own personal network of animal helpers and evacuation locations.
- Practice with the animals and the helpers in daytime, night time, and all kinds of weather.
- Practice loading equines and livestock in a variety of trailers.

LOAD & GO BASICS

- Fuel and stage vehicles facing out.
- Emergency contacts, vet records, animal ID with photos, microchip information.
- Your Ready-kits for animals & you, tools, first aid, meds, prescriptions, cash, toys & comfort items.
- Advance Care Directive
- Enough food, water, meds for min. of 14 days
- Halters, ropes, collars, harnesses, leashes
- Carriers, cages, bedding, animal-safe cleaning supplies.

MAKE YOUR EMERGENCY ACTION PLAN

Everything takes longer with animals and requires more planning. Always have multiple options and lists of contacts ready, including:

- Pet-friendly motels, AirBnBs, friends.
- Equine-friendly campgrounds and other alternatives to shelters.
- Have paper maps highlighting destinations and route options.
- Prevent evac escapes! Make sure pets are secure in vehicles and destinations.

DO NOT

- Post animal help requests on unofficial Facebook or NextDoor platforms.
- Cut fences without owner permission.
- Post photos or videos of injured animals, or people rescuing animals.
- Attempt to rescue wild animals.

Evacuation and Transport Safety

**Avoid dangerous travel conditions
by moving animals BEFORE
Evac Warnings or Orders are issued.**

ANIMAL PREP

- Have animals confined for quick catch and load.
- Make detailed, current lists of loading order and of transport hierarchy, if you cannot move all at one time.
- Visible ID on every animal.
- Extra sets of halters & ropes for every equine, and for the relevant small ruminants.
- Practice with your team & your animals.



RIG PREP

- Do a safety inspection.
- Fueled up, hooked up, staged for safest loading and departure.
- Bedding removed and windows closed if you're traveling near wildfire.

Scan QR codes for detailed truck, trailer, and barn safety checklists.



ROAD or TRAILER ACCIDENT – WHAT TO DO

- Call 911
 - State LOCATION and SITUATION clearly
 - Ask for immediate equine veterinary assistance
 - Ask if an ANIMAL TECHNICAL RESCUE TEAM is available
 - State number of vehicles and types
 - State number of animals
 - When help arrives stay focused and follow orders
 - Ask Scene Commander to minimize sirens, flashing lights, and bright lights shining directly into eyes of horses

DOCUMENTS

- Animal insurance policy info, Agent, emergency number
- Animal ID & health info
- Owner & Proxy contacts
- Trailer Model info (may be very helpful to first responders!)

EMERGENCY & SAFETY KITS

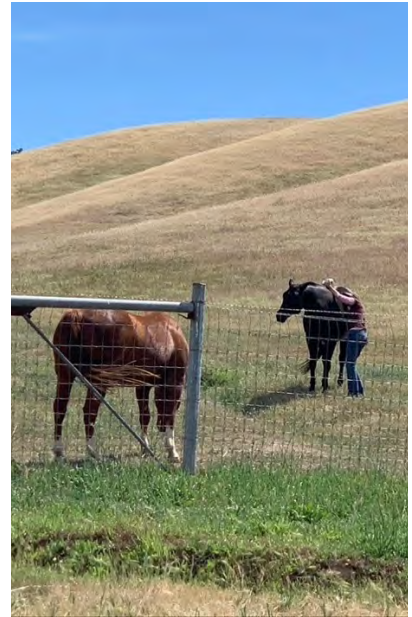
- First aid for animals & people
- Reflector signs & vests
- Work gloves
- Flashlights, headlamps, flashing lantern
- Thick cotton rope (2 x 20')



If using a commercial hauler: Make sure resource has contacts for insurance carrier and owner, and your directive for humane euthanasia.

SHELTERING IN PLACE: WILL YOUR ANIMALS BE SAFE ENOUGH?

- Is their home defensible?
- Irrigated or dry-lot pasture?
- How far from radiant heat sources are they?...heavy brush or timber, big barns, residences
- Secure, firesafe perimeter fencing?
- Safe, enclosed animal housing to reduce smoke exposure.



HOW SAFE IS YOUR PROPERTY?

- Will it be accessible after a fire or earthquake?
- If water or fencing is power-dependent, is there a backup source?
- Consider all potential hazards:
 - Wind-blown fire & embers
 - Health impacts of smoke



Credit: 564FirePhotos

EVAC OR SIP?

ASSESS THE RISKS

DISASTER PLANNING

Evac or SIP? Assess the Risks

- ✓ Human safety
- ✓ Infrastructure resilience
- ✓ Continuity of business operations
- ✓ Animal health
- ✓ Bio-Safety
- ✓ Product quality protection
- ✓ Public perception

Ranch Hazard Awareness

- ✱ Hay storage
- ✱ Vehicles, fuel tanks
- ✱ Structures, EVs, battery storage
- ✱ Pressurized tanks, lithium ion batteries, chemicals
- ✱ Trees, power lines
- ✱ Poor access, visibility, egress

Barn Hardening Checklist

- No flammable clutter inside or outside
- Maintain structures, gutters, vents
- Add extinguishers, hoses & nozzles, sprinklers
- Smoke alarms, security cameras

Harden Your Ranch

- Defensible space
- Hardened structures
- Safe access & egress for emergency vehicles
- Strong infrastructure
- Frequent inspections





FIRE WEATHER BARN ROUTINE

Prep on Fire Weather **WATCH** days.
Turn Prep Into **Action** at start of Fire Weather **WARNING**
and **RED FLAG** periods.



Visit Cal Fire's "**Ready, Set, Go!**" web site or your local FireSafe Council
or Firewise Community site for defensible space and property access guidance.
Your home, barn, property, and vehicles should be wildfire-ready
before a Fire Weather alert is issued.

This checklist is focused on your equine, large animal and pet preparations.

- ☒ Confine animals where they can be caught quickly.
- ☒ Stage halters, lead ropes, leashes, crates and carriers for quick access.
- ☒ Make sure all animals have visible ID.
- ☒ Fuel up vehicles.
- ☒ Remove bedding from trailers.
- ☒ Review loading priorities.
- ☒ Prep trailer ties.
- ☒ Load truck copy of your AEP, including animal care sheets and current vax & health records (including Coggins, if needed).
- ☒ Load Go-Bags and First-Aid kits for people & animals.
- ☒ Load feed, water, equipment.
- ☒ Load your Personal Protection Equipment (PPE).
- ☒ Stage transport rigs for a quick exit, and turn around without having to back up.
- ☒ Check in with your helpers and destinations.
- ☒ Confirm reservations.
- ☒ Review travel routes with all helpers & haulers.
- ☒ Transport all top-priority animals during daylight and allow time to return rigs to barn before dark.



RED FLAG SHELTER-in-PLACE PREP

If your Evacuation Plan Includes sheltering some animals in place,
complete all preparations BEFORE Fire Weather WARNING or RED FLAG begins.
More info at HALTER Project.org

SHELTER-in-PLACE CHECKLIST

- ☒ Have animal refuge areas prepared.
- ☒ Leave extra halters & ropes for every equine in fire-resistant container.
- ☒ Store feed in secure fire-resistant containers 50' (minimum) away from animals.
- ☒ Remove halters, masks, wraps, sheets.
- ☒ Braid or trim tails up to hock length.
- ☒ Trim fetlock feathers.
- ☒ Check for loose shoes.
- ☒ Increase humidity in refuge area.
- ☒ Add water troughs, top off all.
- ☒ Secure troughs so they cannot tip over.
- ☒ Leave gates closed and unlocked.
- ☒ Turn all animals out, but never loose in close proximity to roads.
- ☒ Close barn and shed doors.
- ☒ Deactivate electric gates and fences.
- ☒ Notify Animal Services of animals on site.



Disaster Prep Resources for Equines & Livestock

Flooding & Equine Owners: Preparing, Responding, Recovering

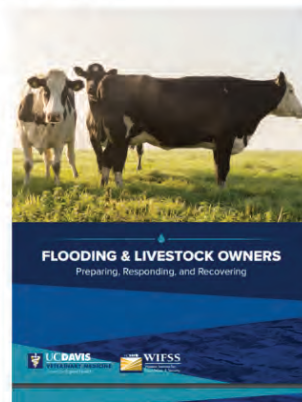
Flooding can be dangerous not only for horses but for ranchers and their employees as well. Six inches of moving water can topple an adult, and as little as 12 inches can sweep a vehicle off the road.



This pamphlet describes actions EQUINE owners can take to prepare.

Flooding & Livestock Owners: Preparing, Responding, Recovering

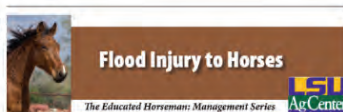
Flooding is the most common and costly disaster experienced by U.S. citizens. For livestock operations, structure damage and the loss of feed, animals, and genetic potential can be financially crippling.



This pamphlet describes actions LIVESTOCK owners can take to prepare.

Flood Injury in Horses

- Disease Prevention
- Response
- Triage & Medical Treatment
- Handling & Restraint
- Hoof Problems
- Ophthalmic Injuries
- Respiratory Disease
- Gastrointestinal Dysfunction



Natural disasters have the unique ability to take people by surprise. Although it is difficult to prepare for every scenario, horse owners who plan for a "worst-case" will greatly reduce the stress and health risks their horses experience during flooding events. In such situations, horse owners have emergency horses, making it even more important to understand the necessity of preparation.

Issues Prevention

- During a disaster, animals will be stressed and are likely to come in contact with other horses, and flood-damaged structures, which can increase the transfer of disease.
- Prior to the storm season, horses should be vaccinated with current vaccines for Equine Herpes (EHV-1, EHV-2), influenza (A & B), encephalomyelitis (EEE, WEE, WNV), rabies and tetanus.
- Providing food and fresh water to rescued animals is a priority. Adult horses need 10 to 15 gallons of water per day and enough emergency hay available to last at least seven days.
- Planning ahead to have adequate flood zones is important to minimize severe stall changes. Horses fed a pasture-based diet will require more attention if they do not have access to fresh forages to prevent

Response Plan

- Do your part to evacuate ahead of a flood, and make sure your horses can be handled and unloaded to being fed. These actions will help prevent injury during rescue and transportation.
- Make sure your horses can be identified during an emergency in case evacuation is necessary. This can be done by painting contact information on the horse. Markings and/or brand identification can be helpful for the rescue team when trying to locate owners.
- Equine emergency field response during a flood should be carried out by experienced team (including veterinarians, first responders and trained handlers) for the safety of both humans and horses.

Triage and Medical Treatment

- Get horses checked in a flood, there is a major contributor to flood-related equine medical problems and commonly include those discussed in the following sections.
- Injured horses should be examined by a veterinarian in the field and stabilized prior to transport. It is important to move the patient to an area for initial triage and assessment as soon as possible.



EQUINE Emergency Preparedness

Animal owners, and especially owners of horses and livestock, must rely on themselves to take care of their animals in a disaster. Make sure your emergency plan includes the following 10 points.



HALTER Project
ANIMAL DISASTER
PREPAREDNESS + RESPONSE
HALTERproject.org



**SCAN to
DOWNLOAD
ARTICLES!**

PLAN AHEAD FOR POWER OUTAGES

PETS & PEOPLE

- Create a home cooling station for pets & people.
- Remember: Kids, people with special needs, pug-nosed cats and dogs, rabbits, and birds are all especially vulnerable to heat.
- Know what to do for people dependent upon medical equipment.
- Stock up on meds & medical supplies.

EVERYONE

- Gas stations won't be open!
- EV charging won't be available.
- Stock up on fuel for generator.
- ATMs may not work; have cash on hand.
- Have good LED headlamps and lanterns.

EQUINES & LIVESTOCK

- Automatic systems on PG&E will not function, including:
 - * Waterers
 - * Irrigation
 - * Fans & insect repellent dispensers
- Automatic security, gates, doors, alarms.
- Stable equipment: refrigerators, sterilizers, washers, dryers.
- Fish pond aerators and filters.

WATER

Prepare for minimum of
7-10 days
& high temperatures.

GALLONS REQUIRED PER DAY

People & Pets: 1-2

Equines: 15-20

Cattle: 9

Pigs: 2-4

Small Ruminants: 1

Poultry: 5 (per 100)

Turkey: 12 (per 100)

COMMUNICATIONS

- Get a communications app or satellite phone.
- Have solar power source for charging cell phones, tablets, computers.
- Have extra batteries for everything!

GENERATOR SAFETY

- Does your permanent generator meet needs?
- Know the safety protocols for temporary generators!
- More info:
 - * pge.com Generator Safety
 - * SafeElectricity.org

FOOD SAFETY & WASTE MANAGEMENT

- Do you have an emergency plan?
- Will power outages impact your food storage, and/or waste management systems?
- Safe food storage... will you have enough capacity?

BIOSECURITY

- Be aware of current disease alerts and quarantines.
- Untrained helpers may unknowingly spread disease.
- Know how to contact authorized animal response resources.

PROPERTY ACCESS

- Know how to disable electric gates, garage doors, security systems.
- Have clearly marked entrance and signage throughout property.
- Provide access for emergency and evacuation vehicles, including: gates, trees, road and driveway conditions and adequate space for turnarounds.



HOW TO REQUEST HELP FOR ANIMALS YOU CANNOT EVACUATE:

9-25-24

If you are not able to evacuate some or all of your animals, call the Animal HOTLINE or Animal Control Emergency number.

- Call when you are safe.
- You can also ask a trusted friend, neighbor, or caregiver to call for you.

WHO HELPS THE ANIMALS?

- Authorized Animal Responders working with Emergency Services
- During evacuations, Sheriff Deputies will not be able to rescue animals, other than a Service Animal accompanying a human.

MAKE A SITE MAP OF YOUR PROPERTY

XYZ Ranch
12345 Your Road, Your Town, Your Zip

Contact 1: Name: _____ Phone _____

Contact 2: Name: _____ Phone _____



● Equines: ___ Mares ___ Foals ___ Geldings ___ Stallions ___ Minis

◆ Cattle: Quantity: _____

▲ Barn Cats: Quantity _____ Names _____

★ Dogs: Quantity _____ Loose? _____ In kennels? _____ Friendly? _____

● Chickens / Poultry:

● Small Ruminants:

● Water ● Troughs:

Evacuate or Shelter in place (SIP)?

NOTES:



Electric Vehicle & Charger



Hazardous Materials

Response Resources for Livestock & Equines

Whether you are a hobby farmer, commercial breeder, or a boarding facility, you must have strong, reliable, and ready resources when prepping for fire, flood, or other natural disasters.

Types of Resources include transport, water suppliers, feed suppliers, backup power sources, pump and equipment mechanics, and equipment such as panels, troughs, and fencing. Equally important are critical animal care workers and veterinarians.

Continuity of your small breeding, boarding or other commercial or hobby farm business depends on your preparedness to keep the humans and animals safe and well, and your infrastructure's capacity to withstand and recover from a natural disaster.

Ag Pass Programs

Some states and regional jurisdictions have programs to allow registered commercial Ag producers to remain on their property inside a Mandatory Evacuation Order, and entry access to critical workers and other resources.

To find out if your area has an "Ag Pass" type program, and qualification requirements, qualify, contact your Ag Commissioner, County or State Department of Agriculture, or local Farm Bureau.

Hobby and Non-Commercial Farms & Ranches

If you do not have a commercial Ag business, you must rely on a network of personal resources that you cultivate and collaborate with to build strong disaster plans.

You must also have a clear understanding of who the authorized animal disaster responders are for your area, and how to request their assistance.

Your strongest safety net is a group of "species-specific" animal handlers and transportation specialists, along with a network of safe temporary boarding and/or refuge locations. These groups, if they are trained in safety procedures, are often highly valued by emergency managers as go-to resources during natural disasters.

By cooperating with your local Animal Control, Sheriff, and Fire agencies to establish and maintain a responsible, safe, and well-resourced livestock or equine disaster support group, you take a huge step toward best outcomes for your animals and your community.

RESOURCES

How Much Do You Need?

GO: 1-2 weeks

STAY: 1 month minimum

✓ **PLUS** extra parasite control and special food(s).



WATER! How Much DO I Need for a Day?



Humans: 1.5 - 2 gallons

Horses: 12 - 20 gallons



Dogs: 1 oz/lb.

Cats: 5 -10 oz/lb.



Small Ruminants: 1 - 2 gallons

Poultry: 1-2 gallons (per 12-20)





HORSE AND/OR LIVESTOCK EVACUATION KIT

Be prepared for a disaster with an animal evacuation kit. Talk with your veterinarian when developing your kit, and assemble the kit well in advance of any emergency.

Food and medicine

- ☐ 7-10 days' worth of food*
- ☐ 7-10 days' supply of water (if possible)
- ☐ Two-week supply of supplements or medications*

**These items must be rotated and replaced to ensure they don't expire*

Animal care supplies

- ☐ Bandanas/blindfolds (if necessary)
- ☐ Blankets
- ☐ Fly spray
- ☐ Grooming/hoof care materials
- ☐ Leg wraps
- ☐ Portable livestock panels
- ☐ Restraints (halters, lariats, leads, ropes, etc.)
- ☐ Water buckets

General supplies

- | | |
|---------------------------------------|---|
| ☐ Batteries | ☐ Shovel |
| ☐ Cloth towels | ☐ Tarps |
| ☐ Duct tape | ☐ Thick gloves |
| ☐ Flashlight | ☐ Trash bags |
| ☐ Knife | ☐ Trash cans (with lids) |
| ☐ Paper towels | ☐ Wire cutters |
| ☐ Radio | |

First aid kit

- ☐ Antibiotic ointment
- ☐ Bandage tape and scissors
- ☐ Cotton bandage rolls
- ☐ Isopropyl alcohol/alcohol prep pads
- ☐ Latex gloves
- ☐ Saline solution
- ☐ Towel and washcloth
- ☐ Tweezers

Important documents

- ☐ Copies of veterinary records and proof of ownership
- ☐ Medication instructions and pharmacy information
- ☐ Emergency contact cards, including veterinarian and pharmacy
- ☐ Maps of the local area and evacuation routes

Other items you may want to remember

- ☐ _____
- ☐ _____





POULTRY AND/OR RABBIT EVACUATION KIT

Be prepared for a disaster with an animal evacuation kit. Talk with your veterinarian when developing your kit, and assemble the kit well in advance of any emergency.

Food and medicine

- ☐ 7-10 days' worth of food*
- ☐ 7-10 days' supply of water (if possible)
- ☐ Two-week supply of supplements or medications*

**These items must be rotated and replaced to ensure they don't expire*

Animal care supplies

- ☐ Bedding material
- ☐ Feeders and waterers
- ☐ Transport coops/crates (with heating/cooling apparatus as needed)

General supplies

- | | |
|---|---|
| ☐ Batteries | ☐ Paper towels |
| ☐ Cloth towels | ☐ Radio |
| ☐ Cleaning supplies (including detergent and disinfectant) | ☐ Shovel |
| ☐ Duct tape | ☐ Tarps |
| ☐ Flashlight | ☐ Thick gloves |
| ☐ Knife | ☐ Trash bags |
| | ☐ Trash cans (with lids) |
| | ☐ Wire cutters |

First aid kit

- ☐ Antibiotic ointment
- ☐ Bandage tape and scissors
- ☐ Cotton bandage rolls
- ☐ Isopropyl alcohol/alcohol prep pads
- ☐ Latex gloves
- ☐ Saline solution
- ☐ Towel and washcloth
- ☐ Tweezers

Important documents

- ☐ Identification papers including proof of ownership and microchip number, if applicable
- ☐ Medical records and medication instructions
- ☐ Emergency contact cards, including veterinarian and pharmacy
- ☐ Maps of the local area and evacuation routes

Other items you may want to remember

- ☐ _____
- ☐ _____





Small Ruminant & Camelids Ready Kit

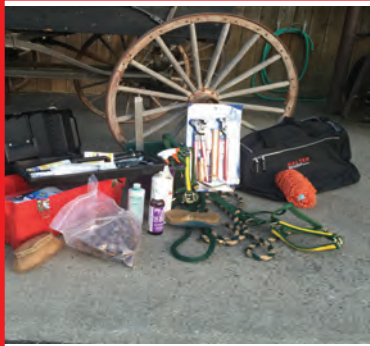
- ✓ Vet Records, medications, prescriptions, feed supplements
- ✓ Emergency contacts, IDs, photos, registrations
- ✓ Halters and leads
- ✓ Feed and supplements
- ✓ Buckets, feed and feed pans
- ✓ Bottled water
- ✓ Water purification items (iodine or chlorine tablets, filter)
- ✓ Portable pens/fencing, or crates
- ✓ Hoof nippers
- ✓ Clippers / shears
- ✓ Tweezers to remove thorns
- ✓ Microchip reader
- ✓ Leather gloves
- ✓ Scissors, sharp knife, wire cutters
- ✓ Non-latex gloves, hand sanitizer, N95 masks
- ✓ Animal-safe cleaning supplies
- ✓ Bleach, detergent, paper towels
- ✓ Muck bucket, rake
- ✓ Portable radio, flashlight, extra batteries
- ✓ Duct tape, markers, livestock crayons
- ✓ Trash & ziplock bags
- ✓ Fly spray



Health & First Aid Kit

- ✓ Mineral Oil
- ✓ Gauze Pads
- ✓ Eye wash solutions
- ✓ Eye lubricant
- ✓ Eye antibiotic ointment
- ✓ Emergency medications - Ask your veterinarian
- ✓ Syringes, droppers
- ✓ Saline irrigation solution
- ✓ Wound cleanser / antiseptic (e.g., Betadine)
- ✓ Wound dressing (e.g., Silver Sulfadiazine)
- ✓ Alcohol wipes / swabs
- ✓ Hand towels, hand wipes
- ✓ Nitrile disposable gloves
- ✓ Adhesive bandages
- ✓ Bandage scissors
- ✓ Bandaging materials: vet wrap, rolled cotton, roll gauze, tape, ACE bandage
- ✓ Emergency splint: 2" PVC pipe or 1" dowell
- ✓ Camera to document events / injuries





EQUINE READY-KIT

First-aid kit with EVERYTHING

Hoof care tools

Climbing rope

Extra halters & lead ropes

Long butt-rope

Fly spray & stick

Leg wraps

Fly masks

Liniment

Treats

Towels, assorted buckets

Slow-feed hay nets

Feed & water in trailer & arena

1 gal. metal can w/handle

EZ boots

Vicks in a tube

1 mane-tail comb

1 coat brush

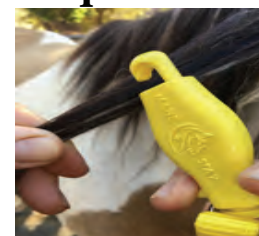
Fly sheets in a vacuum bag

Hose, nozzle



EQUINE ID

- Use multiple forms of ID
- Micro-chip! Keep updated!
- ManeStay ID tags, halter wraps w/ contact info
- Livestock ear tags & markers
- Livestock crayons and paint
- ID Tags & Markers
- Reflective neck and fetlock bands
- Giant markers
- Duct Tape (Reflective or Neon)
- Registration, Vet Records
- Emergency Contacts
- Medical Directives: What to do and amount of expense approved
- White Board listing all animals & locations
- Photos of you with your pets and equines



HALTERProject

HALTERproject.org Rescue@HALTERfund.org

Pet ID & Reunification

If you and your pet are separated, good ID, photos, and records will help you reconnect faster and more safely.

Microchipping is the BEST way to help you and your pets reconnect. Report your missing pet to local Animal Services and/or Helpline. Post missing pet info on agency, social media, and local neighborhood social media.

- ✓ Have multiple forms of identification -- and keep them all updated!
- ✓ Collar or harness with pet name and your contact info
- ✓ Vet records, registrations
- ✓ Personal & emergency contacts
- ✓ Photos of you with your animals
- ✓ Videos - vocals are helpful
- ✓ Advance Medical Directive for your pets: What to do and approved expenses
- ✓ Post a sign on window with info about animals inside



Pet Supplies, Go-Kits & Stay-Crates

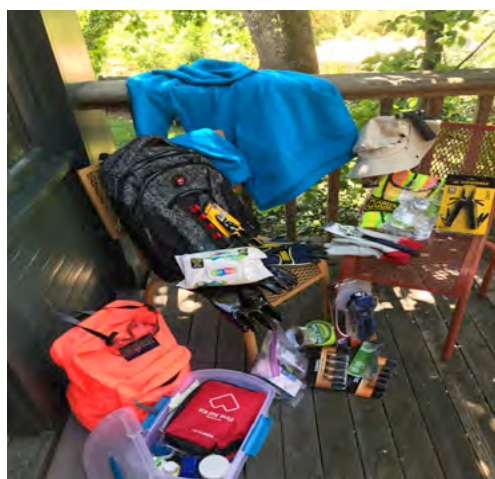
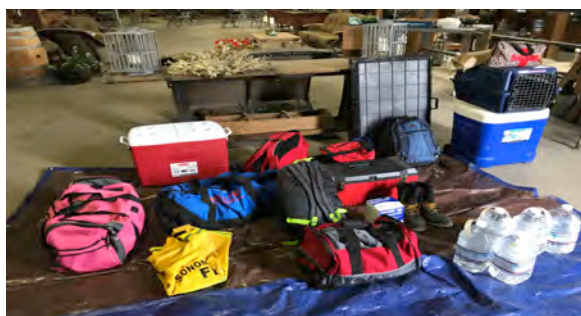
Supplies and Ready-Kits should be easy to grab and go. Keep them where they are safe and accessible in an extended emergency.

- ✓ Refresh food & medications regularly
- ✓ WATER, FOOD, PARASITE CONTROL, MEDS
 - * 7-14 Days if evacuating
 - * 30 Days, if possible, if sheltering in place
 - * Water purification products

✓ PET-SAFE CLEANING PRODUCTS

- * Use unscented when possible.
- * If using alcohol, bleach or hydrogen peroxide products, MUST allow to air-dry COMPLETELY before pet use.
- * Put newspapers under pee pads for extra cushion and easier cleanup

- ✓ Pet carrier & folding wire cage
- ✓ Vet records, prescriptions and dosage
- ✓ First aid kit, grooming supplies, baby wipes
- ✓ Saline solution or wipes to clean eyes, face, mouth, paws, minor wounds
- ✓ Travel bowls, can opener, fork, plastic lid
- ✓ Cooling pads, ice packs
- ✓ Lightweight blanket, sheet or towel to give pets privacy, security, warmth in crates
- ✓ Kennel pads, poop bags, diapers
- ✓ Newspapers, disposable litter pans & litter
- ✓ Trash bags, rubber gloves, sanitizer
- ✓ Sheets & towels for pet privacy & bedding
- ✓ Calming aids, Thunder Shirts
- ✓ Large pillow case (Makes good temporary carrier for cats, birds, reptiles)
- ✓ Flashlight, charger, radio, batteries
- ✓ Your PPE, cash, glasses, meds



CAR AND TRUCK READY-KITS

- ✓ Water (packs, jugs, Camelback)
- ✓ Purifier straw & tablets
- ✓ Buckets, hose, nozzle
- ✓ Tarps, foil blankets, ponchos
- ✓ Boots and socks
- ✓ Multi-season clothes
- ✓ Underwear
- ✓ Nitrile gloves
- ✓ Work gloves
- ✓ Potty bucket & liners
- ✓ Disinfectant & Chlorine Bleach
- ✓ Antibacterial soap, wipes, TP
- ✓ N-95 Masks & safety eye wear
- ✓ Food kit
- ✓ NOAA Radio
- ✓ Satellite phone/Beacon locator
- ✓ Buckets, spray bottles, sponge
- ✓ Vehicle Safety Checklist
- ✓ Loaded gross weight verification
- ✓ Fire Extinguisher
- ✓ Chargers (several kinds)
- ✓ First-aid kit
- ✓ Generator and fuel
- ✓ Chain & hand saws
- ✓ Bolt & wire cutters
- ✓ Reflective Duct Tape
- ✓ Safety Cones
- ✓ Wheel chocks, jack, crowbar
- ✓ Jumper cables
- ✓ Whistles & flares
- ✓ Headlamps, lanterns
- ✓ Safety vests
- ✓ Flashlights & batteries
- ✓ Solar charger
- ✓ Small toolkit, knife, scissors

WATER STORAGE & TRANSPORT

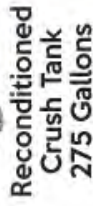
**Choose what you can safely
carry & store.**



Water Tank on Trailer
500 Gallons



Open Head
Plastic Drum
with Ring Lock
16 Gallons



Reconditioned
Crush Tank
275 Gallons



Stackable Storage
5 Gallons



Complete Water
Storage System
55 Gallons



AquaBrick Water
& Food Storage
3 Gallons



Yeti Tank Bucket
20.6 Gallons



Aqua Tainer
7.5 Gallons



Jerry Can
20 Gallons



Jerrican
5 Gallons

WATER: GALLONS REQUIRED PER DAY

Humans: 1.5 - 2	Equines: 15 - 20
Dogs: 1 oz. per pound	Cattle: 15 - 30
Cats: 5 - 10 oz	Pigs: 2 - 4
Birds: 5% of body weight	Small Ruminants: 1 - 2
Rabbits: 1.5 - 5 oz	Poultry: 5 (per 100)
per 2 lbs. body weight	Turkey: 12 (per 100)

DRINKING WATER SAFETY FOR PEOPLE & ANIMALS

ENSURING THAT YOUR WATER IS SAFE

In addition to having a bad odor and taste, water from questionable sources may be contaminated by a variety of microorganisms, including bacteria and parasites that cause diseases such as dysentery, cholera, typhoid and hepatitis.

Treat all water of uncertain purity before use.

To Treat Water For Consumption and/or Hygiene,
Follow These Steps:

Filter the water using a piece of cloth or coffee filter to remove solid particles.

Bring it to a rolling boil for one full minute.

Let it cool at least 30 minutes. Water must be cool or the chlorine treatment described below will be useless.

Add 16 drops of liquid chlorine bleach per gallon of water, or 8 drops per 2-liter bottle of water. Stir to mix. Sodium hypochlorite of the concentration of 5.25% to 6% should be the only active ingredient in the bleach. There should not be any added soap or fragrances. A major bleach manufacturer has also added Sodium Hydroxide as an active ingredient, which they state does not pose a health risk for water treatment.

Let stand 30 minutes.

If it smells of chlorine. You can use it. If it does not smell of chlorine, add 16 more drops of chlorine bleach per gallon of water (or 8 drops per 2-liter bottle of water), let stand 30 minutes, and smell it again. If it smells of chlorine, you can use it. If it does not smell of chlorine, discard it and find another source of water.

NOTE: If local public health department information differs from this advice, the local information should prevail.

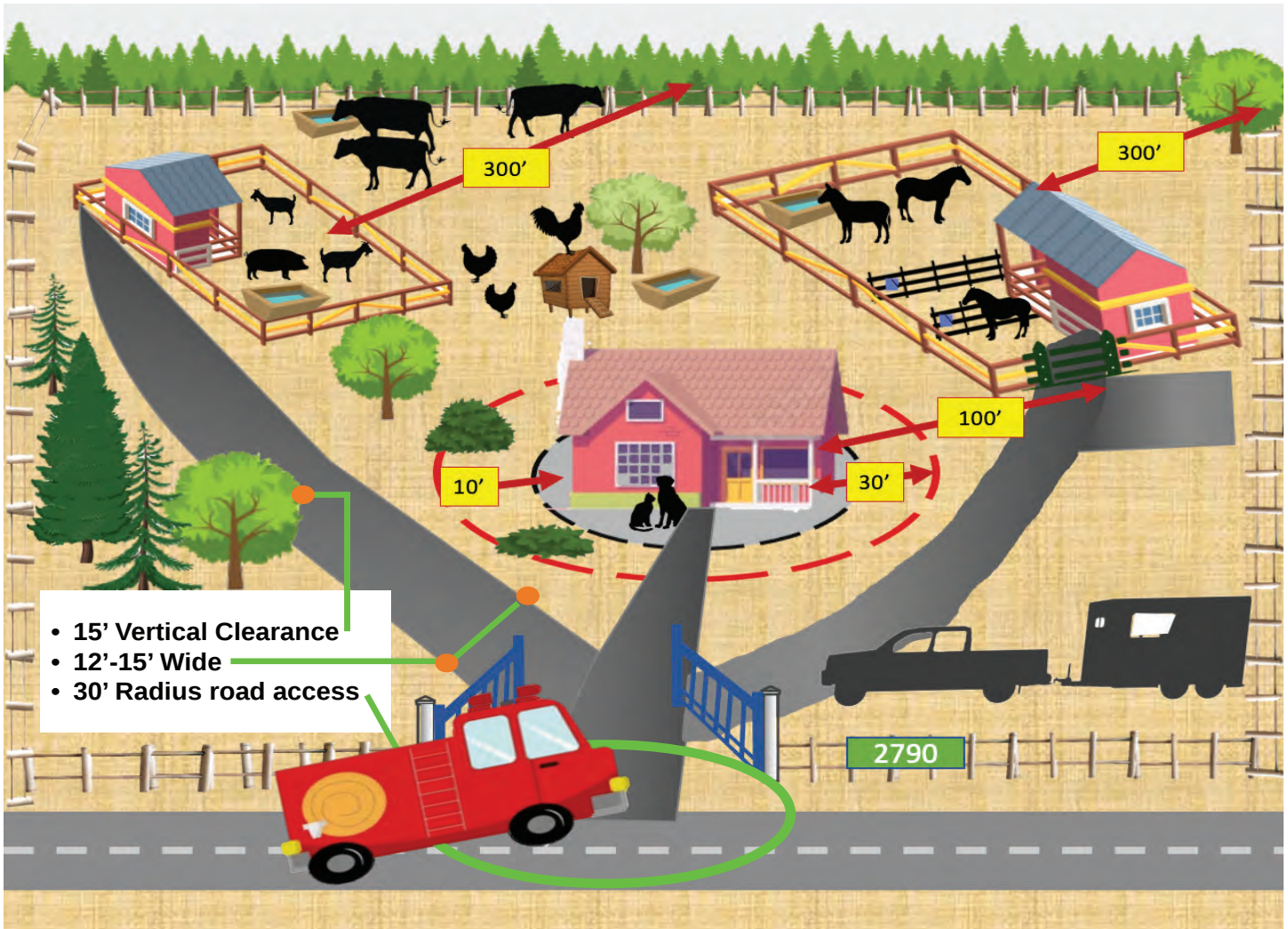
RESOURCES

AmericanRedCross.org/water-safety
CDC.gov/healthywater

EPA.gov/ground-water-and-drinking-water
Ready.gov/managing-water



DEFENSIBLE SPACE FOR ANIMALS



- ✓ Create a “LEAN, CLEAN and GREEN ZONE” by removing all flammable materials within 30' immediately surrounding structures.
- ✓ Keep animals as far as possible from brush and forest.
- ✓ Clear “stuff” next to buildings (furniture, tack boxes, supplies, etc.)
- ✓ Store hay, feed and bedding away from animal housing.
- ✓ Keep long hoses & nozzles in good shape and connected.
- ✓ Maintain safe property access for Emergency Vehicles!

Barn and Property Safety Checklist

Item	OK	To Do	Shopping List
Around the Property			
Check perimeter fencing and gates. Do you need to replace boards and wires? Is gate hardware in good working order? Do the gates drag on the ground?			
Do you need to remove any fallen branches, stumps and debris? Look for broken branches on trees and shrubs that are low enough a horse may run into it and cut or impale themselves.			
Check for poison plants.			
Check for overgrown bushes that may block gates.			
Is your address clearly visible on the street for easy access of emergency services?			
Check jumps and other equipment in your arenas. Make sure nothing has broken or come loose. Screws may work loose over time.			
Check water troughs and feeders for damage.			
Check drainage pipes for sharp edges.			
Run-In Sheds - Check the buildings over all condition, look for nails and other sharp objects. Erosion may cause gaps to form where a horse could catch a leg or hoof.			
Around the Barn			
Make sure debris, combustible material and weeds are cleared 30 feet from structures for fire protection			
Check barn structure. Is there damage to posts, beams or walls? Is the roof in good condition?			
Do the outside electrical outlets and switches have waterproof covers?			
Wash areas should be free of clutter and any shelves should be high enough that a horse will not hit the shelf.			
Are fire extinguishers in working order? Place fire extinguishers in all buildings. In large facilities, place fire extinguishers every 40 ft.			
Inspect all wiring. Older wiring may have damage from weather or rodents.			
Check all electrical cords. Appliances and equipment should be unplugged when not in use.			
Are there cobwebs and dust accumulating behind refrigerators and other appliance, around lights, near electrical sources? If so, clean the area.			

Barn and Property Safety Checklist

Grain and supplements should be stored in metal cans and lids secured with a bungee cord to prevent rodent infestation. This will also keep that escaped horse from gorging on grain.			
Hay & Shavings Storage. Whenever possible store these in a separate building. Storing hay in a well ventilated loft is preferable to the floor. If you store hay on the floor, place it on pallets or skids as far from stalls as possible. Keep the area clean.			
Are aisle ways clear of clutter? Any items stored in the aisles should be placed on hooks high enough that a panicked horse will not injure himself. Tack boxes and other items on the floor should not prevent stall doors from opening.			
Check stalls for damage to wood surfaces, broken or cracked feeders, protruding nails. Check the floor for damage or uneven surfaces. Look around the bottom of stalls for areas that may be hazardous when a horse rolls.			
Check latches and door knobs. Are they in good working order? Do they pose a hazard? Will tack or horses be hung up on them?			
Check floors for standing water, slick surfaces and uneven areas.			
Look for and destroy any wasps nests			
Throw away old medications. Remember if you did not use all of that antibiotic, etc. you should not keep it around. When in doubt, ask your vet.			
Check first aid and emergency supply kits. Do you need to replenish supplies? Throw away expired over the counter medications and replace as needed.			
Are emergency numbers and information posted near the phone or in the barn aisle? Is the information up-to-date?			
Boarding facilities should have safety rules clearly posted.			
Do you have "No Smoking" signs posted?			



Barn Fire Safety Checklist

Mrs. O'Leary's Cow may have gotten a bad rap but the folktale reminds us fire safety is an important part of farm life. People, animals, and property are in danger when fire breaks out on the farm. Inspect your barn and outbuildings for fire hazards to reduce the risk of tragic loss.

- ✓ Heat lamps and space heaters are kept a safe distance from anything that can burn.
- ✓ Heaters are on a sturdy surface and cannot fall over.
- ✓ Electrical equipment is labeled for agricultural or commercial use.
- ✓ All wiring is free from damage.
- ✓ Extension cords are not used in the barn.
- ✓ Lightbulbs have covers to protect them from dust, moisture, and breakage.
- ✓ Damage is identified quickly and repairs are completed with safety in mind.
- ✓ Dust and cobwebs around electrical outlets and lights are removed.
- ✓ Oily rags are stored in a closed, metal container away from heat.
- ✓ Feed, hay, straw, and flammable liquids are stored away from the main barn.
- ✓ The barn is a smoke-free zone.
- ✓ Exits are clearly marked and pathways are clear.
- ✓ Fire drills are held frequently with everyone who uses the barn.
- ✓ Workers are trained to use fire extinguishers.
- ✓ Everyone in the barn knows personal safety is the first priority if a fire breaks out.
- ✓ Hazard checks take place on a set schedule.

Required Equipment

The following safety equipment may be required by local building codes and will help protect your barn. Install and maintain:

- ABC-type fire extinguishers near every exit and within 50 feet from any point in the barn.
- Fire alarm system
- Sprinkler system
- Carbon monoxide detection system



Talk with your local fire department to address safety concerns unique to your farm.

Go to www.nfpa.org/farms to learn more about fire safety on the farm.



NATIONAL FIRE PROTECTION ASSOCIATION
The leading information and knowledge resource on fire, electrical and related hazards

Livestock Emergency Numbers

Phone Contacts Cards

(Keep in your wallet, barn, vehicles,
Farm Emergency Action Plan)

My **LIVESTOCK EMERGENCY** numbers

Trailers/Haulers	Grain supplier
	Hay supplier
	Water supplier
Extension office	Area emergency coordinator
State Veterinarian	Alternate caretaker information

My **LIVESTOCK EMERGENCY** numbers

Veterinarian	Poison Control
Animal control	Police (non-emergency)
	Fire department (non-emergency)

For more disaster preparedness tips visit avma.org/Disaster

Mis números **DE EMERGENCIA PARA GANADO**

Tráileres/remolques	Proveedor de granos
	Proveedor de heno
	Proveedor de agua
Oficina de extensión	Coordinador de emergencia de la zona
Veterinario del estado	Información sobre cuidadores alternativos

Mis números **DE EMERGENCIA PARA GANADO**

Veterinario	Control de Intoxicaciones y Envenenamiento
Control de animales	Policía (no es de emergencia)
	Bomberos (no es de emergencia)

Para obtener más información sobre consejos de preparación para desastres, visite avma.org/Disaster

<https://www.avma.org/resources-tools/animal-health-and-welfare/disaster-preparedness/emergency-contact-cards>

ANIMAL EMERGENCY PLAN

For Owners, Caregivers, and Animal Sitters

Attach current
vaccination & vet
records to this plan.

- * Keep a copy with your important records.
- * Put a copy where helpers and responders can see it.
- * Give copies to animal caregivers.
- * Keep a copy electronically.

Pet's Name: _____

Pet's Description: _____

Medical Information

Veterinarian's Name: _____

Address: _____

Email: _____ Phone: _____

Pet Allergies: _____

Special Diet Needs: _____

Medication: _____ Dose: _____

Medication: _____ Dose: _____

Attach copies of pet's vaccination records and a photo of your pet to this plan

EMERGENCY CONTACTS

Name: _____ Phone: _____

Name: _____ Phone: _____

EMERGENCY SHELTERING INFORMATION

For public health reasons, many emergency shelters cannot accept pets. Identify 2 hotels/motels that accept pets in your area for short-term emergencies and 2 long-term pet boarding options. Long-term options could include boarding kennels, veterinarians, and animal shelters.

Hotels/Motels:

Name: _____ Rate: _____

Address: _____ Phone: _____

Name: _____ Rate: _____

Address: _____ Phone: _____

Boarding Options:

Name: _____ Rate: _____

Address: _____ Phone: _____

Name: _____ Rate: _____

Address: _____ Phone: _____

Update your Animal Disaster Plan, Ready Kit, and emergency supplies twice a year.



Advance Health and Final Care or Pets

In the event of my death, or incapacity to act,
I want the following plan for the care and safety
of my pet(s) to be implemented.

**HALTER
Project**
www.HALTERproject.org

Pet's Name	Species	Age	Gender
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

I would like my pet(s) to be:

- ☐ Placed in an appropriate home by this rescue organization:

- ☐ A copy of this document is on file with this organization.
- ☐ Surrendered to the SPCA, local humane society, or pet rescue organization
☐ A copy of this document is on file with this organization.
- ☐ Euthanized, cremated, buried/remains disposed of with me, as mine.
- ☐ Placed with family or friends, as listed below.
☐ Each person named has a copy of this document.

Name	Address	Phone	Relationship
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Veterinarian Information

Name _____ Phone _____

Address _____

City _____ State _____ Zip _____

- ☐ A copy of this document, and my pet(s) records are on file with my veterinarian.

Pet Owner Signature _____ Date _____

Witness _____ Date _____

ANIMAL NAME _____

SPECIES: _____ **BREED:** _____ **AGE** _____

COLOR: _____ **STALL/PEN #** _____

SEX: Mare Gelding Stallion

OWNER NAME _____

PHONE 1 _____ **PHONE 2** _____

EMERG. CONTACT NAME _____

PHONE _____

VET _____ **PHONE** _____

ANIMAL IDENTIFICATION

MICROCHIP NUMBER _____

BRAND / TATTOO Circle Location: Neck Hip Lip Other

MARKINGS (Blaze, Sock, etc.) _____

PHOTO

FEED

HAY A.M. NOON. P.M.

GRAIN A.M. NOON. P.M.

ADDITIONAL INSTRUCTIONS _____

NOTES

NEEDS MEDICATION _____

BLIND: Left Right Both **LAME:** (Describe) _____

WARNINGS: Kicks Bites Head/Ear Shy Doesn't Load

Other _____

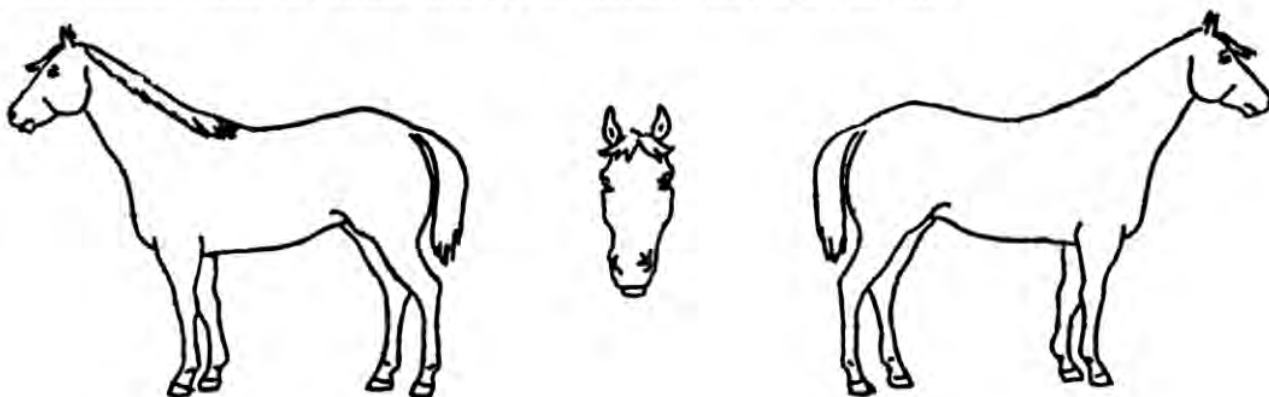
Needs to be with others or has a buddy _____

PHOTO

ANIMAL INSURANCE INFO – Policy Number

OWNER'S VEHICLE(S) LICENSE PLATE(S)

Sketch markings and indicate colors or attach photographs showing both sides and face.



SAFETY	TRAILERS THIS HORSE WILL GET IN:		STEP-UP: Y / N / ?		STRAIGHT LOAD: Y/N / ?		
			RAMP: Y / N / ?		STOCK TRAILER: Y/N / ?		
	VICES:						
	IS YOUR HORSE?	SAFE TO TIE? Y / N			GOOD W/OTHER HORSES? Y/N		
		SAFE IN PASTURE? Y / N		SAFE IN PADDOCK? Y / N		REQUIRE STALL? Y / N	
PREFERRED EVACUATION SITE:							

IN CASE OF EMERGENCY

**ANIMALS MAY BE INSIDE THE HOUSE,
BARN, OR COOP**

ANIMAL
CONTROL

Phone #: _____

**HALTER
Project**

LEADING RESIDENTS TO
SAFETY & PREPAREDNESS

HALTERproject.org



_____ of **DOGS**

Names: _____



_____ of **CATS**

Names: _____



BARN/OUTSIDE -- CATS, DOGS

of Cats _____

of Dogs _____

of Other _____

LIVESTOCK / POULTRY -- SPECIES & LOCATIONS



OWNER: _____ CELL: _____

ADDRESS _____

EMERG. CONTACT: _____ CELL: _____

**PET(S) INSIDE
DO NOT
OPEN DOOR**

PET(S) NAME(S) & INFO:

Large Animal Feeding Guide

California Veterinary Emergency Team



Species		Feed			Feces		Water	DO NOTS
Species	Digestive Type	Type	Amount/Feeding	Feedings/Day	Amount	Consistency	Gallons/Day	
Horse	Herbivore	Grass hay	1-2 flake	2*	1 pile per 3-4h	"Apple" shaped	8-10	No poultry or pig feed No sudden feed change
Donkey	Herbivore	Grass hay and clean barley straw	1/4 flake grass hay 3/4 flake straw	2*	1 pile per 3-4h	"Apple" shaped	7-10	No poultry or pig feed
Mule	Herbivore	Grass hay	1 flake	2*	1 pile per 3-4h	"Apple" shaped	10-15	No poultry or pig feed
Cattle	Herbivore	Grass hay	2-3 flakes	2	1 pile per 3-4h	Semi-formed	15-20	No poultry or pig feed
Sheep	Herbivore	Grass hay	1/4 flake	2	1 pile per 2h	Pelleted	1-2	No poultry or pig feed
Goat	Herbivore	Grass hay	1/4 flake	2	1 pile per 2h	Pelleted	1-2	No poultry or pig feed No grain or alfalfa
Llama/Alpaca	Herbivore	Grass hay	1/2-1 flake	2	1 pile per 2h	Pelleted	2-5	No grain
Market Swine	Omnivore	Pig Complete Feed	1-2lbs	2	4-8 per day	Round solid balls	1-2	No wet cob** No salt block
Pot Belly Pigs	Omnivore	Mini pig specific feed (Mazuri brand recommended); leafy vegetables and fruit	1 cup/30lb BW	2	4-8 per day	Round solid balls May need potty area	1/4-1	No dry or wet cob** No salt block

*If possible, equids (horse, donkey, mule), should be fed 3x daily as to continually have forage available.

**COB – Corn/Oats/Barley grain combination

Normal Vital Signs

California Veterinary Emergency Team



Species	Heart Rate (beats/min)	Resp Rate (breaths/min)	Temperature (°F)	Mucous Membranes	Capillary Refill Time	Gastrointestinal	Overall Demeanor
Dogs	Small: 100-160 Medium: 60-100 Puppy: 120-160	10-30	100.0-102.8	Pink/moist	<2s	Soft, non painful	Bright, alert, responsive (BAR)
Cats	100-140	20-30	100.0-102.5	Pink/moist	<2s	Soft, non painful	Bright, alert, responsive (BAR)
Rabbits	120-150	50-60	100.4-105	Pink/moist	<2s	Soft, non painful	Bright, alert, responsive (BAR)
Chickens	140-250	15-30	105-109.4	Firm red comb	<2s	Soft fluctuant crop	Bright, alert, responsive (BAR)
Horses	Adult: 28-44 Foal: 50-70	Adult: 8-15 Foal: 20-40	Adult: 99-101 Foal: 99-102	Pink/moist	<2s	Gut sounds in all four quadrants	Bright, alert, responsive (BAR)
Goat	Adult: 70-110 Kid: 120-160	Adult: 15-40 Kid: 40-65	Adult: 101.5-103.5 Kid: 102-104	Pink/moist	<2s	Rumen contractions + soft rumen	Bright, alert, responsive (BAR)
Sheep	Adult: 60-120 Lamb: 120-160	Adult: 12-72 Lamb: 30-70	Adult: 102-103.5 Lamb: 102.5-104	Pink/moist	<2s	Rumen contractions + soft rumen	Bright, alert, responsive (BAR)
Llama/Alpaca	60-90	10-30	99-102	Pink/moist	<2s	3-4 rumen contractions/min	Bright, alert, responsive (BAR)
Cattle	Adult: 40-80 Calf: 100-140	Adult: 12-36 Calf: 30-60	Adult: 100.5-102.5 Calf: 101.5-103	Pink/moist	<2s	Rumen contractions + soft rumen	Bright, alert, responsive (BAR)
Pigs	70-120	30-50	101.5-103.5	Pink/moist	<2s	Soft, non painful	Bright, alert, responsive (BAR)

Suggested Equine Drug Kit

This information was provided by an equine veterinarian to assist in the understanding of various prescribed medications for equines for other other large animals and small ruminant species. ALWAYS check with your vet before administering and medication,.

- **Acepromazine** is a tranquilizer. This means that it will have a calming effect on the horse but will do nothing to control pain. Effect is dependent on dose amount as well as the horse's adrenaline levels at the time of administration. Generally, 2-3 cc intramuscularly in a 1000 lb. horse with a 20–30-minute quiet waiting period post-injection will achieve a desired effect. **DO NOT USE IN STALLIONS.**
- **Banamine** is a non-steroidal anti-inflammatory drug. It is used for fever, swelling, pain from colic, eye trauma, laminitis, or laceration.
- **Betadine** solution is a non-detergent broad spectrum antiseptic agent used to disinfect wounds, skin, and non-biological surfaces. It effectively kills bacteria, fungi, and viruses.
- **Bute** is a non-steroidal anti-inflammatory drug. It is used for fever, swelling, pain from colic, eye trauma, laminitis, or laceration.
- **Fura/1 {Furazone) Aerosol Spray** is a topical antiseptic aerosol spray power used for large open wounds.
- **Nitrile** disposable gloves are a comparable alternative to latex gloves.
- **Silver Sulfadiazine Cream** is a topical cream that is safe and effective for wounds and burns. It has broad spectrum topical antibiotic.
- **SWAT** is a fly repellent ointment that is safe for use on and around the edges of open wounds.
- **Triple Antibiotic Ophthalmic Ointment** is a broad-spectrum antibiotic ointment that is formulated to be safe for use in eyes.
- **Xylazine (Rompun)** is a sedative, meaning that it will have a calming effect on a horse as well as provide potent pain relief. When working on painful eye trauma, leg trauma, wounds, or managing colic pain, xylazine is a useful aid. It also can be used to help handle and load fractious horses. The effect is dose dependent. Generally, 2-3 cc intramuscularly in a 1000 lb. horse with a 15-minute quiet waiting period post-injection will achieve a desired effect.

Wildfire smoke and animals



As irritating as smoke can be to people, it can cause health problems for animals as well. Smoke from wildfires and other large blazes affects pets, horses, livestock and wildlife. If you can see or feel the effects of smoke yourself, you also should take precautions to keep your animals – both pets and livestock – safe.

Animals with cardiovascular or respiratory disease are especially at risk from smoke and should be closely watched during all periods of poor air quality. Look for the following signs of possible smoke or dust irritation in animals. **If any of your animals are experiencing any of these signs, please consult your veterinarian.**

- Coughing or gagging
- Difficulty breathing, including open mouth breathing and increased noise when breathing
- Eye irritation and excessive watering
- Inflammation of throat or mouth
- Nasal discharge
- Asthma-like symptoms
- Increased breathing rate
- Fatigue or weakness
- Disorientation or stumbling
- Reduced appetite and/or thirst

Tips to protect pets

- Keep pets indoors as much as possible, and keep your windows shut.
- **Birds are particularly susceptible** and should not be allowed outside when smoke or particulate matter are present.
- Let dogs and cats outside only for brief bathroom breaks if air quality alerts are in effect.
- Avoid intense outdoor exercise during periods of poor air quality. Exercise pets when dust and smoke has settled.
- Have a [pet evacuation kit](#) ready, and include your animals in your disaster preparedness planning.

Tips to protect livestock

- Limit exercise when smoke is visible. Especially don't require animals to perform activities that substantively increase airflow into and out of the lungs.
- Provide plenty of fresh water near feeding areas.
- Limit dust exposure by feeding low-dust or dust-free feeds and sprinkling or misting the livestock holding area.
- Plan to give livestock 4 to 6 weeks to recuperate after the air quality returns to normal. Attempting to handle, move, or transport livestock may delay healing and compromise your animals' performance.
- Have a [livestock evacuation plan](#) ready in advance. If you don't have enough trailers to quickly transport all of your animals, contact neighbors, local haulers, farmers, producers, or other transportation providers to establish a network of reliable resources that can provide transportation in the event you need to evacuate your animals.
- Good barn and field maintenance can reduce fire danger for horses and other livestock. Make sure barns and other structures are stable, promptly remove dead trees, clear away brush, and maintain a defensible space around structures.

Ministry of Agriculture, Food and Rural Affairs

Spontaneous Combustion and Hay Fires

Lives have been lost and hay crops destroyed because of fires caused by spontaneous combustion. This year has been particularly bad for hay heating due to the hot humid weather. If the hay crop is put into the mow above 20-25% moisture content, spontaneous combustion may occur.

A hay crop that is placed too wet into a mow will heat rapidly. If the mow is so large that heat loss is restricted, the internal temperature will rise. As the temperature rises above 130°F (55°C), a chemical reaction occurs and may sustain itself. This reaction does not require oxygen, but the flammable gases produced are at a temperature above their ignition point. These gases will ignite when they come in contact with the air.

Check your hay regularly. If you detect a slight caramel odour or a distinct musty smell, chances are your hay is heating.

What do you do if you suspect that your hay is heating? First of all, make yourself a simple probe that can be inserted into the hay mass to check the temperature. A probe can be made from a 10 foot piece of electrical tubing. Rivet a hardwood pointed dowel to one end and drill 8 - 3/16 inch diameter holes in the tube just above the dowel. Drive the probe into the hay mass and lower a candy thermometer on a long string into the probe. The thermometer should be left for 10 minutes to ensure an accurate reading.

Watch for the following temperatures:

150°F (65°C) ** **Entering the Danger Zone.** Check temperature daily.

160°F (70°C) ** **Danger!** Measure temperature every four hours and inspect mow.

175°F (80°C) ** **Call the Fire Department!** Wet hay down and remove from the barn.

185°F (85°C) ** **Hot Spots and Pockets May be Expected.** Flames will likely develop when heating hay comes in contact with the air.

212°F (100°C) **Critical!** Temperature rise is rapid above this point. Hay will almost certainly ignite.

Caution: Before entering the mow, place long planks on top of the hay. Do not attempt to walk on the hay mass itself. Pockets may have already burned out under the hay surface. Always tie a rope around your waist and have a second person on the other end in a safe location to pull you out should the surface of the hay collapse into a fire pocket.

Extreme caution should be taken when fighting a hay fire if hay has been treated with chemical preservatives. Hay treated with preservatives containing ethoxyquin and BHT (butylated hydroxytoluene) will produce hydrogen cyanide gas at around 240°F (115°C). This gas is very deadly. Additives containing primarily propionic acid do not produce hydrogen cyanide during a fire.

Many farmers sprinkle salt on hay as it is stored, in an effort to prevent hay fires. However, tests have shown that salt has no effect on controlling spontaneous combustion. Dry ice, liquid nitrogen or carbon dioxide gas pumped into the hay will prevent combustion by eliminating the oxygen from the hay mass.

Spontaneous combustion is not an accident. By following good storage practices, not only will spontaneous combustion be avoided, but a higher quality of hay will be obtained.

For more information:

Toll Free: 1-877-424-1300

E-mail: ag.info.omafra@ontario.ca



Minimizing Wildfire Risk on Horse Properties



Wildfire is a very real concern for horse owners, especially with a warming planet and for those who live in the dry climates of the American West. Extreme temperatures, limited summer rainfall, strong winds, and lightning storms all lead to high fire danger. Windblown embers from a nearby fire can travel a mile or more, landing on and igniting buildings or other combustibles and putting you and your horses at risk. This checklist will help you identify and reduce wildfire threats on your horse property, farm, or ranch.

☐ Create defensible space around important structures

Defensible spaces are areas that are landscaped and maintained to reduce fire danger by keeping vegetation and combustibles to a minimum. Having a defensible space reduces the risk that fire will spread to or between structures on your property, and provides firefighters and emergency officials with a safer defense point should you have a fire. **A minimum defensible space of 100 feet is recommended for homes and outbuildings on flat ground.** Because fire acts differently on hillsides, **defensible space for structures on sloped sites should be at least 200 feet.**

☐ Choose firewise landscaping

Choose landscaping plants that have high moisture content, high salt or soap content, low-growing/compact growth, low oil or resin content, green stems, small leaves, or high drought tolerance. Visit <https://thehorse.com/135408/firewise-landscaping-for-horse-properties> for examples.



☐ Remove flammable yard decorations

Replace wooden patio furniture, brooms, flower boxes, flammable doormats (such as the popular coconut mats), and other combustible items with non-flammable varieties made out of metal or ceramic.

☐ Opt for non-flammable fencing

Not only will wooden or plastic fencing burn in a fire, but it can draw a fire right to your barn. Replace flammable fencing with non-flammable options such as metal panel fencing or welded pipe.

☐ Replace combustible siding or roofing

Cedar shake shingles, wood, vinyl, and plastics can all catch fire easily. Replace combustible roofing and

siding with non-combustible options such as metal, tile, brick, or adobe. Green roofs are also an excellent option with the added conservation benefits of slowing water runoff, conserving energy, improving air quality, reducing noise, and providing wildlife habitat.



☐ **Clear weeds and debris**

Weeds like cheatgrass are extremely flammable when dry. Remove weeds through grazing, mowing, prescribed burning, or herbicide use. Keep vegetation that is within 100 feet of structures grazed low and green during fire seasons. Regularly clear leaves and other debris out of your gutters, off of your roofs, and away from the base of each structure. Check rafters for cobwebs, which can trap dust and flammable debris.

☐ **Store combustible items away from important structures**

Hay, bedding, large manure piles, and livestock feed should be stored away from stables in a dry, covered area. Maintain a 12-30 foot firebreak of cleared land such as a gravel driveway, concrete pad, or dirt path between storage areas and other structures. Keep propane and other fuels 30 feet from buildings, wood fences, and other structures. Regularly clean up wind-blown debris or weeds that accumulate in these areas.

☐ **Practice basic barn fire safety**

Inspect electrical systems and replace damaged wires. Install smoke detectors and replace batteries every six months. Keep fire extinguishers next to doorways in barns and in vehicles and tractors. Keep barn aisles and doors clean and free of obstruction to provide quicker access in an emergency. Post important phone numbers (barn manager, vet, etc.) and your barn's street address next to the phone for easy reference when communicating with emergency personnel.

☐ **Prepare for emergency response personnel**

Post your address at the entrance to your property in a spot that's clearly visible from the road. Make sure fire trucks and emergency vehicles can access your property by checking for overhead utility lines, tree branches, ranch gates or signs, rocks or other landscaping, or other potential obstructions.

Remember: Even with the best defensible spaces, sometimes evacuation is the best option when wildfire is imminent. Planning and preparing for an emergency evacuation ahead of time will help keep everyone safe. Refer to Horses For Clean Water's FREE Firewise Evacuation Checklist for help creating your evacuation plan *before* the threat of wildfire becomes real.

<http://www.horsesforcleanwater.com/tip-sheets/firewise-evacuation-checklist>

RESOURCES FOR DISASTER PLANNING & PREPAREDNESS

Be PERSONALLY Prepared

Always start with your local Emergency Services to sign up for local alerts and be aware of other critical information and preparedness resources in your county, state, and province.

Disaster Planning Resources for SMALL FARMS, BREEDING & BOARDING OPERATIONS

- Find out what agency has the authority to manage animal welfare in your county, state or province. Bureaucratic organization and authority vary widely.
 - Pets, equines, and non-commercial livestock may be under the authority of Animal Control, while commercial livestock are under the authority of the Department of Agriculture.
-
- AlpacaInfo.com
 - [Wildfire Preparedness for Farms, Ranches, and Agricultural Operations](#) -- UC Ag & Natural Resources Fire Network (ACANR)
 - [The Livestock Conservancy](#)
 - [The Livestock Project](#)
 - [Managing Grazing Livestock During Wet Weather](#) --University of Minnesota Extension
 - [Is Your Farm Ready? 4 Livestock Preparedness Tips](#) -- FEMA.gov
 - [¿Su granja está lista? 4 consejos de preparación para el ganado](#) -- FEMA.gov
 - [Disaster Preparedness for Livestock Owners](#) -- California Department of Food and Agriculture
 - [Resources for Small and Mid-sized Farmers](#) -- USDA
 - [Preparing the Farm and Farm Animals for Disasters](#) -- Alpaca Owners Association Inc.
 - [All-Hazard Preparedness for Rural Communities booklet](#) -- Center for Food Security & Public Health / Iowa State University
 - [Preparación Para Todo Tipo De Peligros Para Las Comunidades Rurales](#) -- The Center for Food Security & Public Health / Iowa State University
 - [Disaster and Emergency Planning](#) -- The Livestock Project
 - [Small Farm Preparedness](#) -- AVMA
 - [Save the Whole Family](#) -- AVMA
 - [Resources for Farmers](#) -- Univ. of Sydney Australia

Be PERSONALLY Prepared

Always start with your local Emergency Services to sign up for local alerts and be aware of other critical information and preparedness resources in your county, state, and province.

For PEOPLE

- [American Red Cross](#) - Make A Plan In 3 Steps
- [CDC: Centers for Disease Control and Prevention](#)
- [ListosCalifornia.org](#)
- [Ready.gov](#)

For ANIMALS

- [CVET Large Animal Care and Feeding Guide 2024](#)
- [Animal in the Wildland Urban Interface Guide \(WUI\)](#)
- [Wildfire Smoke and Animals](#) – AVMA
- [First Aid Tips for Pet Owners](#) – AVMA
- [Donkey Welfare Symposium](#)



**Loops Large Animal
Rescue System**



**Madigan
Foal Squeeze
Videos & Tips**



**Animals in the
Wildland Urban
Interface
(WUI)**

Resources at **HALTER**Project.org



HALTERPROJECT.ORG



**SUBSCRIBE TO HALTER
NEWSLETTERS**



**ANIMAL READY-
KIT CHECKLISTS**



**SMALL FARM PREP
WORKBOOK ALL-GEO**



**ESPAÑOL ANIMAL
DISASTER PREP**



**FireSAFE
Animals**



**PET PREP
for SENIORS
& CAREGIVERS**



**AG WORKER
DISASTER PLAN
(English & Español)**

Stay Connected with Us on Social Media!

