
A Horse Owners Guide to Horses in Disasters



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Educational Series
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ACKNOWLEDGEMENTS

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INTRODUCTION

ABOUT THIS SERIES

As much as we would like to deny it, disasters happen every day. Luckily the majority of them do not affect us directly, but that is no excuse not to be prepared.

So why are we so bad at planning for disasters? Is it that we don't think that it can or will happen to us or is it that it seems like such a daunting task to properly prepare for the big "what if"? If you think that it will never happen to you, think again! Since 1990, (EM-DAT) the top ten natural disasters in the United States have caused 17,263 deaths, directly affected approximately 24.2 million people, with economic damage estimates at \$298.8 billion. In 2010 alone there were 81 federally declared disasters and while the large-scale disasters often receive more media attention the cumulative cost of small-scale disasters to the US annual far exceeds the cost of large-scale disasters.

Many disasters cannot be prevented. Even the most advanced technology cannot stop a tornado, hurricane, flood or earthquake from occurring; however there are numerous ways to mitigate the adverse affects of these calamities.

Disaster preparedness is important for all animals, but it with horses there are unique circumstances to consider. Because most disasters have similar consequences, such as loose and unidentified animals, general animal well-being, and environmental impacts, an emphasis will be placed on taking an "all-hazards" approach on consequence management.

This series is packed full of information to help you learn more about and prepare for disasters that could affect you, your horse(s) and your facility.

HOW TO USE THIS BOOKLET

As a Learning Guide

Each lesson covers one broad topic or set of related topics. Lessons are arranged in order of increasing proficiency and the information that you acquire in one lesson may be used and

developed in subsequent lessons. For this reason, you should work through the lessons in sequence.

We organized each lesson into informational topics geared towards supporting your knowledge base and to allow you to use the information in a practical sense. Throughout this book you will find information, illustrations and supporting background information to provide you with a foundation and structure to learn more about equine first aid and identification.

As a Review Tool

Any method of instruction is only as effective as the time you are willing to invest in it. Please keep in mind that while some of the information that you learn in the series course today may not seem important to you immediately, it may become important later on. For this reason, we encourage you to spend some time reviewing the topics after completion of this educational series.

As a Reference

The organization and layout of this booklet has been designed to make it easy to use as a learning and information tool and as an after-course reference. You can use this booklet as a source for background information on given topics.

SERIES OBJECTIVES

By the time your finish this series, you should be to:

- Assess your local risk for emergencies and/or disasters
- Understand mitigation practices that you can take before a disaster
- Learn how to create a disaster plan
- Know what to put in a disaster kit
- Learn to assess the risk of staying or evacuating
- Understanding what to do after the disaster

LESSON 1

ASSESS THE RISK

The United States faces a multitude of hazards ranging from natural hazards such as severe weather including high winds and winter storms, flooding, landslides, and earthquakes, to man-made hazards like civil unrest, and terrorism to name a few. It is important to take the time before disaster strikes to find out what your major vulnerabilities are (both regionally and locally) and to figure out what you can do to minimize the risks and potential damage that may be caused by those vulnerabilities. The first step is familiarizing yourself about the types of hazards that you specifically face in your region is an important tool to help you prepare.

Let's explore the top hazards that we face here in Western Washington both on a large scale and on a personal, location specific scale.

Regional Hazards

Each region of the country has its own unique hazards. Knowing what the hazards in your region are will help you plan for the worst. The following is a list of some of the hazards that we have the potential of facing here in Western Washington:

- Floods
- Thunderstorms and Lightning
- Tornadoes
- Winter Storms
- Extreme Cold
- Extreme Heat
- Earthquakes
- Volcanoes
- Landslides and Debris Flows
- Fires/Wildfires
- Hazardous Materials
- Chemical, Biological and/or Radiological Threats



You may already know many of the threats that you might face in your particular region, however there may also be many that you have overlooked (like an underground pipeline or hazardous chemical facility located nearby). A phone call or email to your local emergency management agency may provide you with more information and can also serve as a valuable contact should you have any further questions or concerns.

It is important to understand that each hazard also has its own unique set of circumstances and conditions. Some of the hazards are predictable, such as an impending thunderstorm, while others strike without warning, like an earthquake. While each hazard contains unique elements, by planning for the worst of them, you can readily mitigate the smaller or less severe ones that occur.

Property Hazards

While you are likely able to research and objectively examine the hazards that you may face locally, it is often much more difficult to objectively approach the hazards that are on your property. While, as horse owners we know the importance of keeping fences in good repair, we often turn a blind eye to other hazards that may exist.

Some things to consider when doing a hazard assessment on your property are:

- Consider how easily emergency departments (police, fire, EMS) can find your property *and* ensure that your signage is appropriate
- Create safe confinement areas for your horses
- Examine all fencing on a regular basis
- Assess your horse's terrain for shelter from storms and flooding issues
- Look critically at all water sources that could be a problem during flooding or alternate sources of water during a drought or extended power outage
- Ensure that drainage ditches have coverings, which help maintain sod
- Have natural combustible materials, such as trees and combustible debris, removed from your property
- Consider the property for ease of ingress and egress
- Familiarize yourself with fire hydrants in your area, which will also assist fire personnel
- Secure all moving objects including feeders, jumps, gates, lawn furniture, etc.
- Use caution if there are overhead power lines running across any portion of your pasture

Be sure that you know how to and are able to open any automatic gates that are operated on electrical power in the case of a power outage.

Barn Hazards

After surveying your property for hazards, you should next look even deeper. Barns harbor a multitude of hazards that many consider just every day nuisances. Things to look for and consider are:

- Build or repair buildings to meet or exceed local construction codes
- Replace or cover glass windows with materials that will not shatter and injure horses or people
- Keep barn isles and walls clear from clutter
- Locate and know how to shut off any natural or propane gas valves
- Know where your main electrical service panes are located and how to shut them off
- Locate the main water valve and be prepared to close it off should a pipe burst causing flooding in or outside of the barn
- Closely examine your barn for and remove highly combustible materials such as cobwebs and saddle cleaning supplies
- Store feed, bedding and hay in a separate building if possible
- Horse manure is also combustible and should be stored away from buildings and removed often
- Remove debris from roofs and rain gutters
- Store chemicals in tightly sealed containers, above flood level and in storm-proof buildings
- Enforce no smoking rules
- Have all electrical wiring installed and inspected by qualified electricians
- Consider the installation of fire extinguishers, sprinkler systems and smoke detectors
- Examine all the ways that you could evacuate your horses from the barn should one entry way become blocked

Mitigation means taking measures to reduce the effects of disasters. Once you are armed with an understanding of the risks posed by regional and immediate hazards, you should look at possible ways to avoid or minimized the undesired effects that the hazards may cause.

Non-Physical Risks

While it is relatively easy to look for and detect physical hazards, your risk assessment should not stop there. A thorough risk assessment includes considering all aspects of both physical and non-physical threats. These may include:

Business - If you are running a business you should consider how a disaster might affect your bottom line. This includes examining what you could afford to lose to a disaster and still remain

viable as a business as well as how your business loss might affect others if they rely on you for service or products.

Communication - If a disaster were to unexpectedly affect you, have you considered how you would get and relay critical information to the outside world?

Knowledge/Capabilities - Your community already has in place it's most valuable asset in the case of emergency. That asset is you and the information that you possess to act and react to any given disaster that may occur. Are you certified in CPR and First Aid? Do you know the basics of Equine First Aid? What are you capable of handling?

Documentation - As with any type of emergency or disaster, there are certain documents that you always keep with. Caring for your horses is no different and like your driver's license and insurance cards kept in your wallet, there are some important documents to gather, copy and have on hand in case of an emergency. Those documents can include:

- Animal registration/identification
- Proof of ownership
- Microchipping
- Insurance
- Animal medical history
- Coggins
- Barn inventory
- Emergency phone numbers
- Extra copies of your equine disaster plan

The image shows a sample of a New York State Equine Identification and Registration Form (Form 100). The form is titled "EQUINE IDENTIFICATION AND REGISTRATION FORM" and includes a section for "EQUINE IDENTIFICATION AND REGISTRATION FEE RECEIPT". The form contains various fields for owner information, horse details, and a diagram of a horse with numbered points for identification. The form is dated 01/01/2010 and includes a section for "EQUINE IDENTIFICATION AND REGISTRATION FEE RECEIPT".

Supplies/Resources - It is important to realize that you and your horses may need to survive on your own for days at a time should a disaster cut you off from the rest of the world. Equally important is the need to consider all the supplies you need to take with you should you be forced to evacuate in a short amount of time.

Assembling the supplies you might need following a disaster is more important than ever when you are contemplating planning for horses. You should consider what you use on a daily basis with your animals as well as any essential/horse specific items that you may need.

Now that you have a good idea on how to conduct a thorough assessment of your risks from the regional level right down to your barn, it is time to learn a little more about what you can do to help mitigate any potential issues before a disaster occurs.

LESSON 2

BEFORE THE DISASTER

We already know that almost every week there is a story in the news about a disaster, whether it is natural or human-made. While there is no way to tell ahead of time exactly when a disaster will strike or how bad it will be, we can still take actions to minimize any potential damage and to prepare our facilities, animals, staff, volunteers and families so that should the worst happen your facility as a whole is prepared to deal with the calamity.

While each type of hazard presents some of its own unique mitigation and preparedness strategies, there are a number of general strategies that should be addressed prior to any type of hazard that could affect you, your horses or your facility. These general strategies will ensure that you have the basics in place, should you be affected by a disaster.

General Preparedness Strategies

Take Inventory – of your facility, your animals, and your equipment. It is vital to have a written list of the items that you have at your facility for insurance purposes after a disaster. You should have an itemized list, including value and photographs and video possible. Copies of proof of ownership kept in a portable, grab-and-go container are the best.

Properly Insure – your facility, animals and crops (if applicable) to mitigate the financial effects a disaster may have on you and your business. Examine your property and buy additional insurance, if necessary, that covers flood damage, hurricane damage, etc. as often many standard insurance policies do not cover such damages.

Create a Plan – that comprehensively covers what to do in the event of an emergency. Your plan should include emergency phone contact, animal identification procedures, evacuation plans, transportation procedures, sheltering information, etc. A separate plan detailing your business plan should also be created. Plans should be reviewed and revised at least on an annual basis. (See “Creating a Plan” for more information.)

Make a Kit – that contains all the things that you would need to sustain yourself, any staff or volunteers, and your animals for a minimum of three days. Kits should include food, clean

water, first aid supplies, tools, sanitation supplies, important records, etc. Each facilities kit will be unique and individual based on you and your animals' needs. Disaster kits should be reviewed and revised every six months to ensure freshness of supplies. (See "Make a Kit" for more information.)

Educate – your staff, volunteers, and clients so that should a disaster occur while they are on your premises that they are aware what to do, where to go and any actions that should be taken. This will ensure that they will remain safe and calm and could also provide you with valuable assistance should you need it.

Heed Emergency Statements – by monitoring local radio and television statements and keeping updated about current situations and conditions. Early warning and preparation could make the difference between success and failure. Take early precautions when time permits like securing animals, having trucks and trailers hooked up and ready to go, consider early evacuation, etc.

Secure Your Property and Facility – by ensuring proper ingress and egress for emergency response vehicles (roadways at least 20' wide with a 14' clearance that are capable of supporting 40,000 lbs. and kept clear of snow, ice, and debris), construct buildings according to local construction codes, replace or cover glass windows so that they cannot shatter and injure people or animals, check facility wiring, keep heat sources away from flammable materials, store chemicals in a secure location that is not susceptible to flooding or spillage, keep your facility in good repair, etc.

Secure your Animals – by bringing them in close should you need to evacuate or shelter them. Have emergency identification ready or on all animals in the event you need to quickly evacuate or in the event that they get loose.



Enact a Transportation Plan – that includes multiple escape routes should a normal route be impassable. Have trucks and trailers ready and fully fueled. Ensure that disaster kits are secure and ready to go with you and your animals. Know where you are evacuating to and what to expect when you arrive.

Practice and Conduct Drills – with your staff, volunteers and clients dealing with different scenarios and exercises so that in the event of an actual disaster everyone is well rehearsed in emergency procedures.

Be Prepared for Power Outages – by securing an alternate source of electrical power, like a generator, and testing and maintaining it on a regular basis so that it is operational when you need it.

Reach Out – Host an open house for emergency services personnel in your area to familiarize them with the layout of your property. Provide them with tips on horse handling or present a mini-seminar with hands-on training for horse handling.

Hazard Specific Strategies

Since each hazard has its own unique qualities, it is important to note some specific mitigation and preparedness strategies that you should take for a particular hazard. While it is impossible to cover every type of mitigation strategy that a horse owner could take, if you take the approach of planning for the worse-case scenario you will be better prepared for any type of disaster that you may face.

Again, often times it is the easily overlooked ‘little things’ that can pose serious risks to your horses and facility. Refer to Lesson 1 and review your risk assessment when examining things to remove, secure, etc. prior to any kind of an emergency or disaster occurring.

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LESSON 3

CREATE A PLAN

Planning for an emergency is not something we want to “wish” we would have done while we are in the middle of it. If we love and care for our horses, then disaster planning is not something to postpone and it is as easy as starting a list.

While it may seem like there is a lot to think about, once you get started the plan almost writes itself and you will soon see that you have a solid disaster plan to proceed with. Creating a disaster plan is also a great exercise to go through with your neighbors, friends, barn mates, etc. as one idea will lead to another and the next thing you know you have a support system in place that will weather anything Mother Nature will try to throw at you.

Start with What You Know

The hazard overview section of this book should have prompted you to explore what hazards you face locally. When faced with creating your own disaster plan, start locally, with what you know.



Regional Hazards – Chances are, unless you recently moved to a new location, you already know the top hazards that you may face and what to do to mitigate and prepare for them. Start your disaster plan with your list of regional hazards and jot down any specific information that might apply to you. Be sure to include what your risk level is and how you might be able to reduce your risks.

Local Hazards – Now that you have generated a list of regional hazards, it is important to look locally at hazards that may affect a smaller area, but that can be just as devastating. Look at your immediate locale, you might live in or near a floodplain, down river from a major dam, in close proximity to a fuel storage facility, or you might be located on the edge of urban sprawl. Talk with your neighbors, get in touch with your local emergency manager and ask questions. You might be surprised by what you discover.

Facility Hazards – It is often times easy to forget about what hazards you might face within your own facility, but it doesn't mean that they aren't important too. A house or barn fire, even frozen pipes, can create a facility disaster that could leave you scrambling as well. Consider what would happen if you had a house fire, a barn fire, flooding from broken pipes, an accidental gas leak, etc. and plan for them.

Floor Plan – When creating your plan, it helps to have a floor plan of your facility that shows such things as exits, windows, stalls, feed rooms, hay storage, tack rooms, utilities, fire extinguishers, and the locations of your emergency supplies and first aid kits. It is also beneficial to post your facility floor plan where everyone can see it so that in the event of an emergency, people will know how to get out or where critical items are located.

Utility Shutoffs and Overrides – It is important to know where all your main utility shutoffs are located and how to shut them off. You should be familiar with where your main electrical circuit is, where your main water valve is and where your gas valve is, if applicable. Don't forget to list and show the location of any wrenches or tools needed to shut off utilities. Also consider the lesser known, but essential overrides like your garage door or any gates.

Basic Supplies – Where ever you are right now, take a moment to either type out or jot down some basic things that you need on a daily basis to care for your horse. This often overlooked list is an excellent way to map out items that you can't do without. Your list should include feed, water, supplements, medications, first aid kit, halter and lead (for each horse that you have), etc. If you are having a hard time thinking about what you need, simply take a pen and paper with you when you go out to do your chores and the list will soon write itself.

Communication

Having a communication plan is crucial, no matter the event, and having a comprehensive communication plan that you can use during a disaster is extremely important because it will allow you to not only receive help when and where it is needed, but also for you to provide help should you not be affected by the disaster.

Types of Communication Devices – There is a number of different types of communication that a person may utilize. Landlines are slowly becoming a thing of the past while cell phones are gaining in popularity. It is important to remember that cordless and cellular phones require charging. You should take into consideration what might happen should you also lose power and were unable to charge your phones.

Many facilities also use two-way communication. Walkie-talkies and direct connect phones (which often times can be used when phone lines are down in a disaster) are options to consider if you need to communicate with someone on the opposite end of your facility.

While expensive, satellite phones are a reliable source of communication as they are not linked to a local phone system.

HAM radios are another communication option during a disaster and classes to become a licensed HAM radio operator are available locally.

Personal/Family Communication Plan – Often times during a disaster local telephone lines become overburdened. For this reason it is important to create a personal or family communication plan with someone who is located out-of-state or out of the region that is affected. This person can become your phone check-in contact and can serve to relay information in case you cannot contact who you need to directly.

Facility Communication Plan – Staff, volunteers and clients should all be aware of your facility communication plan. Staff and volunteers may need to contact you to inquire as to whether they should report or to tell you that they cannot report. Clients may be concerned about their animals or wish to lend a hand. Devising a plan on how to communicate and relay information in a disaster will likely reduce anxiety during the actual event.

Emergency and Service Numbers – In the event of an evacuation, the inability to access your home, or the inability to access phone numbers stored in your cell phone, it is important to keep a list of emergency and service numbers in your disaster plan. Access to phone numbers to contact your local animal control department, veterinarian, farrier, feed supplier, etc. could be critical. It is also helpful to have a list of local animal rescue groups that you can call in case your horses become lost or injured. Writing down a complete communication directory will broaden your local network and support base.



Warning Communication – Phone numbers and out-of-area contacts is only one aspect of communication. Warning can be one of the most **important** types of **disaster communication**, allowing the recipients to avoid the threat altogether or to significantly lessen the impact. Should you lose power or the ability to communicate via phone, you should still have a way to receive warning communications. A NOAA All-Hazards radio or battery operated radio tuned to your local stations can serve as that resource.

What to Communicate – Emotions and anxiety often run high during and after a disaster. It is important that you slow down and think carefully about what you want to communicate. If you need assistance, you need to clearly relay what type of assistance and equipment you need. If you are relaying that things are “okay” it doesn’t tell the receiver what “okay” means. Use facts and be very clear with your needs and wishes.

Clear, Concise Communication – How to communicate is just as important as what you communicate. Say your message slowly, clearly, concisely and spell out confusing names, if

necessary. Also remember that you might not be dealing with another “horse person” who understands the slang like you do. It is also important to remember that communication is not complete until the other party acknowledges the message. Have the receiver repeat back to you what was relayed to make sure that they correctly heard and understood your message.

Reunion Location

Look for and establish two places where you, your family, staff, volunteers and clients can meet following a disaster. One location should be at a safe location on your property and another should be at a safe location off your property in case you must evacuate the area.

Important Documents

Copies of important documents should be gathered and included into your disaster plan. You want to ensure that the original documents are stored in a safe place away from your facility. Documents should include copies of insurance policies, horse identification papers (i.e. registration papers, bills of sale, microchip or other identification paperwork, etc.), vaccination and medical records, photos of horses, bank account numbers, credit card account numbers and companies, deeds, property records, facility inventories, etc.

Evacuate or Stay

Horse evacuations, whether for one horse or for an entire facility, present unique problems. Therefore, an appropriate and well thought out plan is essential. Many things should be considered and included in your plan when deciding whether to evacuate your horses or stay. This information will be covered more in depth during Lesson 5.

Learn What You Don't Know

Planning for disasters also means planning for the things that you may not know about or know how to do. Make a list of all the things that you think you might encounter during a disaster and then look objectively at that list to see what things you know how to do and where your weakness lie.

It is important to take the time before a disaster to learn new skills. Just like you shouldn't teach your horse to load into a trailer when you need to evacuate, you shouldn't learn CPR when you need to administer it in a life or death situation.

Look at what skills to you need to care for other people and your horses and then look for areas to improve your knowledge and training. What better excuse do you have on taking that bandaging or first aid class, than being prepared “just in case.”

Business Continuity Planning

Recovering from a disaster can often take years and many small businesses affected by a major disaster never fully recover. For this reason it is important to consider all aspects of your operation whether it is operated for profit or pleasure. Some things you should consider the following in the business portion of your plan:

- Evaluate staffing needs and patterns prior to a crisis and plan for minimal staffing.
- Have a current roster of all staff, volunteers and clients which includes their names, addresses, and phone numbers.
- Designate specific job functions, including who is in charge, for disaster operations.
- Consider planning for housing/sheltering of staff, volunteers and clients.
- Inquire and list all resources that your staff, volunteers and clients may have or are willing to provide.
- Educate staff, volunteers and clients of the disaster plan and practice the plan.

Financial Considerations

Disasters also cause a financial toll. If possible, avoid making major financial decisions during and immediately after a disaster. Some financial issues, however, must be addressed without delay.

When disaster strikes, it may involve personal loss, property loss, or—very often—a combination of both. One of your first priorities following a disaster is to restore some normalcy to your household and facility.

Remember to collect all policy numbers and insurance company phone numbers. Find out how your company processes claims and what you can do to expedite the process. If the damage is widespread, some companies set up special procedures and send extra personnel and claims adjusters. Ask your company if they do so and how you would be notified.

Some additional things to consider would be how you will continue to provide for the care of your animals (i.e. feed, vet, farrier, etc.), what would happen to your income cash flow, how would you pay staff, what effect could a disaster have on the community infrastructure. Many of these issues are typically addressed prior to a disaster; however this information should also be included into your written plan.



During a disaster, things never seem to go according to plans. Sometimes you simply have to make the best decision for what you are faced with and what resources you have at the time. Having a disaster plan in place will help you know what you have on hand and can assist you in quickly coming up with Plan “B” when all other plans have failed.

It is also wise to include an extra feed bucket in your kit that your horse is accustomed to. Trying to remember to bring your original bucket might be difficult if you need to evacuate quickly and having one already in your kit will save you valuable time.

When storing hay, be sure to protect it water, rodents and fire. Elevating the stack and covering it with a flame resistant tarp will protect it from the elements.

It helps to keep a feeding chart in your kit that lists the quantities of hay, feed, supplements, etc. for each horse. Attaching a small copy of this information to the horse (put it in a small, ziplock bag, and duct tape it to your horse's halter) would also be helpful in the case of an evacuation or if your horse escapes.

Supplements and Medications

It is important to include special supplements and medications in your kit. All items should be stored in an airtight, waterproof container and properly labeled with the correct dosage.

Water

For many disasters, the water supply can be disrupted or contaminated. For this reason water storage must be carefully considered.

You will need at least 20 gallons of water per horse per day. Ideally water should be stored in numerous locations on your property in secured containers like large tanks or barrels and should be changed at least four times a year to ensure that it is fresh and free of contamination.



It is important to address contingencies with water storage. If you live in a cold climate, consider purchasing a tank heater or water pump to keep water from freezing. Consider storing extra hoses to direct water where needed, remembering that the higher your water tank is, the more water pressure you will have.

Do not rely on a water pump to obtain water. Power outages may affect how you obtain water.

If you are unsure of the quality of your stored water, add a bottle of household bleach in your kit to purify the water. For horses, use 1 ounce of bleach for each 20 gallons of water. You will need to allow the water to sit for a minimum of three hours before allowing your horses to drink. You can also purchase water purification tablets and follow the printed directions on the tablet container. It is not recommended to use the water in a swimming pool because of the chemical content of the water. However, if this is your only option, fill buckets and allow them to sit in full sunlight for two days before using it. While not an ideal solution, it is better than not having water at all.

Communication

Communication during a disaster is vital. For that reason it is important to have various methods of both obtaining and relaying information. Your kit should contain a portable, battery operated radio in order to receive local information on alerts, warnings and evacuation instructions.

Cell phones are fairly commonplace, however if there is an extended power outage, phones can lose battery power and become unusable. Consider adding an electric and car cell phone charger to your kit.

Two-way radios, HAM radios, satellite phones, etc. are also other means of communication that are useful during a disaster. Consider what your best options for communication are and stock your kit accordingly.

-HELPFUL HINT-

Disasters rarely happen when it is convenient for us. They may occur in the middle of the day or the middle of the night, therefore you will want to consider lighting options if there is a power failure.

First Aid

April's Education Series was all about equine first aid and identification. Every horse owner knows that a first aid kit is a must have in every barn and it is even more of a 'must have' in your disaster kit. You can check with your vet or go online to find out what is recommended to include in your kit.

Sanitization Items

Maintaining a clean environment for your horse will go a long way in minimizing the threat of disease and illness. Consider keeping a manure fork or shovel in your kit, smaller versions are now available to save space. Include household bleach in your kit which can serve as a disinfectant along with multiple other uses. Consider including pre-soaked kitchen wipes, towels and general cleaning supplies.

Tools

Tools are often things that we don't think about needing in a disaster, however they can be quite helpful in a number of different situations. Shovels, rakes and forks can serve many purposes from helping with sanitization to suppressing fires. Tarps are an excellent thing to

have because of the many and varied uses that they can serve, and everyone knows that duct tape is the ultimate tool with hundreds of uses.

Think about what you use on a daily basis and include those things in your kit. Consider including the basics like a pliers, screwdriver, hammer, etc. and adding to it as you find a need.

Important Records

Copies of important documents should be gathered and included into your disaster kit. Documents should include copies of insurance policies, horse identification papers (i.e. registration papers, bills of sale, microchip or other identification paperwork, etc.), vaccination and medical records, photos of horses, bank account numbers, credit card account numbers and companies, deeds, property records, facility inventories, etc.

Creature Comforts

Sometimes, during a disaster, the little things make a big difference. Consider adding some creature comforts to your disaster kit, like some special treats, a favorite toy or soothing herbal spray. If your horse is sensitive to insect bite add a fly sheet or light blanket. If you are concerned about cuts and scrapes pack hoof boots and leg wraps. Include things that would not only make your horse feel more secure and comforted, but that will soothe you as well.

By now you have the information needed to safely assess your risks, mitigate potential hazards, plan for what you cannot prevent and know what items are needed for a comprehensive disaster kit. However, one of the largest decisions that you may have to make is whether to evacuate or stay where you are during a disaster. Lesson 5 will help you with that process.

LESSON 5

EVACUATE OR STAY

Horse evacuations, whether for one horse or for an entire facility, present unique problems. Therefore, an appropriate and well thought out plan is essential. Many things should be considered and included in your plan when deciding whether to evacuate your horses or stay and this information should be included in your disaster plan.

This lesson will explore some of the things to consider when it comes to making the decision to evacuate or stay during a disaster.

Evacuation



Evacuations are more common than many people realize. Hundreds of times in any given year both natural and human-made disasters force thousands of people and their pets to leave their homes. The amount of time you have to leave will depend on the hazard. Some hazards, such as a slow rising flooding river, will give you some time to prepare and evacuate, but others, like a wildfire, may not allow for enough time to gather the most basic of your supplies.

When it comes to evacuating with your horse, well thought out procedures including transportation, evacuation routes that can be navigated with a truck and trailer, and destination locations are just a few of the things that need to be considered.

Plan in Advance - It is stressful for the horse to be moved from its familiar surroundings; therefore it pays to take some time in advance to acclimate your horse to different emergency procedures and surroundings.

Things are often hectic and move at a fast pace during a disaster and horses can sense the excitement in the air. Practice your exercises and drills in a relaxed manner and also practice

them at a speed in which your horse has to strain to keep up. Varying the speed will help to desensitize your horse and keep her more in tune with you rather than concentrating on what is going on around her and will help to establish a sense of routine. Above all, you keeping calm will help to keep your horse calm.

Community Plan - Most horse owners have connections with horse communities, and many of these communities have plans in place in the event of the need to evacuate your horses. Schedule meetings with your neighbors and community prior to the disaster to see what plans are already in place and to discuss how you might help each other.

Evacuation Routes - In the event of a disaster, your normal routes of travel may be blocked for various reasons. When time is of the essence, you want to have alternate routes that you can take and you want to be familiar with those routes as some of them may be challenging to negotiate with a trailer. You should also drive the main route and alternate routes on a regular basis so that you are familiar with all the routes and are not surprised by unexpected construction projects.

Transportation Vehicles - Ensure that your vehicles and trailers are fully fueled and in good working condition. If you do not have your own trailer or do not have enough trailer space for all of your horses, you need to come up with a plan on how to evacuate them. Work out a plan with a friend, neighbor or have a contact list of several commercial transporters so that you have a solid plan in place.

-HINT-

When time is of the essence, it is not the time for a trailer loading lesson. Practice loading your horse on the trailer and, if available, different types and styles of trailers in case someone else needs to transport

Communicate - Inform friends and neighbors of your evacuation plans and routes. Make sure that all staff, volunteers and clients are aware of the evacuation procedures, routes and potential shelter sites.

When you know that you will be evacuating, call the facility that you will be evacuating to and make sure they have room for you and are aware that you are coming and with how many animals.

Leave Early - It takes longer to evacuate animals than it does humans. Plan on leaving before the storm and before an evacuation is recommended to avoid getting caught in traffic jams with your horses in tow.

Emergency Shelter Sites - If you must evacuate with your horses, you need to know where you are planning to go. You should have a minimum of three options, one close to home, one outside of the area and a third option. Keep this information in your written plan, program numbers into your cell phone and have an extra copy located in the glove compartment or all your vehicles.

What to Take - When evacuating with your horse, it is important to take along what you can to not only ease your horse's comfort, but also to ease the burden at any emergency shelter site that you may end up at – even if it is with family or friends. Consider taking extra halters and leads, proof of ownership, medical records, feed and water supply (including medications and supplements), and your equine first aid kit.

Weather the Storm



While it is important that you be prepared to evacuate your horses to a safe location, if necessary, it is just as important to be prepared to shelter-in-place in the event of a disaster in which you do not have the time or resources to evacuate.

For many hazards, like extreme heat, winter storms, potential flooding, etc., it is best to simply move your horses to a safer location on your own property rather than to evacuate. Horses are generally happier, healthier and

safer if they can be left in their familiar surroundings and when horses feel safe, they are generally calmer and easier to handle.

Know the Area - It is always good to familiarize yourself with not only your property or boarding facility's property, but the general area in which you are located. Your immediate geographical area can serve as an undiscovered resource rich area providing you with what you may need. For instance look for high areas in case of flooding or alternate water sources should your usual sources be unavailable.

Communicate – If you decide to stay make certain that friends, family, neighbors, staff, volunteers and clients know your intentions and that they have a way to contact you and vice versa. Consider that phone lines might be disrupted and have a plan addressing other means of communication.

Necessary Items – Make sure that if you decide to stay that you have what you will need to sustain yourself, any additional persons, and your animals.

Reach Out - Chances are you are not the only one in your rural community with horses or other large animals who may decide to stay. Network with your neighbors and create a plan to see how you could help each other out, if needed, during a disaster. Often times resources can be doubled and provided locally within a couple mile radius, however this requires taking the time to talk and plan with those in your community prior to the disaster.

Under Cover or Turned Out - The choice of keeping your horse in a barn or turning them out to pasture is often a harrowing decision for horse owners. Horses will naturally seek shelter when they feel like the need to get out of the elements. Using common sense, taking into consideration the type of hazard, facility structure, condition of your property and what property hazards you may have to encounter will aid your decision.

Power Outages and Generator Safety - Power is often needed to operate feeding and watering equipment, lighting, fans and specialized equipment. The best way to prepare for potential power outages is to have your own alternate power supply. Generators, with a power supply output sufficient enough to sustain operations, can be purchased through suppliers or can be secured through contractual agreements. It is important to note that generators also require regular maintenance, which should be scheduled several times a year.

Special Considerations

- ☛ If you opt to stay you need to be able to be self-reliant for a minimum of three days up to a week or more.
- ☛ Never assume that you will be rescued if you stay after an evacuation order has been given. It may be impossible for rescuers to reach you.
- ☛ Just because you have not been ordered to evacuate initially does not mean that you cannot be ordered out later, in some instances even after the storm has passed. It is important to be prepared should this happen.

If You Must Leave Your Horses Behind

No horse owner wants to consider the thought of having to leave their horses behind, but there may be certain instances in which you may be instructed by local officials to leave your horses behind and evacuate immediately.



Turn Out – If you must leave your horses for any reason, they are usually safest outside if you have wide open pastures free from the hazards described previously in this section. Horses need room to maneuver to avoid injury and if given the chance are quite adept to avoiding serious injury.

Identification – All horses should have on some type of emergency identification in the event they escape from their area and are later found. More information on emergency identification can be found in this book.

Food and Water – Ensure that your horses have access to food and water.

Prevent Traps – Close all barn doors to prevent your horses from returning to any potential entrapment locations.

Post Signs – If possible, post signs at the property’s entrance to inform first responders and rescuers that you have horses on your property. Also, inform the local rescue organizations, animal control agencies and first responders of the exact location of your horses in the event evacuation/rescue is applicable.

DO NOT TURN YOUR HORSES LOOSE!!

Although your instinct may be to let your animals loose in the event of a wildland fire or other hazard, your animals are safer in their pastures. **Loose horses can pose a life threatening danger to themselves, to the public and to emergency responders.**

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LESSON 7

AFTER THE DISASTER

Recovering from a disaster is typically a gradual process. Safety is a primary issue, as is considering the mental and physical well-being of those affected. By knowing what to do and how to access assistance, should it be required, after a disaster will make the recovery process go faster and be less stressful.

Securing/Reclaiming Your Animals

Familiar landmarks, sights and scents may be altered after a disaster and your horse could easily become confused and lost. For this reason you should not leave your horses unattended unless they are in a safe, enclosed area, free of debris and sharp objects that could injure them.

If your horses are lost during a disaster or if you find someone else's horse after the disaster, contact surrounding barn owners and neighbors, local veterinarians, equestrian centers, animal control groups, etc. as they will be your best source of finding your lost horses and reuniting the horse you found with its rightful owner.

When reclaiming your horse, be prepared to show documentation of ownership. You should have registration papers, bills of sale, brand/microchip identification information, etc.

Securing Your Property

Once you have been cleared to return to your property or, if you have sheltered-in-place, once the storm has passed you will need to conduct a thorough assessment of your property. Use extreme caution and be wary of animals and wildlife that may be injured or have been displaced.

Start Outside – Check the perimeter of your property. Look for downed power lines, broken or down fences, debris in pastures, flooding or other damages. If fences are down and there is debris scattered in the pasture, keep your horses contained in a safe area until you can inspect and remove any hazards from their pastures.

Check Buildings – Check the outside of all building prior to entry. Ensure that no trees, limbs or power lines are weighing on the roof. Check for broken or damaged gas and water lines. Check for foundation cracks and ensure that overhangs still have solid foundational supports. Significant damage on the outside of a building may mean that entry is not safe or that the building is not suitable to use as a shelter.

-HINT-

Take photographs of damage, which may be needed to substantiate insurance claims for later prior to making any type of repairs.

Dealing with Contaminated Water and Feed - Following a disaster, water containers, supplies and wells are commonly contaminated with bacteria. This bacterial needs to be killed before the water is safe for both humans and animals to drink.

It is highly recommended that all containers used for horses are emptied and disinfected before use. Bedding and feed often get contaminated by bacterial, pesticides and chemicals in a flooding situation. Therefore, any feed or bedding that has gotten wet or damp should be properly disposed of in order to reduce the risk of serious health consequences.

Financial Recovery

Learning where you stand financially and then making a plan to manage your income, expenses, and debt will help you on the road to financial recovery.

Make an accurate list of all the damages and take photographs and/or video. Use this list, along with your photographs and/or video when you file a claim to prove that a loss took place and to confirm the value of the loss. Start with a preliminary list and check the list against any inventory you made before the disaster occurred. Also keep all available receipts, invoices, credit card statements, canceled checks, etc. to prove the value of lost items.

File any claims as soon as you have a list of damaged or destroyed property. Claims generally are settled in the order they are received.

LESSON 8

FREQUENTLY ASKED QUESTIONS

Q: I've had horses for years and never considered creating an evacuation plan for them. I do not want to have to take them to the fairgrounds where everyone else is going. What are some other options that I have?

A: Fortunately you are now considering your options and looking at creating an evacuation plan for your horses. While pre-designated evacuation locations are not only convenient, but also fully staffed, for a variety of reasons some horse owners prefer not to utilize them.

In your instance I would recommend reaching out to the horse community around you. Check to see if local boarding stables, private farms, friends, family and/or even your veterinarian would be able to house your horses in the event of an evacuation.

Whatever you decide it is important to have contact names, phone numbers, transportation routes and also a Plan B, C and even D just in case the facility is already full or in peril itself. It is also important that you bring your own supplies, feed and containers for your horses – not only for their comfort, but also so you don't put someone else out!

Q: I live in a remote area that has only one way in and out. What should I do to prepare?

A: In instances where you have limited access to your property, it is vitally important that you be fully prepared to evacuate, if necessary, and to heed the warnings and evacuate early to ensure that your ingress/egress routes are not blocked.

In instances like this it is also recommended that you work closely with the first responders that cover your area. Invite them out to your property for an assessment. If the need to get to you do they have enough clearance for their vehicles? Do they know exactly where you are located? Are they familiar with what you may need? Hosting a small 'getting to know you' session can pay dividends for both parties in the event of a disaster.

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LESSON 9

SUMMARY

The ultimate responsibility now lies with you. While many suggestions were presented, you must find the answers which fit for you and your situation. You should focus on developing the resources necessary for a disaster or emergency and be prepared to be self-sufficient for days, weeks, even months.

Remember when you plan to always plan for the worst case scenario. By planning for the worst you will likely be prepared for many of the hazards you may face; and in the event you find yourself faced with an emergency, you will have the knowledge and resources to safely navigate through the obstacles.

Please keep in mind that horses are survivors. They have adapted to many different environments and have relied on their instincts which have allowed them to survive without human intervention for many years. Domestication has made them reliant upon us for their care and needs. We all need to be individually responsible, whether we keep our horses on our own property or board our animals at a facility or friends. Their concern is in our hands and it is our responsibility to prepare and plan for their survival.

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APPENDIX 1

DEALING WITH CONTAMINATED WATER

Following a disaster, water containers, supplies and wells are commonly contaminated with bacteria. This bacterial needs to be killed before the water is safe for both humans and animals to drink.

Water Purification

If you are unsure of the quality of your stored water, add a bottle of household bleach in your kit to purify the water. For horses, use 1 ounce of bleach for each 20 gallons of water. You will need to allow the water to sit for a minimum of three hours before allowing your horses to drink. You can also purchase water purification tablets and follow the printed directions on the tablet container. It is not recommended to use the water in a swimming pool because of the chemical content of the water. However, if this is your only option, fill buckets and allow them to sit in full sunlight for two days before using it. While not an ideal solution, it is better than not having water at all.

Disinfection of Wells

Well disinfection can eliminate or reduce many different kinds harmful bacteria and viruses. Bacteriological counts of wells can be tested in certified laboratories.

Whether you have a bored or drilled well, be sure to turn off all electricity and clear debris from around the top of the well prior to disinfecting. Also be sure to mix the recommended amount of bleach with 3-5 gallons of water prior to adding the bleach mixture to the well.

Bored or Dug Well

To disinfect a bored or dug well, you will need to calculate the amount of water in it and use that amount to determine how much bleach to use:

- 2 drops of bleach per quart of water
- 8 drops of bleach per gallon of water
- 1/2 teaspoon bleach per five gallons of water

- If water is cloudy, double the recommended dosages of bleach
- Only use bleach (not scented). To insure that your bleach is at its full strength, rotate or replace your storage bottle minimally every three months.

It is important that the bleach comes into contact with all surfaces of the well using caution to avoid all electrical connections. Once the bleach has been added the well should be sealed. Next open all faucets inside the home and run the water until you notice a strong odor of chlorine bleach at each faucet. Once this occurs, turn off all faucets and allow the solution to remain in the well and plumbing for 12-24 hours.

After at least 12 hours, open all faucets and continue draining until the chlorine odor disappears. At this point the well should be safe, however until well water has been tested, boil it (roiling boil for 1 minute) before use or utilize an alternative water source.

It is recommended that you wait at least 7-10 days after disinfection, prior to having the water in your well sampled as sampling cannot be done until all traces of chlorine have been flushed from the system.

Drilled or Driven Well

To disinfect a drilled or driven well, you will need to calculate the amount of water in it and use that amount to determine how much bleach to use. To find the appropriate bleach solution, contact your local health department for guidelines.

Remove the vent cap. Pour the bleach solution into the well avoiding all electrical connections and ensuring that the bleach comes into contact with all surfaces of the well. Attach a clean hose to the nearest hose bib and use it to circulate water back into the well for thorough mixing then replace the vent cap. Next open all faucets inside the home and run the water until you notice a strong odor of chlorine bleach at each faucet. Once this occurs, turn off all faucets and allow the solution to remain in the well and plumbing for 12-24 hours.

Once the well has been cleaned, flush the water and follow testing instructions as described above.

APPENDIX 2

HELPFUL LINKS

The following are some helpful links for you to reference and/or utilize when planning and preparing for disasters:

FEMA Links/Courses:

Hazards - <http://www.fema.gov/hazard/index.shtm>

Animals in Disaster - <http://training.fema.gov/EMIWeb/IS/is10a.asp>

Livestock in Disaster - <http://training.fema.gov/EMIWeb/IS/is111a.asp>

County Emergency Management Offices:

King County

<http://www.kingcounty.gov/safety/prepare.aspx>

Snohomish County

<http://www.snohomishcountywa.gov/>

Skagit County

<http://www.skagitcounty.net/>

Other Links:

Ready.gov – Animal Preparedness

<http://www.ready.gov/caring-animals>

Disaster Preparedness for Veterinarians

https://www.avma.org/kb/resources/reference/disaster/pages/default.aspx?utm_source=prettyurl&utm_medium=web&utm_campaign=redirect&utm_term=disaster

USDA Animal Health Emergency Management

http://www.aphis.usda.gov/wps/portal/banner/help?1dmy&urle=wcm%3apath%3a%2FAPHIS_Content_Library%2FSA_Our_Focus%2FSA_Animal_Health%2FSA_Emergency_Management