

Master of Public Health
Integrative Learning Experience Report

***VETERINARY AND PUBLIC HEALTH EMERGENCY
PREPAREDNESS INITIATIVES***

by

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submitted in partial fulfillment of the requirements for the degree

MASTER OF PUBLIC HEALTH

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Summary

Public Health Activity-Fort Lewis encompasses the U.S. Army Veterinary Services throughout the states of Washington and Alaska. During my year-long APE, I worked with my preceptor to develop and enhance the Public Health Activity-Fort Lewis emergency management program at Joint Base Lewis-McChord, WA. The components of my experience included leading the Public Health Activity-Fort Lewis emergency management program, representing the unit at installation-level work groups at Joint Base Lewis-McChord, developing emergency preparedness resources for pet owners and veterinary teams, and supporting the First Year Graduate Veterinary Program capstone project. My primary objectives were to support pet owner preparedness and develop the Public Health Activity-Fort Lewis emergency management program. Completing this Applied Practice Experience provided me the opportunity to utilize my didactic MPH coursework in an impactful real-world program and to provide a positive and lasting benefit to future military emergency management.

Subject Keywords: emergency, preparedness, military, client education

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Chapter 1 - Literature Review

As many recent disasters have demonstrated, pet owners increasingly consider their pets to be part of the family and are willing to risk their own safety to protect their companions. In “Save Me, Save My Dog,” the author evaluates literature that characterizes pet ownership as a risk factor against early evacuation and survival during natural disasters (1). Examples given in this article include individuals who have died trying to save their companion animals and studies reporting increased risks of failure to evacuate, as well as perilous rescue efforts by pet owners. Post-disaster distress may also occur following death or forced abandonment of animals. The author suggests utilizing the human-animal relationship to explore how “human and animal health and safety needs can be simultaneously addressed by promoting natural disaster preparedness” and reframing this relationship into a protective factor (1). In other words: can the bond between humans and their companion animals be used to help prepare both for emergencies?

In the United States, disasters often “expose underlying systemic vulnerabilities,” as outlined by the authors in “Challenges of Managing Animals in Disasters in the U.S.” The authors observe that, rather than focusing on the systemic issues and weaknesses in emergency preparedness, the management of animals in disasters is often a crisis-driven response (2). This deficiency is also noted in “Evacuation of Pets During Disasters,” in which the author addresses the gaps in emergency management plans for pet sheltering (3). Specific vulnerabilities that cannot be addressed at the time of a disaster frequently rise from insufficient community and animal health infrastructure (including inadequate sheltering plans, identification of vulnerable populations, personnel training and management, establishing local ordinances, and needs-resource mismatch) (2). Without sufficient planning and infrastructure in place, there are multiple public health consequences. Pet owners who are unwilling to leave their pets may be stranded or refuse to follow evacuation orders. Alternately, abandonment of pets may lead to psychopathologies (including grief, depression, and post-traumatic stress disorder). Healthcare workers may refuse to leave their pets and leave medical facilities understaffed, and zoonotic disease risk increases with abandoned/roaming pets (3). These articles share one conclusion: companion animals must be included in disaster preparedness planning to improve public health.

A review of companion animals in natural disasters notes that most research on animals in natural disasters can be divided into “pre- and post-Hurricane Katrina” phases, before and after the 2005 disaster. (4) Noting that the United States had no requirements for companion

animal protection prior to Hurricane Katrina, the authors cite that more than an estimated 217,000 dogs and 247,000 cats were abandoned during Hurricanes Katrina and Rita. This led to the implementation of the Pets Evacuation and Transportation Standards Act of 2006 (PETS Act), which requires cities and states to have detailed emergency accommodation plans for households with pets and service animals in order to qualify for federal emergency funding. This legislation is written to provide companion animal care, and the authors note its intent is also to “address the risk to human health and safety presented by the lack of support” for pets and service animals (4). This article also notes the public health implications of animal management in disasters, due to both the evacuation decisions (failure to evacuate, pet abandonment, or rescue attempts) of disaster victims as well as the “deleterious effects on the resilience of individuals and affected communities” (4). In this review, authors found that the overarching recommendation across reviewed literature was to integrate companion animals into human emergency planning. Specifically, many reviews emphasized the necessity of providing awareness to veterinary professionals and animal owners and the need for individuals to have a plan for their companion animals (4) – this ultimately served as the basis of my APE efforts.

In “Dimensions of the Human-Animal Bond and Evacuation Decisions Among Pet Owners During Hurricane Ike,” authors compared the pre- and post-Hurricane Katrina pet emergency response following the 2008 Hurricane Ike, one of the first mass evacuation events following the implementation of the PETS Act. The authors evaluated the attachment and commitment of pet owners to their pets alongside their decision to evacuate. They tested two hypotheses: first, that people with greater attachment to a pet are more likely to evacuate, and second, that people with greater commitment to a pet are more likely to evacuate (5). A sample of pet-owning residents living in zip codes that had been under mandatory Hurricane Ike evacuation orders were mailed self-administered surveys. The authors discussed that their results found that individuals with higher levels of commitment had lower odds of evacuation (but that attachment was not predictive of human evacuation) and that pets influenced human behavior and decisions. (5). In another study, “Did Harvey Learn from Katrina? Initial Observations of the Response to Companion Animals During Hurricane Harvey,” the authors evaluated changes in the animal emergency management between Hurricane Katrina (2005) and Hurricane Harvey (2017) (6). The authors compared and acknowledged the differences between the two hurricanes and used Hurricane Harvey as a case study on the response effectiveness following the implementation of the PETS Act (6). The authors focused on if the PETS Act had influenced the emergency management of animals, preparations in animal emergency management prior to the hurricane, challenges and complications to the animal

emergency response, and lessons learned from the event. Following a series of interviews and a media review, the authors found that the PETS Act had not been comprehensively implemented but that the impact of Hurricane Katrina had established a culture norm in which companion animal evacuation was expected (6). With the minimal implementation of PETS Act requirements, planning and preparedness efforts were not comprehensive, and response efforts were substantial but lacked cohesion (6). The authors also observed a much more positive media response to Hurricane Harvey as compared to Hurricane Katrina, as well as a deluge of donations, and animal reunification remained a significant challenge (6).

Another review, "Effects of Pets on Human Behavior in Stress and Disaster," evaluates the public health impact of the animal emergency response in the 2011 Japan earthquakes. The authors studied post-traumatic stress disorder (PTSD) scores and attitudes toward pets in pet owners and non-pet owners affected by the earthquakes (7). The authors found that PTSD scores were higher in pet owners immediately after the earthquake but were lower in pet owners 4.4 years after the event; they also found that most respondents believed pets should evacuate with people (7). In this example, too, animal emergency response had not been included in disaster preparedness planning, and pet-friendly shelters were again a recognized gap (7). Evacuation failure and pet rescue attempts were also observed (7). The authors concluded that pets may play a "positive and protective role" for disaster victims (7).

Another public health topic in emergency preparedness is infectious and vector-borne disease control. In "Prevalence of Infectious Diseases in Cats and Dogs Rescued Following Hurricane Katrina," the authors evaluated the prevalence of multiple infectious diseases in 470 dogs and cats rescued and transported from the Gulf Coast within 4 months of Hurricane Katrina, detecting antibodies against multiple bloodborne pathogens (8). The authors conclude that the dispersal of these potentially infectious animals throughout the country could have contributed to "new geographic ranges for these organisms or to underdiagnose in affected animals because of a low index of suspicion in regards to low disease prevalence (8). Furthermore, the authors note that affected animal populations include abandoned, stray, and feral animals, and that local temporary shelters were quickly overrun, necessitating further transport of these animals (8). The implication of this study is that rescued, roaming, or evacuated pets could transmit infectious disease following disasters, which emphasizes the importance of pet owner preparedness in controlling animal abandonment, improving identification and reunification, and establishing preventive medicine protocols prior to disasters.

In addition to evaluating the potential sequelae of infectious disease dispersal, it is also important to investigate the current state of evacuation resources in order to implement

improvements. In “Evacuating People and Their Pets: Older Floridians’ Need for and Proximity to Pet-Friendly Shelters,” authors used Geographic Information Systems (GIS)-based methodology to evaluate older adults’ access to pet-friendly shelters in a densely populated area of Florida (9). This population represents a disproportionately large percentage of disaster-related deaths, and one contributing factor is their lower likelihood of following evacuation warnings (9). Pet ownership is one factor that was identified as a strong predictor of non-evacuation (9). The authors found that, while 34% of older adults in the area of study owned pets and 35% of these adults had reported needing pet evacuation assistance, GIS accessibility measures demonstrated time and distance barriers to access pet-friendly evacuation shelters (9). This increases the vulnerability of older adults in this scenario and illustrates the impact that pet ownership can have on the ability of certain populations to evacuate during a disaster.

These publications, among many others, support the concept that pets are part of the modern family and that pet ownership influences human evacuation during natural disasters. In “Using an Education Intervention to Increase Preparedness Among Pet Owners: Results of a Pilot Study,” the authors utilized a pre- and post-survey designed study to evaluate the influence of an educational intervention (one-on-one informational intervention) on pet-specific and general household preparedness (10). Pet owners agreed to complete a survey, receive the education, and take a post-survey 35-45 days later; participants also received take-home educational materials and a small preparedness-related incentive item (10). Educators spent 15-20 minutes with each participant (10). The post-survey results showed that, while pet owners had better awareness of potential disasters, they were less likely to have a prepared kit and plan; intervention provided an increase in overall pet preparedness and in some preparedness tasks but did not have a statistically significant influence on overall household preparedness (10). This study provided valuable groundwork for future research on the use of educational initiatives in emergency preparedness, especially in light of the growing number of publications (including those referenced here) documenting the impact of pet ownership on evacuation decisions.

Public Health Activity-Fort Lewis (PHA-FL) is my current unit. The mission of PHA-FL is “to provide comprehensive veterinary health services to ensure the health and safety of all DoD populations within the Pacific Northwest and Alaska regions.” PHA-FL consists of four branches; these branches support nine military installations across the states of Washington and Alaska. The public health mission includes clinical veterinary medicine, food safety and security, zoonotic disease surveillance, and One Health collaboration. PHA-FL is headquartered at Joint Base Lewis-McChord, WA, which was the primary location of my APE. The current command

team is Lieutenant Colonel (LTC) Nic R. Cabano and First Sergeant (1SG) Tonya Mullin. My preceptor, Major (MAJ) Katheryn Hanson, is the PHA-FL Executive Officer. She is a veterinarian, a diplomate of the American College of Veterinary Preventive Medicine, and completed her MPH through the University of South Florida with a focus in emergency preparedness. MAJ Hanson provided guidance and mentorship throughout my APE and ILE and supported my professional and intellectual development.

The Federal Emergency Management Agency (FEMA) developed the National Response Framework (NRF) to guide response partners in preparing to support a national disaster in the United States. The NRF outlines the roles, structure, and principles for a “coordinated, effective national response” among support agencies. The NRF contains Emergency Support Functions (ESF), which outline the resources, roles, and responsibilities of all agencies. Under the Army Health System, Department of Defense assets support ESF #8 (Public Health and Medical Services) and ESF #11 (Agriculture and Natural Resources). In working with the PHA-FL emergency management program, ESFs #8 and #11 served as the overarching themes of my work. I utilized my year-long APE to bring together the key points of these supporting publications: pets are increasingly part of the family and will impact human behavior during disasters, pet owners must prepare for disasters and evacuation of their pets, emergency management agencies must include pet evacuation and sheltering during the planning process, and the human-animal bond may help prepare both pets and pet owners for disaster response.

Chapter 2 - Learning Objectives and Project Description

I completed my APE by supporting the emergency management program for Public Health Activity-Fort Lewis (PHA-FL), headquartered at Joint Base Lewis-McChord (JBLM), WA. I spent the year as the PHA-FL Emergency Management Coordinator (EMC) – in this role, my responsibilities included managing the PHA-FL emergency management program, representing PHA-FL at JBLM emergency management groups, and developing products focused on pet owner emergency preparedness. My learning objectives were to gain fluency in emergency management dialogue, to create a product to improve preparedness, and to attend a variety of installation-level preparedness events.

To begin my role as EMC, I completed training to gain familiarization with emergency management doctrine and frameworks. These courses included FEMA ICS-100 (Introduction to Incident Command System), FEMA IS-00800.c (National Response Framework), FEMA ICS-200 (ICS for Single Resources and Initial Action Incident), and FEMA IS-00700.b (Introduction to the National Incident Management System). I also completed the Defense Support to Civil Authorities (DSCA) Phase I, an online training detailing Department of Defense (DoD) engagement in support of the United States. Finally, I completed a week-long in-person course, Public Health & Medical DSCA, which specifically covered the utilization of DoD medical assets during DSCA scenarios. All of these training events established foundational knowledge that I used throughout my APE.

The main product of my APE was disseminating a revised educational pamphlet on emergency preparedness for pet owners. This pamphlet (Appendix 1) was targeted at military pet owners who utilize veterinary facilities on six military installations throughout the states of Washington and Alaska. When creating the new pamphlet, I focused on making the information thorough but easily understandable. I removed technical terminology and superfluous details; my objective was to increase pet owners' awareness of why to prepare their entire family for a disaster or emergency, and specifically how to prepare for their pets' safety. As outlined in my literature review, household pet evacuation and safety in disasters is closely related to the safety and well-being of human victims. The updated brochure is now available for doctors, technicians, and assistants at all six veterinary clinics to use when engaging in emergency preparedness discussions with pet owners.

I also prepared and disseminated a client education toolkit (Appendix 2). The toolkit contains articles, pamphlets, checklists, and educational materials on disaster preparedness, evacuation, emergency kits, and special considerations for household pets and horses. It also

includes fillable documents for boarding information and emergency contacts/plans. The documents were created by the American Veterinary Medical Association, the Centers for Disease Control and Prevention, the Federal Emergency Management Agency, the Red Cross, and multiple universities. While all elements of the toolkit are available in the public domain, the intent of assembling them was to provide veterinary clinics with an easily-accessible resource. The toolkit can be referenced when clients have questions on emergency preparedness or can be used to develop educational displays during National Pet Preparedness Month (June) and National Preparedness Month (September).

As the PHA-FL EMC, I coordinated emergency preparedness efforts across all PHA-FL installations. To begin this, I increased the dial-in meeting frequency from quarterly to monthly as I established the current state of preparedness efforts. Each month, the Emergency Management Representatives (EMRs) from each installation shared their local efforts, challenges, and successes in emergency management. The established PHA-FL emergency management operational plan outlined the requirements of each location. I ensured EMRs kept these requirements (including training, emergency action plans, contact rosters, and emergency drills) up-to-date and assisted with roadblocks as they occurred. I also shifted the focus of the program from implementing the original operational plan to having each site engage in at least one emergency preparedness event each year and integrate their EMRs into installation-level emergency planning groups at their respective locations. The intent of this is to ensure that PHA-FL personnel are included in installation emergency preparedness programs, both as responders and as potential disaster victims.

Two of the highest-impact training events that occurred in PHA-FL during my APE both occurred at Naval Base (NB) Kitsap. Early in 2019, PHA-FL soldiers stationed at NB Kitsap led an educational table at the installation disaster preparedness fair. The soldiers provided service members and their families with detailed information on preparing for a disaster, with a focus on earthquake preparedness. Later, in August 2019, the Kitsap EMR worked with installation emergency management groups to include the PHA-FL element in the annual earthquake drill. PHA-FL soldiers were involved in both an animal and food safety response – a team of veterinarians and veterinary support staff responded to a simulated Military Working Dog (MWD) injury, while the food inspection team responded to food safety issues and refrigeration failures. The Kitsap team's integration with NB Kitsap emergency preparedness efforts is an excellent example of the installation-level involvement for which PHA-FL should strive.

Joint Base Lewis-McChord supports an active population of over 200,000 people. As the PHA-FL EMC, I had the opportunity to represent PHA-FL at multiple JBLM planning groups.

These groups included the Madigan Army Medical Center (MAMC) Emergency Management Functional Management Team (EMFMT), the National Disaster Medical System (NDMS) Federal Coordinating Center (FCC), and the JBLM Protection Working Group (PWG). The frequency of these meetings varied, depending on the tempo of the respective programs and scheduled training exercises. Each group provided different opportunities for PHA-FL involvement. At MAMC, the focus was on hospital preparedness, and PHA-FL provided a supporting role in disease control and food safety. At the NDMS FCC, PHA-FL served as a planner and responder for a full-scale patient reception exercise. By representing PHA-FL at multiple planning groups, I was able to better communicate our capabilities and identify areas of improvement for the PHA-FL EM program.

A highlight of my experience was at the NDMS FCC Patient Reception Area full-scale exercise, where PHA-FL responded to a simulated injured military working dog arriving on a medical evacuation flight. At the planning meetings for this exercise, I worked with the FCC leaders to identify JBLM emergency responders for food and animal concerns. PHA-FL served as the primary responder to the incoming military working dog casualty. Participating in the exercise highlighted multiple areas of uncertainty, sustainment, and improvement. I presented these findings to PHA-FL following the exercise, and they will be used to develop a standard operating procedure for future responses.

JBLM is also one of seven First Year Graduate Veterinary Education (FYGVE) program sites. Here, four newly-graduated Veterinary Corps Officers spend a year developing their skills and knowledge base in clinical medicine, food inspection, and military leadership. The FYGVE veterinarians complete a capstone project as part of their training program. During my APE, the 2018-2019 FYGVE class chose emergency preparedness as the focus of their capstone, and I had the opportunity to support their efforts. The four FYGVE veterinarians worked throughout the year to develop two culminating events: a pet owner preparedness fair and a PHA-FL tabletop exercise. The pet owner preparedness fair was held at the JBLM Veterinary Center on April 27th, 2019. The event included a vaccine and microchip clinic, a pet photo station, emergency preparedness trivia, educational materials, and interactive booths on pet disaster kits, food safety, and handwashing. To support the overall goal of community emergency preparedness, the FYGVE veterinarians focused on pet owner education. This had the added benefit of supporting public health and One Health topics through education on zoonotic disease control and safe food handling.

At the PHA-FL emergency preparedness tabletop exercise, the focus shifted to disaster response within our organization. Over 30 PHA-FL soldiers and civilians participated in the

event. JBLM emergency management professionals also were in attendance. These professionals helped facilitate discussion amongst PHA-FL personnel on how to manage the simulated disaster. In addition to supporting the PHA-FL discussion, the emergency management professionals gained improved understanding of the support that PHA-FL personnel can provide to the installation in a disaster. It also allowed PHA-FL and JBLM emergency management professionals to develop collaborative relationships for future exercises. This served as another opportunity to exercise the strengths and weaknesses of the current PHA-FL preparedness program, which ultimately defined my contributions to the program.

Chapter 3 - Results

During my year-long APE, I was involved in a wide variety of emergency management efforts. I initially focused on building an emergency management knowledge base by completing FEMA courses on the National Incident Management System, the Incident Command System, the National Response Framework, and Defense Support of Civil Authorities. I also worked to clarify the initial status of the PHA-FL emergency management program and increase collaboration within the program. As the year progressed, I represented PHA-FL at multiple JBLM emergency preparedness groups and in exercises. This included supporting the FYGVE capstone projects, which had an immediate impact on local readiness.

Over the course of my APE, I learned that PHA-FL has a substantial role in emergency preparedness efforts in WA and AK and that there are many talented and dedicated individuals working towards this role. Since the initial operations order for implementing an emergency management program was developed in 2018, the PHA-FL program has made great strides and serves as an example for other locations. The driving force behind the program has been the support of the PHA-FL commander, as well as higher levels of command. Strengths of the PHA-FL emergency management program include a thorough and understandable operations order, which guides the program, and having trained and appointed representatives at each site. Another strength is permitting flexibility in the implementation of the program based on the capabilities at each site. At JBLM in particular, continuous interaction with installation emergency management groups has improved the shared understanding of PHA-FL capabilities and limitations. The PHA-FL program also has some areas of improvement, including continuity of preparedness efforts during personnel turnover, access to impactful training events for personnel at remote sites, and continuing to develop standardized protocols and operating procedures.

In working with MAJ Hanson and PHA-FL, I was fortunate to have the support and training to make an impact on the local area. My products, the pet owner preparedness pamphlet and National Pet Preparedness Month educational toolkit, are available for all PHA-FL veterinary clinics to utilize. I also supported all PHA-FL sites in progressing their local emergency management programs, which included training events, installation-level involvement, and preparedness tasks. Finally, I represented PHA-FL at multiple JBLM emergency management planning groups and exercises. This portion of my APE, which was the focus of the latter half of my year, required the most background work and preparation but was also the most rewarding.

At the MAMC EMFMT meetings, MAJ Hanson and I represented PHA-FL in support of Emergency Support Function #8, Public Health and Medical Services, and as the lead agency of ESF #11, Agriculture and Natural Resources. This was beneficial as it allowed us to communicate our support capabilities with a wide audience of medical personnel, and it provided the opportunity for collaboration with other supporting agencies. One such agency was the NDMS FCC. We worked with the FCC to incorporate PHA-FL in the planning and response to a patient reception area exercise at McChord Field (JBLM), which provided a valuable training and planning opportunity for our team.

In addition to engaging in these meetings, PHA-FL was also tasked to support multiple installation and regional emergency planning exercises over the course of the year. These high-visibility events required that I have comprehensive background knowledge of emergency management topics and PHA-FL capabilities. I gained this baseline experience during the initial phases of my APE and represented PHA-FL, with the support of the PHA-FL command team, at multiple planning exercises. By serving as a PHA-FL representative at these events, I engaged with senior leaders and planners and communicated the capabilities and limitations of our support to the area.

Chapter 4 - Discussion

During the initial part of my APE, my primary area of focus was on pet owner preparedness. I identified this as an important part of emergency preparedness which is frequently forgotten but could easily be addressed at routine veterinary visits. I developed educational materials to this effect, including a pamphlet and resource toolkit. The pamphlet is now available to all six military veterinary clinics in Washington and Alaska, as is the client education toolkit. A future project could be measuring the impact of these educational materials. Veterinary clients could be given a survey prior to reviewing the documents and then a follow-up survey later on to evaluate if their knowledge and/or preparedness behaviors changed after receiving the educational documents. This evaluation was not part of my experience but could provide valuable information for future projects and interventional efforts.

Another area of focus was the involvement of PHA-FL in military installation emergency management efforts in Washington and Alaska. As a comparatively small unit, PHA-FL personnel frequently have had to seek out opportunities to engage with larger units and organizations. While it is occasionally challenging to join such efforts, the benefits are twofold. Firstly, installation-level engagement allows PHA-FL personnel to create a common operating picture based on the public health capabilities of the unit. By sharing our capabilities and limitations in animal health and welfare, food safety, zoonotic disease surveillance, and public health efforts, we can become integrated into installation emergency management plans. This is important to avoid duplication of efforts – for example, both PHA-FL and preventive medicine agencies are involved in food inspection, and sometimes their expertise may overlap. It is also important to clarify misconceptions, such as the assumption that veterinary facilities will have enough space and labor to manage sheltered pets during a disaster. The PHA-FL emergency management program will continue to prioritize cross-organizational involvement, which will help maintain the forward momentum of the program.

This APE supported all three of my initial learning objectives: to gain proficiency in emergency management, to improve pet owner preparedness, and to support events at JBLM. As my preceptor, MAJ Hanson's focus and experience in emergency management were extremely beneficial. The primary strengths of my ILE were the depth and breadth of my exposures, my integral role in supporting the PHA-FL emergency management program, and the support I received from MAJ Hanson as well as the commander of PHA-FL. If I were to repeat or continue my ILE, I would focus on quantifying the impact of my activity. This could be accomplished by tracking the number of pamphlets disseminated to pet owners. This could be

performed in combination with a survey pre- and post-exposure to the educational pamphlet to evaluate changes in knowledge and/or preparation efforts by pet owners, as outlined above. I would also like to further refine my products and share them beyond the WA/AK areas.

Throughout my MPH program, I have had diverse exposures in both my didactic and applied coursework. My APE at PHA-FL provided a unique and outstanding opportunity to develop my own skills and knowledge while positively impacting a real-world program. Emergency preparedness is a continual process that must be consistently tested, updated, and refined. Through education and planning, pet owners can support the health and safety of their pets and their families. At an organizational level, the PHA-FL emergency management program is making significant strides in preparing internal and installation-level plans. I look forward to continuing my support of the PHA-FL emergency management program. By preparing pet owners for disasters and preparing emergency management plans to include household pets, emergency planners can support the health and welfare of both humans and animals. Further work in this area can utilize the human-animal bond to improve public health and save lives.

Chapter 5 - Competencies

Student Attainment of MPH Foundational Competencies

During my APE, I utilized many of the MPH foundational competencies (Table 2.2). The most applicable were competencies 9, 13, 16, 18, and 21, but the foundations established in all didactic MPH curriculum (including social and behavioral health, epidemiology, environmental health, and One Health) were important throughout the duration of my experience.

Competency 21 – Performance on interprofessional teams was the most educational and impactful part of my ILE. With the guidance of my preceptor, MAJ Hanson, I was empowered to both lead the PHA-FL emergency management program and to represent PHA-FL at multiple installation-wide emergency preparedness groups. In leading the PHA-FL program, I was responsible for working with eleven other representatives across WA and AK. These representatives had varying levels of experience in emergency management and military leadership, and I utilized varied communication skills to work with the team. I increased quarterly conference calls to monthly in frequency and encouraged all team members to share their questions and successes with the group.

As the PHA-FL representative for JBLM emergency management, I worked with MAJ Hanson to establish our role on the installation. We initially attended meetings with the Madigan Army Medical Center Emergency Management Functional Management Team and the National Disaster Medical System working group in support of ongoing preparedness efforts and exercises. During the second half of my ILE, we also attended multiple intensive installation emergency preparedness working groups. Participating in these groups helped me develop professional and efficient communication skills in interprofessional groups.

Competency 13 – As outlined above, my ILE allowed me to lead the PHA-FL emergency management program and to represent PHA-FL at JBLM working groups. In both of these opportunities, I was able to build coalitions and partnerships between my organization and others with similar goals. At some groups, PHA-FL was not an established participant, and I provided background information on our mission and capabilities. In others, I referenced previous PHA-FL involvement to support established partnerships and develop joint exercises.

Competency 16 – The JBLM Veterinary Center hosts one of the Veterinary Corps' seven First Year Graduate Veterinary Education (FYGVE) programs, a year-long internship program for newly-graduated Veterinary Corps Officers. The 2018-2019 FYGVE class developed a yearlong capstone project based on emergency preparedness. I served as a resource and mentor to this group, providing them with references, background information, and guidance on

their projects. The FYGVE veterinarians developed a series of outstanding and impactful products, culminating in a disaster preparedness fair at the JBLM Veterinary Center, which provided pet owners with resources to develop their emergency preparedness plans and prepare their pets. The second culminating product was a tabletop exercise in which over 30 PHA-FL soldiers worked with installation emergency managers to respond to a simulated natural disaster. This event highlighted the capabilities and limitations in PHA-FL preparedness and provided all participating groups with a shared vision and collaborative decision making.

Competency 18 – Department of Defense beneficiaries who utilize military veterinary facilities vary greatly in age, background, education, and experience levels. There are also varying levels of experience among veterinary facility staff, which includes military and civilian veterinarians, technicians, assistants, and clerks. One challenge of my APE was developing effective communication strategies to reach all sectors of clients and staff in WA and AK military veterinary facilities. I developed a toolkit of assembled electronic resources (which could be printed, shared on social media, or used during clinic training) targeted on pet owners’ emergency preparedness. I focused on including a variety of pet species, multiple forms of media, and an easily-referenced format in order to meet this competency.

Competency 9 – Related to competency 18, one component of my APE was updating and sharing an updated pamphlet on pet disaster preparedness for military pet owners. This project was easily and quickly shared with all PHA-FL veterinary teams and provided a quick reference to key pet preparedness tips. The pamphlet was targeted to the military pet owner audience and can easily be adapted to fit other regions or audiences.

While my APE provided exposures and skills beyond these five competencies, I have highlighted these as key foci of my experience.

Table 5.1 Summary of MPH Foundational Competencies

Number and Competency		Description
9	Design a population-based policy, program, project, or intervention.	Developed an informational pamphlet on pet emergency and disaster preparedness designed for military families.
13	Propose strategies to identify stakeholders and build coalitions and partnerships for influencing public health outcomes.	Developed and disseminated a toolkit for pet owner education on emergency preparedness. Led the PHA-FL Emergency Management program. Attended monthly meetings at multiple JBLM emergency work

		groups. Participated in multiple JBLM emergency preparedness exercises.
16	Apply principles of leadership, governance, and management, which include creating a vision, empowering others, fostering collaboration and guiding decision making.	Mentored four new Army veterinarians in developing a public health capstone project, which culminated in a disaster preparedness fair for pet owners and a tabletop exercise involving over six organizations.
18	Select communication strategies for different audiences and sectors.	Developed and shared an informational pamphlet and toolkit on emergency preparedness for military pet owners, which contained multiple resources and served as a conversation starter for veterinary care providers.
21	Perform effectively on interprofessional teams.	Led 11 representatives across PHA-FL in managing emergency preparedness at their respective locations. Represented PHA-FL at multiple installation-level emergency management groups across JBLM.

Student Attainment of MPH Emphasis Area Competencies

Table 5.2 Summary of MPH Emphasis Area Competencies

MPH Emphasis Area: Infectious Diseases & Zoonoses		
Number and Competency		Description
1	Pathogens/pathogenic mechanisms	Evaluate modes of disease causation of infectious agents.
2	Host response to pathogens/immunology	Investigate the host immune response to infection.
3	Environmental/ecological influences	Examine the influence of environmental and ecological forces on infectious diseases.
4	Disease surveillance	Analyze disease risk factors and select appropriate surveillance.
5	Disease vectors	Investigate the role of vectors, toxic plants and other toxins in infectious diseases.

Competency 1 – A primary concern in emergency evacuation and natural disaster management is the spread of communicable disease and infectious agents. I addressed this competency by developing products for pet owner education, which were disseminated to six military veterinary clinics in summer 2019 to provide education to clients and staff, and by engaging with JBLM emergency preparedness groups on pet shelter and disease control measures.

Competency 2 – During natural and manmade emergencies, humans and animals experience substantial stress. The stress of the disaster and of subsequent travel/transport, temporary housing/sheltering, and exposure to unfamiliar environments can all reduce the ability of humans and animals to mount an adequate immune response. During my ILE, I considered this competency when developing vaccine recommendations to pet owners and when discussing shelter options with JBLM entities.

Competency 3 – Another aspect of emergency management is considering the influence of environmental/ecological forces on the transmission of communicable disease. This competency nests with competencies 1 and 2. It is a necessary consideration when recommending preparedness tasks to pet owners and when planning emergency response efforts with area support agencies. In the Pacific Northwest, the temperate environment and potential for a massive seismic event that may destroy large amounts of infrastructure are both important considerations in the environmental/ecological framework.

Competency 4 – One primary function of veterinary services in the DoD is supporting ESF #8 and ESF #11. Disease surveillance is an important part of these support functions. This is of substantial importance following a large-scale emergency. Part of my interaction with JBLM emergency preparedness groups was explaining our capability to screen for and report infectious diseases in our veterinary patient population.

Competency 5 – The final competency I addressed in my ILE was disease vectors. Similar to the above competencies, the identification and evaluation of vectors is a necessary factor when planning for emergency preparedness and response. This is again important in natural disasters affecting infrastructure and in temporary housing/shelter situations. It was also part of my pet owner preparedness education and installation-level planning.

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Appendix 1: Client Educational Pamphlet

DO YOU HAVE A PLAN?

A household emergency plan will help prepare your family for the unexpected. As you prepare your home and family members for an emergency, remember that your pets rely on you!

Create an emergency plan based on your location, your family members' needs, and your resources. Everyone's plan will look different, but you can prepare for the future with planning, practice, and communication.

RESOURCES

American Veterinary Medical Association
www.avma.org

American Animal Hospital Association
www.aaha.org

Centers for Disease Control and Prevention
www.cdc.gov

Federal Emergency Management Agency
www.fema.gov

American Red Cross
www.redcross.org

IMPORTANT INFORMATION

My Vet: _____
Address: _____
Phone: _____

My Pet's Name: _____
My Pet's Microchip: _____

EMERGENCY PREPAREDNESS
Are Your Pets Prepared?



CONSIDERATIONS FOR PETS

Do you have an emergency plan for your family? Does that plan include your pets?

Here are a few things to consider for your four-legged family members!

TRAVEL

How will you take your pet with you if you have to evacuate? How will you transport them in a car, a bus or train, a plane, or on foot? Don't forget about your pet's emergency kit!

SHELTER

Make a shelter plan – will your pets be able to stay with you if you stay with friends or family? How about at a pet-friendly hotel or shelter? Will you be able to leave your pets at a boarding facility? Identify your options in advance, in case of an emergency, so you have time!

COMMUNICATION

Make a plan with your family on how to communicate during an emergency, and include your plan for your pet in this discussion. Do you have a friend or neighbor who can help evacuate or care for your pets if you cannot? Does your pet have special needs?

EMERGENCY KIT

Consider these items when you are making your pet's emergency kit! Remember that these items should supplement, not replace, what you keep in your household emergency kit.

- Pet food
 - At least a one-week supply in an airtight container
 - Don't forget a can opener!
- Water
 - At least a one-week supply
- Medications
 - At least a two-week supply
 - Remember parasite prevention!
- Crate or carrier
- Leash and collar or harness
- Medical records
- Recent photographs of your pet
- Disposable bags
- Litter and litter pan
- Paper towels and disinfectant wipes
- Food and water bowls
- Blankets, toys, and treats
- A pet first aid kit
 - Muzzle
 - Thermometer
 - Gauze squares and rolls
 - Nonstick pads
 - Bandage tape
 - Sterile lubricant
 - Saline solution
 - Antibiotic ointment
 - A pet first aid guide
 - Talk to your veterinarian about medications or additional items to include

HOW ELSE CAN WE PREPARE?

Here are a few other ways to prepare your whole family for a potential emergency!

- Talk to your veterinarian to keep your pets up-to-date on immunizations and parasite prevention
- Microchip your pets! This is the best way to reunite your pets with your family, if you are separated. Be sure to update your contact information if you move!
- Keep your emergency kits in an easily-accessible area
- Print out information, in case you can't use your phone or the internet
 - Location of pet-friendly hotels or shelters
 - Location and phone number of veterinarians
 - Phone numbers of family and emergency contacts
 - Medical records
- Practice!
 - Get your pets used to being in their crates or carriers, riding in the car, and spending time outside of the home
 - Practice packing up your emergency kits
 - Look for classes in first aid, CPR, and emergency preparedness
 - Practice your communication plan with your family

Appendix 2: Pet Owner Disaster Preparedness Toolkit

PET OWNER PREPAREDNESS TOOLKIT

- Contents
 - Article: American Association of Equine Practitioners: Guidelines for Equine Emergencies
 - Handout: American Animal Hospital Association: National Check the Chip Day
 - Pamphlet: American Veterinary Medical Association Disaster Preparedness
 - Fillable Card: American Veterinary Medical Association Livestock Contact Card
 - Fillable Card: American Veterinary Medical Association Pet Contact Card
 - Pamphlet: American Veterinary Medical Association Pet First Aid
 - Pamphlet: American Veterinary Medical Association Zoonotic Diseases
 - Fillable Sheet: CDC Pet Boarding Instructions
 - Checklist: CDC Pet Disaster Kit
 - Checklist: CDC Pet Disaster Kit (child-friendly)
 - Pamphlet: FEMA Pet Emergency Preparedness
 - Pamphlet: Illinois Department of Agriculture Pet Emergency Preparedness
 - Checklist: Red Cross Pets & Disaster Safety
 - Checklist: Red Cross Pet First Aid Kit
 - Checklist: Red Rover Pet Disaster Preparedness
 - Checklist: UC Davis Equine Emergency Evacuation Kit

HELPFUL WEBSITES

- American Red Cross: Pet Disaster Preparedness
 - <http://www.redcross.org/get-help/how-to-prepare-for-emergencies/pet-disaster-preparedness#Pet-Emergency-Kit>
- ASPCA: Disaster Preparedness
 - <https://www.asPCA.org/pet-care/general-pet-care/disaster-preparedness>
- AVMA: Pets and Disasters
 - <https://www.avma.org/public/EmergencyCare/Pages/Pets-and-Disasters.aspx>
- Center for Disease Control and Prevention: Disaster Preparedness for Your Pet
 - <https://www.cdc.gov/features/petsanddisasters/index.html>
- US Food and Drug Administration (FDA): Take Care of Your Pets Before Disaster Strikes
 - <https://www.fda.gov/AnimalVeterinary/ResourcesforYou/ucm047099.htm>
- Ready: Pets and Animals
 - <https://www.ready.gov/animals>
- Red Rover: Pet Disaster Preparedness
 - <https://redrover.org/resource/pet-disaster-preparedness/>
- The Humane Society: Pet Disaster Preparedness kit
 - http://www.humanesociety.org/issues/animal_rescue/tips/pet_disaster_preparedness_kit.html

Guidelines for Equine Emergencies

If you own horses long enough, sooner or later you are likely to confront a medical emergency. There are several behavioral traits that make horses especially accident-prone: one is their instinctive flight-or-fight response; another is their dominance hierarchy -- the need to establish the pecking order within a herd; and a third is their natural curiosity. Such behaviors account for many of the cuts, bruises, and abrasions that horses suffer. In fact, lacerations are probably the most common emergency that horse owners must contend with. There are other types of emergencies as well, such as colic, foaling difficulties, acute lameness, seizures, and illness. As a horse owner, you must know how to recognize serious problems and respond promptly, taking appropriate action while awaiting the arrival of your veterinarian.

RECOGNIZING SIGNS OF DISTRESS

When a horse is cut or bleeding, it's obvious that there is a problem. But in cases of colic, illness, or a more subtle injury, it may not be as apparent. That's why it's important to know your horse's normal vital signs, including temperature, pulse and respiration (TPR), as well as its normal behavior patterns. You must be a good observer so that you readily recognize signs of ill health.

WHAT'S NORMAL?

There will be variations in individual temperature, pulse and respiration values. Take several baseline measurements when the horse is healthy, rested, and relaxed. Write them down and keep them within easy reach, perhaps with your first aid kit, so you have them to compare to in case of an emergency. Normal ranges for adult horses are:

Pulse rate: 30 to 42 beats per minute.

Respiratory rate: 12 to 20 breaths per minute.

Rectal temperature: 99.5° to 101.5° F. If the horse's temperature exceeds 102.5° F., contact your veterinarian immediately. Temperatures of over 103° F indicate a serious disorder.

Capillary refill time (time it takes for color to return to gum tissue adjacent to teeth after pressing and releasing with your thumb): 2 seconds.

Other observations you should note:

Skin pliability is tested by pinching or folding a flap of neck skin and releasing. It should immediately snap back into place. Failure to do so is evidence of dehydration.

Color of the mucous membranes of gums, nostrils, conjunctiva (inner eye tissue), and inner lips of vulva should be pink. Bright red, pale pink to white, or bluish-purple coloring may indicate problems.

Color, consistency, and volume of feces and urine should be typical of that individual's usual excretions. Straining or failure to excrete should be noted.

Signs of distress, anxiety or discomfort.

Lethargy, depression or a horse that's "off-feed."

Presence or absence of gut sounds.

Evidence of lameness such as head-bobbing, reluctance to move, odd stance, pain, unwillingness to rise.

Bleeding, swelling, evidence of pain.

Seizures, paralysis, or "tying up" (form of muscle cramps that ranges in severity from mild stiffness to life-threatening illness).

ACTION PLAN

No matter what emergency you may face in the future, mentally rehearse what steps you will take to avoid letting panic take control. Here are some guidelines to help you prepare:

1. Keep your veterinarian's number by each phone, including how the practitioner can be reached after-hours. If you have a speed dial system, key it in, but also keep the number posted.
2. Consult with your regular veterinarian regarding back-up or referring veterinarian's number in case you cannot reach your regular veterinarian quickly enough.
3. Know in advance the most direct route to an equine surgery center in case you need to transport the horse.
4. Post the names and phone numbers of nearby friends and neighbors who can assist you in an emergency while you wait for the veterinarian.
5. Prepare a first aid kit and store it in a clean, dry, readily accessible place. Make sure that family members and other barn users know where the kit is.
6. Also keep a first aid kit in your horse trailer or towing vehicle, and a pared-down version to carry on the trail.

FIRST AID KITS

First aid kits can be simple or elaborate, but there are some essential items. Here is a short list to get started. (*Material that should be sterile.)

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Accept

*Contact bandage

*Cling wrap

*Gauze pads, assorted sizes

*Gauze wrap

Adhesive wrap and adhesive tape

Leg wraps

Sharp scissors

Hemostats

Steel cup or container

Rectal thermometer with string and clip attached

Surgical scrub and antiseptic solution

Latex gloves

Flashlight and spare batteries

Permanent marker pen

Pliers (to pull nails)

6" diameter PVC tubing cut in half the long way (like a gutter) into lengths of 1-1/2 to 2 feet (for emergency splinting)

EMERGENCY WOUND CARE

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The sight of blood may unnerve you, but maintaining your presence of mind can save your horse's life. The initial steps you take to treat a wound can prevent further damage and speed healing. How you proceed will depend on your individual circumstances, and you must exercise good judgment. The following should be viewed as guidelines:

Catch and calm the horse to prevent further injury. Move the horse to a stall or other familiar surroundings if this is possible without causing distress or further injury to the horse. Providing hay or grain can also be a good distraction.

Get help before attempting to treat or evaluate a wound. It can be difficult and very dangerous to try to inspect or clean the wound without someone to hold the horse. You cannot help your horse if you are seriously injured yourself.

Evaluate the location, depth, and severity of the wound. Call your veterinarian for a recommendation anytime you feel your horse is in need of emergency care. Here are some examples of situations where your veterinarian should be called:

- There appears to be excessive bleeding.
- The entire skin thickness has been penetrated.
- The wound occurs near or over a joint.
- Any structures underlying the skin are visible.
- A puncture has occurred.
- A severe wound has occurred in the lower leg at or below knee or hock level.

The wound is severely contaminated.
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Consult with your veterinarian regarding a recommendation before you attempt to clean the wound or remove debris or penetrating objects, as you may precipitate uncontrollable bleeding or do further damage to the wound. Large objects should be stabilized to avoid damaging movement if possible. Don't put anything on the wound except a compress or cold water.

Stop the bleeding by covering the wound with a sterile, absorbent pad (not cotton), applying firm, steady, even pressure to the wound.

Do not medicate or tranquilize the horse unless specifically directed by your veterinarian. If the horse has suffered severe blood loss or shock, the administration of certain drugs can be life-threatening.

If the eye is injured, do not attempt to treat. Await your veterinarian.

If a horse steps on a nail or other sharp object and it remains embedded in the hoof, first clean the hoof. Consult with your veterinarian regarding a recommendation before you remove the nail. If your veterinarian advises, carefully remove the nail to prevent the horse from stepping on it and driving it deeper into the hoof cavity. As you remove it, be sure to mark the exact point and depth of entry with tape and/or a marker so the veterinarian can assess the extent of damage. Apply antiseptic to the wound, and wrap to prevent additional contamination.

All horses being treated for lacerations or puncture wounds need to be current on their tetanus vaccine.

OTHER EMERGENCIES

There are far too many types of emergencies from heat stroke to hyperkalemic periodic paralysis, bone fractures to snake bites, foaling difficulties to colic -- to adequately cover them all in this brochure. However, regardless of the situation, it's important to remember these points:

1. Keep the horse as calm as possible. Your own calm behavior will help achieve this.
2. Move the animal to a safe area where it is unlikely to be injured should it go down.
3. Get someone to help you, and delegate responsibilities, such as calling the veterinarian, retrieving the first aid kit, holding the horse, etc.
4. Notify your veterinarian immediately. Be prepared to provide specific information about the horse's condition, as mentioned above, and other data that will help your practitioner assess the immediacy of the danger and instruct you in how to proceed.
5. Listen closely and follow your equine practitioner's instructions.
6. Do not administer drugs, especially tranquilizers or sedatives, unless specifically instructed to do so by the veterinarian.

SUMMARY

Many accidents can be prevented by taking the time to evaluate your horse's environment and removing potential hazards. Also, assess your management routines to make them safer. Mentally rehearse your emergency action plan. Preparation will help you stay calm in the event of a real emergency. Keep your veterinarian's phone number and your first aid kit handy. In an emergency, time is critical. Don't be concerned with overreacting or annoying your veterinarian. By acting quickly and promptly, you can minimize the consequences of an injury or illness. Your horse's health and well-being depend on it.



National
**Check the
 Chip Day**
 August 15

Thank you for celebrating Check the Chip Day with us! This event was created by the American Animal Hospital Association and the American Veterinary Medical Association with support from HomeAgain to encourage pet owners to check their pet's microchip information annually and keep it up-to-date. By doing this yearly, you increase your pet's chances of returning home if lost!

Your pet's name

Your pet's microchip number

Date of check



Manufacturers participating in the AAHA Universal Pet Microchip Lookup Tool

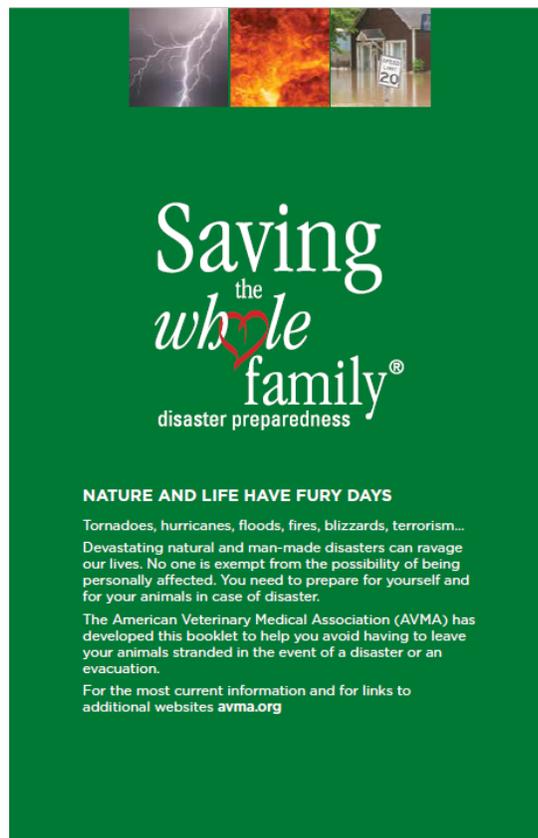
AKC Reunite	akccar.org
EIDAP	eidap.com
Found Animals	foundanimals.org
HomeAgain	homeagain.com
HomewardBound	homewardboundpet.com
InfoPet	infopet.biz
Microchip I.D. Solutions	microchipsolutions.com
Microchip ID Systems, Inc.	microchipsystems.com
PetKey	petkey.org
PetLink	petlink.net
Save This Life	savethislife.com
SmartTag Microchip	idtag.com
911PetChip	911petchip.com

Not sure where your pet's chip is registered? Visit the AAHA Universal Pet Microchip Lookup Tool at petmicrochiplookup.org.

To update your pet's registration, you'll need your pet's microchip number. If you haven't already created an account with the manufacturer, you'll need to do that as well so you can access the registration in the future to update the information. Make sure all of the information, particularly your phone number(s) and address, is correct*.

*Some microchip manufacturers may require a fee for updating/changing already registered information.





DO NOT WAIT UNTIL IT IS TOO LATE

Countless times people have been told to leave their homes for a "short time," only to find they cannot return for days or weeks. Even disasters like gas leaks and minor flooding can keep you from tending to your animals for an extended period of time. To prevent situations such as these: **TAKE YOUR ANIMALS WITH YOU.**

It is best to be overly cautious when a disaster advisory or warning has been issued. Preparing ahead of time and acting quickly are the best ways to keep you and your family, including your animals, out of danger. Familiarize yourself with each type of disaster that could affect your area.

Some common hazards include:

- o Flooding
- o Fires (structure fires and wild fires)
- o Earthquake
- o Hurricanes
- o Tornadoes
- o Other severe weather (windstorms, lightning, hail, blizzards)
- o Man-made disasters (chemical spills, nuclear incidents)
- o Terrorism

For more information about hazards: Ready.gov

- Be prepared for the possible disruption of services for extended periods of time, including gas, electricity, phone (cellular and land lines), internet service, and local sources of food, water and fuel.
- Have a plan in place and practice the plan prior to a disaster. This will help you successfully evacuate and maintain the safety of your family and your animals.

PREPAREDNESS BEFORE THE DISASTER

PREPARING A DISASTER PLAN

Schedule an appointment to talk to your VETERINARIAN about disaster planning.

- Assemble an animal EVACUATION KIT.
- Develop an evacuation plan for all of your animals and practice the plan.
- If you live in an apartment, make sure your animals are on record with management and they are able to be evacuated using the stairs. Teach dogs how to go up and down stairs to better assist rescue personnel.
- Keep written directions to your home near your telephone. This will help you and others explain to emergency responders exactly how to get to your home.
- Identify alternate sources of food and water.
- Have well maintained backup generators and a source of fuel for use in food-animal production operations.
- Keep vehicles well maintained and full of gas.
- Keep emergency cash on hand. (*Remember: ATMs may not work.*)
- If you have horses or livestock, good barn and field maintenance can reduce danger. If evacuating is impossible, decide on the safest housing option for your animals, realizing that the situation is still life threatening. Assess the stability and safety of barns and other structures, promptly remove dead trees, and minimize debris in fields and the immediate environment. If you live in an area prone to wildfires, clear away brush and maintain a defensible space around structures.

+ My Livestock Emergency numbers

Trailers/Haulers	Grain supplier
	Hay supplier
	Water supplier
Extension office	Area emergency coordinator
State Veterinarian	Alternate caretaker information <small>(neighbor, family member)</small>

+ My Livestock Emergency numbers

Veterinarian	Poison Control
Animal control	Police <small>(Not emergency)</small>
	Fire department <small>(Not emergency)</small>

For more disaster preparedness tips visit: www.zvma.org/disaster

DIRECTIONS:
CUT along the dotted lines
FOLD along the solid

+ My Livestock Emergency numbers

Trailers/Haulers	Grain supplier
	Hay supplier
	Water supplier
Extension office	Area emergency coordinator
State Veterinarian	Alternate caretaker information <small>(neighbor, family member)</small>

+ My Livestock Emergency numbers

Veterinarian	Poison Control
Animal control	Police <small>(Not emergency)</small>
	Fire department <small>(Not emergency)</small>

For more disaster preparedness tips visit: www.zvma.org/disaster

DIRECTIONS:
CUT along the dotted lines
FOLD along the solid

PET FIRST AID KIT CHECKLIST

Keep a kit of basic first aid supplies for the pets in your household. Many of the items in a family first aid kit can be used for pets, too.

- **IMPORTANT PHONE NUMBERS** (veterinarian, emergency clinic, poison control, animal control, non-emergency police)
- A copy of your PET'S MEDICAL RECORD
- **DIGITAL FEVER THERMOMETER** to take your pet's temperature
- **MUZZLE** to prevent bites (DO NOT muzzle your pet if he/she is vomiting)
- **SPARE LEASH AND COLLAR**
- **GAUZE ROLL** for wrapping wounds or muzzling an injured animal
- **CLEAN TOWELS** for restraining cats, cleaning or padding
- **NONSTICK BANDAGES OR STRIPS OF CLEAN CLOTH** to control bleeding or protect wounds
- **SELF-ADHERING, NONSTICK TAPE** for bandages
- **ADHESIVE TAPE** for securing bandages
- **EYE DROPPER** (or large syringe without needle) to give oral treatments or flush wounds
- **K-Y JELLY** (or generic version) to protect wounds, eyes
- **MILK OF MAGNESIA OR ACTIVATED CHARCOAL** to absorb poison. (Use only if instructed to do so by your veterinarian or a poison control center)
- **3% HYDROGEN PEROXIDE** to induce vomiting (Always contact your veterinarian or poison control center before inducing vomiting; do not use hydrogen peroxide on wounds.)
- **SALINE SOLUTION** for cleansing wounds (Saline sold for use with contact lenses works well for most purposes.)
- **LOCATION OF PET CARRIER** (for cats and small dogs): _____

in a small area to reduce the risk of additional injury. Pet carriers work well, or you can use a box or other container (but make sure your pet has enough air!). For larger dogs, you can use a board, sled, blanket or something similar to act as a stretcher.

- Call your veterinarian or an emergency veterinary clinic so they can be ready for you when you arrive.

IF YOUR PET'S WOUND IS BLEEDING

- Apply direct pressure with a clean towel or cloth for at least 3 minutes before checking to see if the bleeding has stopped.
- Severe bleeding can quickly be life-threatening—get your animal to a veterinarian immediately if this occurs. Add towels on top of previous layers if they are soaking through, but do not remove them as it may disturb any clot formation.

IF YOUR PET IS BURNED

- Apply a muzzle and flush the burn with cool (not cold) water. Seek immediate veterinary care.

IF YOUR PET HAS HEATSTROKE

- If you cannot immediately get your pet to a veterinarian, move him/her to a shaded area and out of direct sunlight.
- Place a cool or cold, wet towel around your pet's neck and head (do not cover your pet's eyes, nose or mouth). Remove the towel, wring it out, then rewet and rewrap it every few minutes.
- Pour or use a hose to keep cool water running over the animal's body (especially the abdomen and between the hind legs). Then, use your hands to sweep the water away as it absorbs the body heat.
- Transport the pet to a veterinarian as soon as possible.

IF YOUR PET IS BITTEN BY A SNAKE

- Assume the snake is poisonous and seek veterinary attention immediately. Try to identify the snake if it can be done without risk; do not attempt to capture or kill the snake. Do not bring the snake into the veterinarian's office—a photograph will do.

For more information, visit:

www.avma.org/firstaid

Animal Poison Control Center
aspca.org/pet-care/
animal-poison-control



PET FIRST AID

Brought to you by your veterinarian
and the American Veterinary Medical Association



ALWAYS REMEMBER

that any first aid administered to your pet should be followed by immediate veterinary care. First aid care is not a substitute for veterinary care, but it may save your pet's life until he/she receives veterinary treatment.

FOR YOUR SAFETY

If your pet is injured, he/she is likely in pain, scared, and confused. Be careful to avoid getting hurt, bitten or scratched.

- Never assume that even the most gentle pet will not bite or scratch if injured. Pain and fear can make animals unpredictable or even dangerous.
- Don't attempt to hug an injured pet, and always keep your face away from its mouth. Although this may be your first impulse to comfort your pet, it might only scare them more or cause them pain.

- Perform any examination slowly and gently. Stop if your pet becomes more agitated.
- Drive carefully to the veterinary clinic. Panicked or out-of-control driving puts you and your pet at risk.

IF YOUR PET IS CHOKING

Choking pets have difficulty breathing, paw excessively at their mouths, make choking sounds when breathing or coughing, and may have blue-tinged lips or tongue.

- If your pet can still breathe, keep him/her calm and seek immediate veterinary care.
- Look into your pet's mouth to see if a foreign object is visible. If you see an object, gently try to remove it with pliers or tweezers, but be careful not to push the object further down the throat. If it's not easy to reach—don't delay; get your pet to a veterinarian immediately.
- If you can't remove the object or your pet collapses, place both hands on the side of your pet's rib cage and apply firm quick pressure, or lay your pet on his/her side and strike the rib cage firmly with the palm of your hand 3-4 times to sharply push air out of their lungs and push the object out from behind. Repeat this until the object is dislodged or until you arrive at the veterinarian's office.

IF YOUR PET IS NOT BREATHING

- Open your pet's airway by gently grasping its tongue and pulling it forward (out of the mouth) until it is flat. Check the throat to see if there are any foreign objects blocking the airway.
- Perform rescue breathing by holding your pet's mouth closed with your hand and breathing directly into its nose until you see the chest expand. Once the chest expands, continue administering one rescue breath every 4-5 seconds.

IF YOUR PET HAS NO HEARTBEAT

Do not begin chest compressions until you've secured an airway and started rescue breathing.

- Gently lay your pet on its right side on a firm surface. The heart is located on the left side in the lower half of the chest, just behind the elbow of the front left leg. Place one hand underneath the pet's chest for support and the other hand over the heart.
- For dogs, press down with quick, firm pressure to depress the chest one inch for medium-sized dogs. Use more force for larger animals and less force for smaller animals.
- For cats and other small pets, cradle your hand around the animal's chest so your thumb is on the left side of the chest and your fingers are on the right side of the chest, and compress the chest by squeezing it between your thumb and fingers.
- Press down 80-120 times per minute for larger animals and 100-150 times per minute for smaller ones (less than 25 lbs).
- Alternate the chest compressions with the rescue breaths; perform chest compressions for 4-5 seconds and stop long enough to give one rescue breath.
- Continue until you can hear a heartbeat and your pet is breathing regularly, or you have arrived at the veterinary clinic and they can take over the resuscitation attempts.

Please remember that your pet's likelihood of surviving with resuscitation is very low. However, in an emergency it may give your pet his/her only chance.

IF YOUR PET IS POISONED

- If you know or suspect your pet has consumed something that may be harmful, call your veterinarian, emergency veterinary clinic or the Animal Poison Control Center (888.426.4435 - available 365 days/year, 24 hours/day, a consultation fee applies) immediately.
- If possible, have the following information available:
 - Species, breed, age, sex, weight and number of animals involved
 - Symptoms
 - Name/description of the substance that is in question; the amount the animal was exposed to; and how long it's been since your pet ate it or was exposed to it.
 - The product container/packaging available for reference.
- Collect any material your pet may have vomited or chewed, and place it in a plastic sealable bag to take with you when you bring your animal in for veterinary treatment.
- Do not try to induce vomiting or give any medication to your pet unless directed to do so by Poison Control or your veterinarian.

IF YOUR PET IS HAVING SEIZURES

- Clear the area of other pets, furniture, and any other objects that may cause injury. Do not try to restrain your pet or startle him/her out of the seizure.
- Time the seizure (they usually last 2-3 minutes).
- After the seizure has stopped, keep your pet warm and quiet and contact your veterinarian.

IF YOUR PET IS INJURED

- If possible and safe, try to stabilize injuries before moving an injured animal by splinting or bandaging them. Keep in mind, however, that a poorly applied bandage or splint can do more harm than good; if in doubt, leave the bandaging/splinting to professionals.
- If there is a foreign body in the wound, do not remove it. If necessary, carefully cut it short without moving it to leave 3-6 inches sticking out before transporting your pet to the veterinarian.
- While transporting your injured pet, keep him/her confined

MY PET'S EMERGENCY INFORMATION

Owner's name: _____
Phone: _____
Pet's name: _____
Breed: _____
Age (or year of birth): _____
Sex: M F Neutered/Spayed? Yes No

VETERINARY CLINIC

Veterinarian Name: _____
Address: _____
Phone: _____
Directions from home: _____

EMERGENCY CLINIC

Name: _____
Address: _____
Phone: _____
Directions from home: _____

Animal Poison Control Center: 888-426-4435

*there may be a fee for the call

Non-emergency police phone: _____

Non-emergency fire department phone: _____

Animal control phone: _____

HOW CAN I REDUCE THE RISK TO MYSELF AND MY FAMILY?

Sometimes animals carrying a zoonotic disease appear perfectly healthy. It is important to practice these habits with all animals, even if they do not appear to be sick.

- Wash your hands with soap and running water:
 - After petting or handling any animal
 - After you've cleaned up after your pet or livestock or handled their bedding
 - After handling uncooked food for you or your pet
 - After handling any pet or animal food
 - Before preparing food or drinks for yourself or others and before eating or drinking
- Make sure children wash their hands after touching an animal, whether at a petting zoo, fair, pond, beach, backyard, or any other place that they get to interact with animals. Children should also avoid touching their eyes, nose, and mouth until after they've thoroughly washed their hands.
- To help prevent illness and injury, keep children under 5 years of age away from areas where pets are fed.
- Make sure children stay away from wildlife, and that they do not pet unknown dogs or cats without the owner's permission.
- Keep your pet healthy.
 - Make sure your pet receives regular preventive veterinary care including vaccinations (talk to your veterinarian about the appropriate vaccinations for your pet) and flea, tick and intestinal parasite preventives.
 - Vaccinate your pets (including indoor cats) against rabies.

- Clean up after your pets
 - Discard pet waste in a tightly sealed, impermeable bag. Small biodegradable or plastic bags work well.
 - Pet waste can contain harmful bacteria and parasites, so young children should not clean up after pets.
- Store pet foods separate from people foods, and feed your pets in separate areas from where you eat or prepare food for you and your family.
- Handle and cook food according to the directions provided on the package, or based on USDA recommendations.
- For your health as well as your pet's health, don't share your food with your pet.
- If you're attending a petting zoo or fair, do not eat or drink while in an area with animals. Wash your hands as soon as you leave the area.

A WORD ABOUT REVERSE ZOOONOTIC DISEASES

Reverse zoonoses occur when a person spreads a disease to an animal. For example, methicillin-resistant *Staphylococcus aureus* (MRSA) can be spread to people from animals (zoonotic disease), but it can also be spread to animals from people (reverse zoonotic disease) and then possibly back to people from the infected animal. During the 2009 H1N1 Influenza pandemic, there were several confirmed cases of people infecting their pets (ferrets, cats and dogs) with the Influenza virus. Fortunately, the same precautions we've described above are effective ways to reduce the risk of making your pet sick.



Preventive measures and good hygiene reduce the risk of zoonotic disease.

For more information, visit:

avma.org



PREVENTING ZOOONOTIC DISEASES

Brought to you by your veterinarian and the American Veterinary Medical Association



HUMAN-ANIMAL INTERACTIONS ENRICH OUR LIVES,

but can also pose risks to both humans and animals. One of these risks is the spread of disease between humans and animals. Fortunately, preventive measures and good hygiene are simple ways to reduce the risk of disease.

WHAT ARE ZOOONOTIC DISEASES?

Zoonotic diseases are diseases that can be spread between animals and people. They can be caused by pathogens (disease-causing organisms) such as viruses, bacteria, parasites and fungi. Examples include rabies, Salmonella, some strains of Influenza A, and West Nile Virus, just to name a few. At least 65 percent of recent major disease outbreaks have zoonotic origins, and 75 percent of emerging infectious diseases are zoonotic. Emerging zoonoses can come from many animal species, including pets.

HOW ARE ZOOONOTIC DISEASES SPREAD?

Zoonotic diseases can be spread in a number of ways. Some methods of transmission include:

Fecal-oral transmission occurs when people ingest small, usually invisible, amounts of stool or droppings containing a pathogen. It is often an unintentional exposure because the person does not realize, or forgets, that they came in contact with fecal material. This can occur when a person does not thoroughly wash their hands after handling infected animals or items from an animal's environment. *Cryptosporidium* is a common zoonotic parasite that affects people because it can survive in recreational waters, such as ponds, and can be ingested during swimming or playing in water.

Foodborne transmission occurs when people ingest food contaminated with a pathogen, or if a person handles contaminated pet food, uncooked meat or fomites and does not wash his/hers hands before handling foods or drinks. Examples of pathogens that can be transmitted in this way include *Salmonella*, *E. coli*, *Listeria* and *Campylobacter*.

Insect-borne transmission occurs when insects carry a pathogen from an infected animal or person and transfer it to another animal or person. Examples include mosquitoes transmitting West Nile Virus, ticks transmitting Lyme disease, and fleas transmitting plague.

Direct contact occurs when a person becomes infected through touching or handling an infected animal or through a bite, scratch, or contact with the eyes, nose or mouth of an infected animal. Rabies, ringworm and bartonellosis are examples of zoonotic diseases spread through direct contact.

Indirect contact occurs when a pathogen is transmitted without physical contact with the animal. Many pathogens can survive outside a person or animal for a period of time. Some pathogens can survive well in water and soil, or on inanimate objects, also known as fomites. These items can transfer pathogens such as *Salmonella*, *Leptospira* and fecal parasites from place to place, animal to animal and from animals to people.

WHAT ZOOONOTIC DISEASES CAN I GET FROM PETS AND OTHER DOMESTIC ANIMALS?

This list doesn't include every disease you can get from pets and other domestic animals, but below are some examples:

- Bartonellosis (caused by *Bartonella* bacteria)
- Brucellosis (caused by the *Brucella* bacteria)
- *Campylobacter* Infection
- Cryptosporidiosis
- *E. coli* Infection (caused by the *E. coli* bacteria)
- Leptospirosis (caused by *Leptospira* bacteria)
- Plague (caused by the *Yersinia pestis* bacteria)
- Rabies (caused by the rabies virus)



- Ringworm (caused by certain fungi)
- Salmonellosis (caused by the *Salmonella* bacteria)
- Toxoplasmosis (caused by the parasite *Toxoplasma gondii*)
- Toxocarosis (caused by *Toxocara* parasites – also called roundworms)
- Tularemia (caused by the *Francisella tularensis* bacteria)

ARE CERTAIN PEOPLE AT HIGHER RISK OF BEING INFECTED WITH ZOOONOTIC DISEASES?

Children are at higher risk of infection because they are less likely to thoroughly wash their hands immediately after handling animals, they might not have fully developed immune function, and they are more likely to put their hands and other

objects in their mouths. Young children, pregnant women, older people, and anyone with certain health conditions such as chronic respiratory disease, heart disease or a weakened immune system should be extra careful when interacting with animals because these conditions make them more likely to become severely ill if infected. Examples of conditions that cause a weaker immune system include HIV/AIDS, autoimmune diseases, and people undergoing treatment with chemotherapy, steroids or other immune-suppressing medications. People who are around animals often are also more likely to be exposed to a zoonotic pathogen. If you fall into any of these groups, take extra precautions to protect yourself.

PET BOARDING INSTRUCTIONS



PET INFORMATION

Pet name _____

Breed _____ Color _____

Gender _____ Weight _____ Microchip # _____

OWNER INFORMATION

Your name _____

Your address _____

Your phone # _____ Email address _____

Alternate phone # 1 _____ Alternate phone # 2 _____

FOOD AND MEDICATIONS

Type of food _____ Wet Dry Amount _____ Frequency _____

Name of medication _____ Instructions _____

Name of medication _____ Instructions _____

MEDICAL INFORMATION

Veterinarian name _____ Veterinarian phone # _____

Date of last rabies vaccine _____ Rabies certificate # _____

Date of last bordetella vaccine _____ Date of last distemper/parvo vaccine _____

Date of last Heartworm test and result (dogs) _____

Date of last FeLV/FIV test and result (cats) _____

Current medical conditions _____

Behavior concerns _____



CD318748

PET DISASTER KIT CHECKLIST

DOCUMENTS

- Photocopied veterinary records
 - Rabies certificate
 - Vaccinations
 - Medical summary
 - Prescriptions for medications
 - Most recent heartworm test result (dogs).
- Photocopied registration information (ex: proof of ownership or adoption records)
- Pet description(s) (ex: breed, sex, color, weight)
- Recent photographs for each of your pets
- Waterproof container for documents
- Microchip information (ex: microchip number, name and number of the microchip company)
- Your contact information (phone numbers and addresses for your family and friends or relatives you may be staying with)

WATER, FOOD, MEDICATIONS

- 2-week supply of food for each animal stored in waterproof containers
- 2-week supply of water for each animal
- Non-spill food and water dishes
- Manual can opener
- Feeding instructions for each animal
- 2-week supply of any medications (if applicable)
- Medication instructions (if applicable)
- One month supply of flea, tick, and heartworm preventative

OTHER SUPPLIES

- Leash, collar with ID, and harness
- Toys
- Appropriate-sized pet carrier with bedding, blanket, or towel
- Pet first aid book and first aid kit
- Cleaning supplies for accidents (paper towels, plastic bags, disinfectant)



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

CS23619-A

PET DISASTER KIT CHECKLIST

DOCUMENTS

- Photocopied veterinary records
 - Vaccinations
 - Medical summary
 - Rabies certificate
 - Prescription for medications
 - Most recent FeLV/FIV test result (cats)
- Photocopied registration information (ex: proof of ownership or adoption records)
- Pet description(s) (ex: breed, sex, color, weight)
- Recent photographs for each of your pets
- Waterproof container for documents
- Microchip information (ex: microchip number, name and number of the microchip company)
- Your contact information (phone numbers and addresses for your family and friends or relatives you may be staying with)

WATER, FOOD, MEDICATIONS

- 2-week supply of food for each animal stored in waterproof containers
- 2-week supply of water for each animal
- Non-spill food and water dishes
- Manual can opener
- Feeding instructions for each animal
- 2-week supply of any medications (if applicable)
- Medication instructions (if applicable)
- One month supply of flea, tick, and heartworm preventative

OTHER SUPPLIES

- Collar with ID
- Litterbox and litter (cats)
- Pet first aid book and first aid kit
- Appropriate-sized pet carrier with bedding, blanket, or towel
- Toys
- Cleaning supplies for accidents (paper towels, plastic bags, disinfectant)



U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

CS23619-A

PET EMERGENCY KIT CHECKLIST

Stock up on items your pet may need during a disaster. Below are some items to help you get started.

- Pet first aid kit
- Food
- Water
- Bowls
- Extra collar
- Extra leash
- Medical records
- Two-week supply of medications
- Crate or sturdy carrier
- Blanket
- Recent photos of your pets (in case you are separated and need to make "Lost" posters)
- Toys and bones
- Disposable litter trays
- Litter or paper toweling
- Disposable bags for clean-up



U.S. Department of
Health and Human Services
Centers for Disease
Control and Prevention

CS259306-C

Preparing for Your Pets Makes Sense. Get Ready Now.



If you are like millions of animal owners nationwide, your pet is an important member of your household. The likelihood that you and your animals will survive an emergency such as a fire or flood, tornado or terrorist attack depends largely on emergency planning done today. Some of the things you can do to prepare for the unexpected, such as assembling an animal emergency supply kit and developing a pet care buddy system, are the same for any emergency. Whether you decide to stay put in an emergency or evacuate to a safer location, you will need to make plans in advance for your pets. Keep in mind that what's best for you is typically what's best for your animals.

If you must evacuate, take your pets with you if possible. However, if you are going to a public shelter, it is important to understand that animals may not be allowed inside. Plan in advance for shelter alternatives that will work for both you and your pets.

Make a back-up emergency plan in case you can't care for your animals yourself. Develop a buddy system with neighbors, friends and relatives to make sure that someone is available to care for or evacuate your pets if you are unable to do so. Be prepared to improvise and use what you have on hand to make it on your own for at least three days, maybe longer.

Preparing for the unexpected makes sense. **Get Ready Now.**



This information was developed by the Federal Emergency Management Agency in consultation with: American Kennel Club, The American Society for the Prevention of Cruelty to Animals, American Veterinary Medical Association, and The Humane Society of the U.S.



FEMA R-7

Ready
Prepare. Plan. Stay Informed.®



Prepare For Emergencies Now:

Information For Pet Owners.



1 Prepare

Get a Pet Emergency Supply Kit.

Just as you do with your family's emergency supply kit, think first about the basics for survival, particularly food and water. Consider two kits. In one, put everything you and your pets will need to stay where you are. The other should be a lightweight, smaller version you can take with you if you and your pets have to get away. Plus, be sure to review your kits regularly to ensure that their contents, especially foods and medicines, are fresh.

Food. Keep at least three days of food in an airtight, waterproof container.

Water. Store at least three days of water specifically for your pets in addition to water you need for yourself and your family.

Medicines and medical records. Keep an extra supply of medicines your pet takes on a regular basis in a waterproof container.

First aid kit. Talk to your veterinarian about what is most appropriate for your pet's emergency medical needs. Most kits should include cotton bandage rolls, bandage tape and scissors; antibiotic ointment; flea and tick prevention; latex gloves; isopropyl alcohol and saline solution. Include a pet first aid reference book.

Collar with ID tag, harness or leash. Your pet should wear a collar with its rabies tag and identification at all times. Include a backup leash, collar and ID tag in your pet's emergency supply kit. In addition, place copies of your pet's registration information, adoption papers, vaccination documents and medical records in a clean plastic bag or waterproof container and also add them to your kit. You should also consider talking with your veterinarian about permanent identification such as microchipping, and enrolling your pet in a recovery database.

Crate or other pet carrier. If you need to evacuate in an emergency situation take your pets and animals with you provided that it is practical to do so. In many cases, your ability to do so will be aided by having a sturdy, safe, comfortable crate or carrier ready for transporting your pet. The carrier should be large enough for your pet to stand, turn around and lie down.

Sanitation. Include pet litter and litter box if appropriate, newspapers, paper towels, plastic trash bags and household chlorine bleach to provide for your pet's sanitation needs. You can use bleach as a disinfectant (dilute nine parts water to one part bleach), or in an emergency you can also use it to purify water. Use 16 drops of regular household liquid bleach per gallon of water. Do not use scented or color safe bleaches, or those with added cleaners.



A picture of you and your pet together. If you become separated from your pet during an emergency, a picture of you and your pet together will help you document ownership and allow others to assist you in identifying your pet. Include detailed information about species, breed, age, sex, color and distinguishing characteristics.

Familiar items. Put favorite toys, treats or bedding in your kit. Familiar items can help reduce stress for your pet.

2 Plan

What You Will Do in an Emergency.

Be prepared to assess the situation. Use whatever you have on hand to take care of yourself and ensure your pet's safety during an emergency. Depending on your circumstances and the nature of the emergency the first important decision is whether you stay put or get away. You should understand and plan for both possibilities. Use common sense and the information you are learning here to determine if there is immediate danger.

In any emergency, local authorities may or may not immediately be able to provide information on what is happening and what you should do. However, watch TV, listen to the radio or check the internet for instructions. If you're specifically told to evacuate, shelter-in-place or seek medical treatment, do so immediately.

Create a plan to get away. Plan how you will assemble your pets and anticipate where you will go. If you must evacuate, take your pets with you if practical. If you go to a public shelter, keep in mind your animals may not be allowed inside. Secure appropriate lodging in advance depending on the number and type of animals in your care. Consider family or friends willing to take in you and your pets in an emergency. Other options may include: a hotel or motel that takes pets or a boarding facility, such as a kennel or veterinary hospital that is near an evacuation facility or your family's meeting place. Find out before an emergency happens if any of these facilities in your area might be viable options for you and your pets.

Develop a buddy system. Plan with neighbors, friends or relatives to make sure that someone is available to care for or evacuate your pets if you are unable to do so. Talk with your pet care buddy about your evacuation plans and show them where you keep your pet's emergency supply kit. Also designate specific locations, one in your immediate neighborhood and another farther away, where you will meet in an emergency.

Talk to your pet's veterinarian about emergency planning.

Discuss the types of things that you should include in your pet's emergency first aid kit. Get the names of vets or veterinary hospitals in other cities where you might need to seek temporary shelter. You should also consider talking with your veterinarian about permanent identification such as microchipping, and enrolling your pet in a recovery database. If your pet is microchipped, keeping your emergency contact information up to date and listed with a reliable recovery database is essential to your being reunited with your pet.

Gather contact information for emergency animal treatment. Make a list of contact information and addresses of area animal control agencies including the Humane Society or SPCA, and emergency veterinary hospitals. Keep one copy of these phone numbers with you and one in your pet's emergency supply kit. Obtain "Pets Inside" stickers and place them on your doors or windows, including information on the number and types of pets in your home to alert firefighters and rescue workers. Consider putting a phone number on the sticker where you could be reached in an emergency. And, if time permits, remember to write the words "Evacuated with Pets" across the stickers, should you flee with your pets.



3 Stay Informed

Know About Types of Emergencies.

Some of the things you can do to prepare for the unexpected, such as assembling an emergency supply kit for yourself, your family and your pets, is the same regardless of the type of emergency. However, it's important to stay informed about what might happen and know what types of emergencies are likely to affect your region as well as emergency plans that have been established by your state and local government. For more information about how to prepare, visit www.ready.gov or call 1-800-BE-READY.

Be prepared to adapt this information to your personal circumstances and make every effort to follow instructions received from authorities on the scene. With these simple preparations, you can be ready for the unexpected. Those who take the time to prepare themselves and their pets will likely encounter less difficulty, stress and worry. Take the time now to get yourself and your pet ready.

Preparing for Your Pets Makes Sense. Get Ready Now.

4 Stay Informed

Know about Types of Emergencies

Some of the things you can do to prepare for the unexpected, such as assembling an emergency supply kit for yourself, your family and your pets, are the same regardless of the type of emergency. However, it's important to stay informed about what might happen and know what types of emergencies are likely to affect your region as well as emergency plans that have been established by your state and local government. Remember: disasters can be natural or man-made! For more information about how to prepare, visit www.ready.illinois.gov, call 1-800-BE-READY or contact your local Illinois American Red Cross.

Be prepared to adapt this information to your personal circumstances and follow instructions received from authorities. With these simple preparations you can be ready for the unexpected. Take the time now to get yourself and your pet ready.

Preparing for your animals makes sense.

GET READY NOW!



Institute of Government and Public Affairs
University of Illinois

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State of Illinois
Pat Quinn,
Governor
Department of Agriculture
Thomas E. Jennings, Director
Illinois Terrorism Task Force



Illinois State Veterinary Medical Association
Illinois Veterinary Emergency Response



PREPARING ANIMALS FOR EMERGENCIES MAKES SENSE

Prepare Pet Emergency Supply Kit

Just as you do with your family's emergency supply kit, think first about the basics for survival, particularly food and water, and consider two kits. In one, put everything you and your pets will need to stay where you are. The other should be a lightweight, smaller version you can take with you if you and your pets have to get away. Plus, be sure to review your kits regularly to ensure that their contents, especially foods and medicines, are fresh.



FOOD & WATER: Keep at least three days of food in an airtight, waterproof container. Store at least three days of water specifically for your pets in addition to water you need for yourself and your family.

MEDICINES & VITAL RECORDS: Keep extra supplies of medicines your pet takes on a regular basis in a waterproof container. In addition, place copies of your pet's registration information, adoption papers, vaccination documents, medical records and emergency contact information (such as animal control, Humane Society, or ASPCA and emergency vet hospitals) in a clean plastic bag or waterproof container and also add them to your kit.

PET FIRST-AID KIT: Most kits should include: cotton bandage rolls, bandage tape and scissors; antibiotic ointment; flea and tick prevention; latex gloves; isopropyl alcohol and saline solution. Include a pet first-aid reference book.

GET READY NOW!

COLLAR WITH ID TAG, HARNESS OR LEASH: Your pet should wear a collar with its rabies tag and identification at all times. Include a backup leash, collar and ID tag in your pet's emergency supply kit.

TALK TO YOUR VETERINARIAN: Discuss the types of things that you should include in your pet's emergency first-aid kit. Get names of veterinarians or veterinary hospitals in other cities where you might need to seek temporary shelter. Keep one copy of these phone numbers with you and one in your pet's emergency supply kit. You should also consider talking with your veterinarian about permanent identification such as micro-chipping and enrolling in a recovery database. Keeping your emergency contact information current and listing with a reliable recovery database is essential to you being reunited with your pet.

CRATE OR OTHER PET CARRIER: If you need to evacuate in an emergency situation take your pets and animals with you provided that it is practical to do so. In many cases, your ability to do so will be aided by having a sturdy, safe, comfortable crate or carrier ready for transporting your pet. The carrier should be large enough for your pet to stand, turn around and lie down.

SANITATION: Include pet litter and litter box if appropriate, newspapers, paper towels, plastic trash bags and household chlorine bleach to provide for your pet's sanitation needs. You can use bleach as a disinfectant (dilute nine parts water to one part bleach), or in an emergency you can also use it to purify water by using 1/8 of a teaspoon or 16 drops of regular household liquid bleach per gallon of water. Do not use scented or color safe bleaches, or those with added cleansers.

PICTURE: If you become separated from your pet during an emergency a picture of you and your pet together will help you document ownership and allow others to assist you in identifying your pet. Include detailed information about species, breed, age, sex, color and distinguishing characteristics.

FAMILIAR ITEMS: Put favorite toys, treats or bedding in your kit. Familiar items can help relieve pet stress.

2 Plan

What you will do in an Emergency



Be prepared to assess the situation. Use your emergency supply kit you have on hand to take care of yourself and ensure your pet's safety during an emergency. Depending on your circumstances and the nature of the emergency, the first important decision is whether you stay put or get away. You should understand and plan for both possibilities. Use common sense and the information you are learning here to determine if there is immediate danger. In any emergency local authorities may or may not immediately be able to provide information on what is happening or what you should do. Therefore, watch TV, or listen to the radio for instructions. If you're specifically told to evacuate, shelter-in-place or seek medical treatment, do so immediately.

CREATE A PLAN TO GET AWAY: Plan how you will assemble your pets and anticipate where you will go. If you must evacuate, take your pets with you. If you go to a public shelter, keep in mind your animals may not be allowed inside. Secure appropriate lodging in advance depending on the number and types of animals in your care. Consider family or friends willing to take in you and your pets in an emergency. Other options may include, a hotel or motel that takes pets or a boarding facility, such as a kennel or veterinary hospital, that is near an evacuation facility or your family's meeting place. Find out before an emergency happens if any of these facilities in your area might be viable for you and your pets.

DEVELOP A BUDDY SYSTEM: Plan with neighbors, friends or relatives to make sure that someone is available to care for or evacuate your pets if you are unable to do so. Talk with your pet care buddy about your evacuation plans and show them where you keep your pet's emergency supply kit. Also designate specific locations, one in your immediate neighborhood and another farther away where you will meet in an emergency. Obtain "PETS INSIDE" stickers and place them on your doors and windows. Include numbers and types of pets in your home to alert firefighters and rescue workers. Consider putting a phone number on the sticker for emergencies. And, if time permits, write "Evacuated with Pets" across the stickers should you flee with your pets.



Check with your veterinarian and Illinois Department of Agriculture for information about possible disease outbreaks.

Illinois Department of Agriculture
866.299.9256
www.agr.state.il.us

3 Special Considerations

Horse & Livestock Owners

PRIOR TO AN EMERGENCY: Familiarize yourself with types of disasters that could occur in your area, including man-made situations such as chemical spills near highways. Develop a written plan of action for each. Include a list of resources (suppliers, trucks and trailers), evacuation sites, emergency phone numbers and people who can help during an emergency. Store a copy with important papers in a plastic bag or waterproof container. Review the plan regularly with everyone involved.

Survey your property for the best location for animal confinement in each type of disaster. Identify food and water sources that do not rely on electricity, which could be lost during an emergency.

Decide where to take animals if evacuation is necessary. Contact fairgrounds, other producers (especially those with empty barns and pastures), stockyards and auction markets about their policies and ability to take livestock temporarily in an emergency. Have several sites in mind in case your first choice is unavailable.

Familiarize yourself with several evacuation routes to your destination. Avoid routes likely to be traveled heavily by people unless instructed to follow official routes.

Photograph, identify (brands, ear-tags, nose prints, retinal scans, etc.) and inventory (by age, sex, weight, breed) your animals. Identify in a written list which animals (such as breeding stock) are of the highest priority or most valuable. Make sure others know your plans. Keep copies of important papers.

Keep vaccinations and boosters up-to-date. Record the dates, dosages and types of medications and health products the animals have received and record dosing instructions and dietary requirements. Keep this information with the emergency supply kit.

DURING AN EMERGENCY: Listen to the local radio/TV stations for emergency information.

If possible, evacuate your livestock, take all vaccination and medical records, the emergency supply kit and enough hay, feed and water for a minimum of 72 hours. Call ahead to your destination to make sure the site is still available.

Don't forget basic bio-security measures if you evacuate, especially if you know your herd is under quarantine or has a communicable disease.

If you must evacuate without your animals, leave them in an appropriate pre-selected area. Leave enough hay, food and water for 72 hours. Do NOT rely on automatic watering systems; power may be lost.

AFTER AN EMERGENCY: Check fences - be sure they are intact. Check pastures and fences for sharp objects that could injure livestock.

Beware of downed power lines.

Beware of raccoons, skunks and other wild animals that may have entered the area and could pose a danger to your animals.

If animals are lost, contact veterinarians, humane societies, stables, surrounding farms and other facilities. Listen to the local radio for groups that may be accepting lost animals.

Be Red Cross Ready

Pets and Disaster Safety Checklist

Our pets enrich our lives in more ways than we can count. In turn, they depend on us for their safety and well-being. The best way to ensure the safety of your family is to be prepared with a disaster plan. If you are a pet owner, that plan includes your pets. Being prepared can help save lives.

Learn First Aid for Your Pets

Dogs and cats are more than pets—they're family. And just like any other family member, pets deserve to be cared for and protected. That's why the American Red Cross has developed Dog First Aid and Cat First Aid, comprehensive guides to help keep pets healthy and safe. From basic responsibilities like spaying/neutering and giving medications, to managing cardiac emergencies and preparing for disasters, these guides offer information pet owners can trust.

Contact your local chapter or purchase guide books and first aid kits or log on to the Red Cross Store to see all available products.

How can I prepare?



Plan to take your pets with you in an evacuation. If it is not safe for you to stay, it is not safe for them either.

- Know which hotels and motels along your evacuation route will accept you and your pets in an emergency. Call ahead for reservations if you know you may need to evacuate. Ask if no-pet policies could be waived in an emergency.
- Most Red Cross shelters cannot accept pets because of health and safety concerns and other considerations. Service animals that assist people with disabilities are allowed in Red Cross shelters.
- Know which friends, relatives, boarding facilities, animal shelters or veterinarians can care for your animals in an emergency. Prepare a list with phone numbers.
- Although your animals may be more comfortable together, be prepared to house them separately.
- Include your pets in evacuation drills so that they become used to entering and traveling in their carriers calmly.
- Make sure that your pet's vaccinations are current and that all dogs and cats are wearing collars with securely fastened, up-to-date identification. Many pet shelters require proof of current vaccinations to reduce the spread of disease.
- Consider having your pet "microchipped" by your veterinarian.

What should I do?



Assemble a portable kit with emergency supplies for your pets.

- Keep items in an accessible place and store them in sturdy containers so that they can be carried easily. Your kit should include—
 - Sturdy leashes, harnesses and/or carriers to transport pets safely and ensure that they can't escape.
 - Food, drinking water, bowls, cat litter/pan and a manual can opener.
 - Medications and copies of medical records stored in a waterproof container.
 - A first aid kit.
 - Current photos of you with your pet(s) in case they get lost. Since many pets look alike, this will help to eliminate mistaken identity and confusion.
 - Information on feeding schedules, medical conditions, behavior problems, and the name and number of your veterinarian in case you have to foster or board your pets.
 - Bedding and toys, if easily transportable.
- Often, warnings are issued hours, even days, in advance. At the first hint of disaster, act to protect your pet.
- Call ahead to confirm emergency shelter arrangements for you and your pets.
- Ensure that all pets are wearing collars with securely fastened, up-to-date identification.
- Check that your pet disaster supplies are ready to take at a moment's notice.
- Bring pets inside so you won't have to search for them if you need to leave quickly.

After a disaster ...



- The behavior of pets may change dramatically after a disaster, becoming aggressive or defensive, so be aware of their well-being and protect them from hazards to ensure the safety of other people and animals.
- Watch your animals closely and keep them under your direct control as fences and gates may have been damaged.
- Pets may become disoriented, particularly if the disaster has affected scent markers that normally allow them to find their home.
- Be aware of hazards at work and power line of level, particularly debris, spilled chemicals, fertilizers and other substances that might not seem to be dangerous to humans.
- Consult your veterinarian if any behavior problems persist.

Emergency action plans for your family should include your animals—all of your animals.

For information on disaster planning and emergency actions to take for livestock, horses, birds, reptiles or other small animals, such as gerbils or hamsters, please visit RedCross.org, the Humane Society of the United States (www.HSUS.org) or Ready.gov.

Let Your Family Know You're Safe

If your community has experienced a disaster, register on the American Red Cross Safe and Well Web site available through RedCross.org to let your family and friends know about your welfare. If you don't have Internet access, call 1-866-GET-INFO to register yourself and your family.



For more information on disaster and emergency preparedness, visit RedCross.org.

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First Aid Kit for Pets

A fully equipped household first aid kit contains almost all of the supplies you may need for your pets. A simple first aid kit for your pets should include these additional items in a waterproof container:

- Latex (or hypoallergenic material) gloves
- Gauze sponges (a variety of sizes)
- Gauze roll, 2-inch width
- Elastic cling bandage
- Material to make a splint
- Adhesive tape, hypoallergenic
- Non-adherent sterile pads
- Small scissors
- Tweezers
- Magnifying glass
- Grooming clippers or safety razor
- Nylon leash
- Towel
- Muzzle
- Compact emergency "blanket" (available in the camping department of many stores)
- Water-based sterile lubricant
- Hydrogen peroxide (3 percent)
- Rubbing alcohol;
- Topical antibiotic ointment
- Antiseptic towelettes
- Insect sting stop pads
- Cotton-tipped swabs
- Instant cold pack
- Epsom salts
- Baby-dose syringe or eye dropper
- Sterile eye lubricant
- Sterile saline wash
- Safety pins (medium size 4)
- Tongue depressors
- Diphenhydramine, if approved by your veterinarian
- Glucose paste or syrup
- Styptic powder or pencil
- Plastic card (such as old credit card) to scrape away stingers
- List of emergency phone numbers including those for your pet's veterinarian, an after-hours emergency veterinary hospital, and the National Animal Poison Control Center (1-888-426-4435) and money to make a phone call.
- Petroleum jelly
- Penlight with batteries (AA)
- Clean cloth
- Needle-nose pliers

For a complete list of items for your pet first aid kit and detailed information on how to provide first aid for your pets, consult *Pet First Aid* by Barbara Mammato, DVM, MPH, a handbook sponsored by the American Red Cross and The Humane Society of the United States.

5 Animal Disaster Preparedness Essentials

1 Identify evacuation locations

- Find places that can accommodate pets if you evacuate; consider pet-friendly hotels, kennels and/or loved ones
- Write down locations and store them with your disaster kit
- Practice loading your pets into carriers and your vehicle

2 Microchip your pets

- It is the single best way to reunite lost pets and families
- Update microchip registration when you move, change phone numbers or get a new emergency contact
- Secure a sturdy, legible ID tag on your pets' collars, too

3 Start a buddy system

- Exchange keys with someone who can evacuate your animals if you are not home when disaster strikes
- Give your buddy your pets' information and your emergency contact information
- Make sure your buddy is comfortable handling your pets

4 Assemble a disaster kit

- Assemble a kit for each animal in your household
- Keep the kit near an exit so it is easy to grab in case of an emergency
- Turn this card over for tips on what to include in your disaster kit

5 Take photos of you with your pet(s)

- Photos can prove ownership if you are separated from your pets
- Keep copies in your wallet and your disaster kit
- Give copies to a loved one who lives outside of your area
- Storing photos on your cell phone can also be useful



Disaster Kit Checklist

- ✓ **Food**
 - A one-week supply in airtight, waterproof containers
 - If using canned food, include a can opener and spoon
 - Rotate food every two months to avoid spoilage
- ✓ **Water**
 - A one-week supply in airtight, waterproof containers
 - Avoid storing in direct sunlight
 - Rotate water every two months to avoid spoilage
- ✓ **First aid/medication**
 - Basic animal first aid kit and book
 - At least a one-week supply of prescription medication
 - Heartworm and flea/tick preventive
- ✓ **Identification**
 - Photos of pets that show any distinguishing features
 - Photos of you with your pets
 - Temporary "write-on" identification tag
 - Proof of vaccinations (in case you must board pet)
- ✓ **Animal care supplies**
 - Collar and leash or harness
 - Crate or carrier
 - Collapsible food and water bowls
 - Blanket, toys and treats
- ✓ **Cleaning supplies**
 - Paper towels
 - Dish soap
 - Plastic bags or cat litter with litter tray

Visit RedRover.org to:

- Find more disaster preparedness resources
- Get disaster kit supply tips for various species
- Order supplies and planning materials

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Info@RedRover.org

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Equine Emergency-Evacuation Kit Checklist

USE THIS CHECKLIST to make sure you have the essentials you need in case of an emergency evacuation with your horse.

SUPPLIES FOR HUMANS

- FLASHLIGHT AND/OR HEADLAMP
- BATTERY-OPERATED OR HAND-CRANK RADIO
- CELL PHONE AND CHARGER
- BATTERIES
- CASH
- IDENTIFICATION AND PERSONAL RECORDS
- EMERGENCY CONTACT INFORMATION
- WATER (ONE GALLON PER PERSON PER DAY)
- NON-PERISHABLE SNACKS
- BLANKETS/WARM CLOTHES
- WIRE CUTTERS
- HUMAN FIRST-AID KIT AND MEDICATIONS
- PERSONAL HYGIENE AND SANITARY PRODUCTS
- POCKET KNIFE AND/OR MULTIPURPOSE TOOL
- MAPS
- _____
- _____
- _____

SUPPLIES FOR HORSES

- HORSE IDENTIFICATION RECORDS AND PHOTOS
- HORSE HEALTH CERTIFICATE AND COGGINS TEST RESULTS
- HALTER AND LEAD ROPE FOR EACH HORSE
- FEED PANS AND HAYNETS
- WATER BUCKETS
- FEED/HAY (ENOUGH FOR 48 TO 72 HOURS)
- MEDICATIONS IF ANY
- WATER (CONSIDER ADDING A WATER TANK TO YOUR HORSE TRAILER IF YOU DONT ALREADY HAVE ONE.)
- HOSE
- BROOM
- APPLE PICKER/MUCK FORK
- FLY SPRAY
- BASIC EQUINE FIRST-AID KIT (SEE THEHORSE.COM/33573)
- _____
- _____
- _____