

ALL DISASTERS GREAT AND SMALL: ONE HEALTH PREPAREDNESS FOR VETERINARIANS

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Clinician Outreach and Communication Activity (COCA) Conference Call

July 8, 2010



Objectives

At the conclusion of this hour, each participant should be able to:

- Describe issues that will impact veterinary medicine during public health emergencies or disasters
- Describe the programs of the American Veterinary Medical Association that support disaster and emergency response
- Discuss the Pets Evacuation and Transportation Standards Act of 2006 and its impact on public health/human healthcare activities
- List the core environmental health systems priorities
- Describe occupational health issues relevant for the veterinary community



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TODAY'S PRESENTERS



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One Health Linkages During Disaster or Public Health Emergency Response: Background for the Veterinary Practitioner

July 2010

Presented by CAPT Hugh Mainzer, MS, DVM, DACVPM
Chief Veterinary Officer, US Public Health Service

Views are those of the presenter and may not necessarily represent official policies and programs of CDC/ATSDR or the US Department of Health and Human Services





The CDC Mission

Collaborating to create the expertise, information, and tools that people and communities need to protect their health – through health promotion, prevention of disease, injury and disability, and preparedness for new health threats.

CDC Function

CDC seeks to accomplish its mission by working with partners throughout the nation and the world to

monitor health,

detect and investigate health problems,

conduct research to enhance prevention,

develop and advocate sound public health policies,

implement prevention strategies,

promote healthy behaviors,

foster safe and healthful environments,

provide leadership and training.

Public Health Workforce

- Nurses
- Public health advisors
- Physicians
- Dentists
- PhDs
- MPHs
- **Veterinarians**
- Sanitary Engineers
- Industrial Hygienists
- Environmental Health Specialists
- Epidemiologists
- Laboratory Scientists
- Social Workers
- Health Educators
- Statisticians
- Information Technology Specialists
- Entomologists
- Lawyers

One Health

- Human
- Animal
- Environment



ONE HEALTH

One Health is the collaborative effort of multiple disciplines – working locally, nationally and globally - to attain optimal health of humans, animals and our environment.



Protecting Animal and Human Health

- Veterinary medicine is also a human health activity
- Veterinarians serve many public health as well as direct clinical care provider roles



Veterinarians are valuable “one health” practitioners because they are highly trained medical professionals with a unique ability to respond to the unknown.

Events Impacting Large Populations

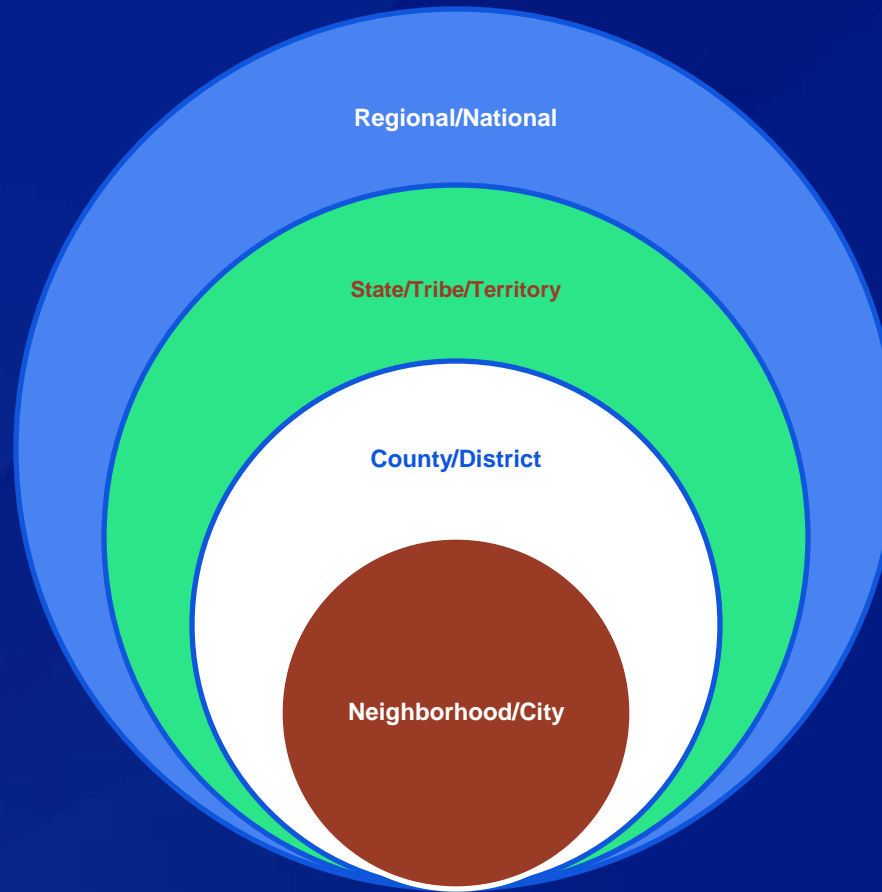


When Disaster Strikes

Many of the health risks that occur are shared by human beings and animals.

It is important for veterinarians-whether members of a community impacted by a health emergency or members of a team or organization providing assistance- to recognize the complex interaction during response, recovery, and reconstruction.

Response Depends on Type, Magnitude, and Location of Emergency or Disaster



Emergency Support Functions

Provide coordinating structure and group functions

**Help organize scope of roles, responsibilities,
authorities, actions, and partnerships**

**Veterinarians and other health providers should be
aware of those functions**

Some Animal Health Response Elements that Involve Veterinarians

Local –

Medical Reserve Corps, Community Emergency Response Teams, Search and Rescue Groups, County animal Response Teams, Animal shelters/humane societies

State-

Academic Centers, State Animal Response Teams- a public private partnership of government agencies and private concerns dedicated to preparing, planning, responding and recovering during animal emergencies

National-

National Animal Health Emergency Response Corps, National Veterinary Response Team, other Federal agency response units , National Alliance of State Animal & Agricultural Emergency Programs, Non-governmental organizations/coalitions/Professional Association Teams,

Less well communicated and emphasized

Veterinarians are also important members and leaders for public health and environmental emergency response functions

Preventive medicine

Local/State Designated Public Health Veterinarians

Epidemiology/Surveillance

Toxicology/Pharmacology

Pathology

Microbiology

Disaster Preparedness

- Pre-planning, training/exercises, public awareness, professional involvement
- Self, family, colleagues/staff, community



One Health Response Knowledge and Practice Domains for Veterinarians

Terrorism-General principles/scenarios related to intentional acts involving biologics, chemicals, radioactivity, and/or explosive devices

Natural/technological Disasters- General principles impacting human populations from naturally occurring or unintentionally caused events

Environmental Health Systems- esp. Water, vector control, food, sanitation, shelter .

Occupational Health and safety.

Support and augmentation of human health care as well as search and rescue activities

Awareness of regulatory issues and incident management principles



Take Home Message



As partners in population health protection and promotion, clinically trained **veterinarians** improve well-being by using their knowledge, skills and understanding of the complex interactions that effect environmental, animal, and human health.

These abilities are essential during public health emergency or disaster response.

Thank you for your attention...

Welcome to the “One Health” Team !!



Be Well- Do Good !

HMainzer@cdc.gov

AVMA Leadership in Emergency and Disaster Preparedness for the Veterinary Profession



Dr. Kristi Henderson

Assistant Director

Scientific Activities Division, AVMA

July 8, 2010

AVMA Leadership in Disaster & Emergency Preparedness

- Committee on Disaster and Emergency Issues (CDEI)
- Publications and Communications
- Veterinary Medical Assistance Teams (VMAT)
- American Veterinary Medical Foundation (AVMF)



Photo by Andrea Booher/FEMA Photo
St. Louis, MO, July 9, 1993

CDEI

Formed in 2001, the CDEI consists of:

- 10 members, all of whom have established experience and expertise in disaster preparedness and emergency issues.
- 1 each from:
 - VMAT (who is a member of the VMAT Program Leadership Committee)
 - Food animal practice
 - Small animal practice
 - Federal or state public health agency
 - AVMA Committee on Environmental Issues
 - Poultry medicine
 - Equine practice
 - The uniformed service
 - A State Veterinarian who is active in disaster-related issues
 - A member of the American Veterinary Medical Foundation Board of Directors



Photo by Andrea Booher/FEMA Photo

St. Louis, MO, July 1993

Publications and Communications

AVMA Disaster Preparedness Materials

<http://www.avma.org/disaster/default.asp>

Provides several key resources including those discussed on the next few pages.

AVMA Home | News | Issues | My AVMA | Jobs | Animal Health | Public Health | AVMA@Work

Search AVMA

Animal Health

AVMA disaster preparedness materials

Materials

The educational materials listed below are provided to assist veterinarians, animal owners, and others interested in the well-being of animals to prepare for animal safety in the event of a disaster.

- Emergency Preparedness and Response
- Saving the Whole Family?
- Disaster Preparedness for Veterinary Practices

AVMA Emergency Preparedness and Response

This searchable CD-ROM is a resource designed for veterinarians, veterinary technicians, emergency managers, and others interested in all hazards all species veterinary and animal emergency issues. This 400+ page reference is full of disaster planning information, containing actual templates for writing detailed animal disaster annexes to county and state emergency operations plans.

New! Searchable PDF now available

[Download for free](#) | [How to order](#)

Saving the Whole Family?

Help your clients keep their animals safe in a disaster by providing them with this informative booklet from the AVMA.

This detailed planning resource for both small and large animals in disasters can help your clients maintain the safety of the animals you have dedicated your life to helping.

View brochure: [English](#) | [Spanish](#)

Download PDF: [English](#) | [Spanish](#)

[How to order](#)

Disaster Preparedness for Veterinary Practices

Are you prepared to continue practicing in the aftermath of a disaster? Disasters can occur anytime, in any place. Find out how to continue practicing veterinary medicine, continue paying your staff and communicate with your clients.

Text: [HTML](#) | [Brochure PDF](#) | [How to order](#)

AVMA Collections: Disaster Preparedness and Response

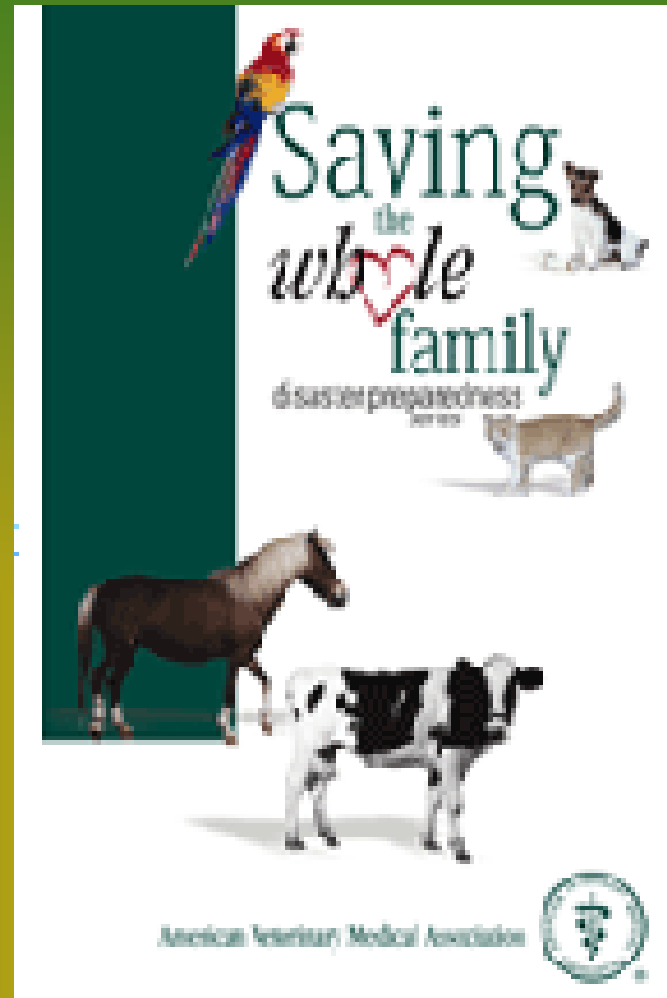
The catastrophic events of the 2002 hurricane season, and the terrorist attacks on the World Trade Center and Pentagon on September 11, 2001, fueled intense activity around improving local, state, and national preparedness and response planning for biosecurity and the handling of animals in disasters. This collection of articles reflects the arduous work of reporters who have grappled with the central questions and offered their findings and recommendations within the covers of AVMA scientific journals. [View the AVMA Collection on Disaster Preparedness and Response.](#)

AVMA COLLECTIONS

Publications and Communications

"Saving the Whole Family"

- http://www.avma.org/disaster/saving_family.asp
- 491 kb pdf
- Discussed in the AVMA-TV video, "Disaster Preparedness: Saving the Whole Family," located at <http://www.avmatv.org/media.cfm?c=200&m=1747&s=64&>



Publications and Communications

“Emergency and Preparedness Response”

- 2.57 Mb PDF
- http://www.avma.org/disaster/emerg_prep_resp_guide.pdf

AVMA Emergency Preparedness and Response



This searchable CD-ROM is a resource designed for veterinarians, veterinary technicians, emergency managers, and others interested in all hazards/all species veterinary and animal emergency issues. This 400+ page reference is full of disaster planning information, containing actual templates for writing detailed animal disaster annexes to county and state emergency operations plans.

Publications and Communications

Several excellent videos are available for viewing on the AVMA-TV site (<http://www.avmatv.org/>).

- “Veterinary Medical Assistance Teams (VMATs)” at <http://www.avmatv.org/media.cfm?c=200&m=1396&s=64&>
- “Lessons Learned from Katrina” at <http://www.avmatv.org/media.cfm?c=200&m=985&s=64&>
- Many more!

Veterinary Medical Assistance Teams (VMAT)

<http://www.avma.org/vmat/default.asp>



The screenshot shows the AVMA website's VMAT section. At the top, the AVMA logo and navigation links (Home, News, Issues, My AVMA, Jobs, Animal Health, Public Health, AVMA@Work) are visible. A search bar is present with a 'Search AVMA' button. The main content area is titled 'Animal Health' and features a sub-section for 'AVMA VMAT'. A prominent heading reads 'AVMA Veterinary Medical Assistance Teams (VMAT)'. Below this, a text block states: 'Connect with the AVMA VMAT teams on Twitter at @AVMAVMAT to stay abreast of VMAT activity.' This is followed by a paragraph describing the VMAT's role as first responders during disasters and emergencies. A bulleted list highlights their services: early assessment of conditions, primary field care, and emergency-related training. A final paragraph notes that dedicated volunteers ensure care for pets, livestock, zoo animals, and wildlife during crises. On the right side, there is a 'Donate' section with a photo of a person holding a small animal and a text box explaining that the program is funded by the American Veterinary Medical Foundation. At the bottom of the page, there are three buttons: 'VMAT News', 'Resources', and 'How to Help Us', along with a 'Help Animals in Crisis' button.

AVMA  Home | News | Issues | My AVMA | Jobs | Animal Health | Public Health | AVMA@Work

Search AVMA Search Tips | Advanced Search

Search Animal Health

Search within Animal Health only.

AVMA VMAT
ALL HAZARDS ALL SPECIES

Animal Health

About VMAT

AVMA Veterinary Medical Assistance Teams (VMAT)

Connect with the AVMA VMAT teams on Twitter at @AVMAVMAT to stay abreast of VMAT activity.

The AVMA's Veterinary Medical Assistance Teams (VMAT) serve as first responders to ensure high-quality care of animals during disasters and emergencies. When requested by a state, VMATs provide operational emergency response programs to state animal health authorities, and preparedness programs to animal health authorities, veterinary medical associations, and other relevant organizations, including:

- Early assessment of veterinary conditions and need
- Primary field care to augment overwhelmed local capabilities
- Emergency-related training for state veterinary associations, professionals and colleges

The dedicated volunteers who make up the AVMA VMAT program help ensure that pets, livestock, zoo animals and wildlife all receive the care they need during times of crisis.

Donate



The AVMA VMAT program is funded through the generous support of the American Veterinary Medical Foundation. Your donation to the AVMF will help the foundation make emergency care available to all animals in times of crisis.

 = AVMA/SAVMA Members Only

VMAT

- Multiple small teams of veterinarians
- Trained and equipped to respond to all hazards / all species
- Trained for the skills to function in severe conditions
- Can be tailored to the needs by use of the wide expertise of the VMAT cadre, i.e. small animal, large animal, zoological, wildlife, lab animal.



VMAT

Expenses paid by

- AVMF
- Or reimbursed through:
 - Pre-existing MOU's through PETS Act
 - PETS Act requires a federal disaster declaration
- EMAC (Emergency Management Assistance Compact) agreements
 - EMAC requires a state disaster declaration.



VMAT



- Early Assessment
- Basic Treatment
- Training



VMAT Early Assessment

- Availability:
 - 24/7 upon request
 - Including pre-deployment where threat of imminent events exist
- Self sufficient
- Assist states in the assessment of all-hazards, all species disasters to determine impact and extent of damage to
 - Local veterinary infrastructure
 - Public health
- Following completion of assessment, state can deploy its own veterinary teams or resources

VMAT Basic Veterinary Care

- Primary field care to augment overwhelmed local capabilities
- Could include facilitating establishment of a base-of-operations as a field staging area for state-based veterinary triage and veterinary medical care of displaced animals
- Deployed at state's request for a max 72 hours (not including travel time)
- Deployment could extend beyond 72 hours depending on the state's needs and capabilities to reimburse for expenses beyond a 72 hour deployment
- Can be tailored to the needs by use of the wide expertise within VMAT. i.e. small animal, large animal, zoological, wildlife, lab animal.



Training by VMAT

- VMAT Offers training to
 - state veterinary associations
 - veterinary professionals
 - and veterinary colleges



Photo by Andrea Booher/FEMA Photo
St. Louis, MO, July 9, 1993

- Provided at a 50:50 cost sharing between the AVMF and requesting organization
- Volunteer AVMA VMAT trainers travel expenses to be split equally by requesting organization and AVMF funding

Training by VMAT

Potential topics for one to two day training courses could include

- Animal decontamination
- Disaster veterinary medicine and triage
- Hazmat awareness for veterinarians
- Critical incident stress management
- Leadership
- Risk communication
- Occupational safety



Jocelyn Augustino/FEMA

Eureka, MO, March 22, 2008

Contact Information

AVMA: www.avma.org, 1-800-248-2862

AVMF: www.avmf.org, 1-800-248-2862 x 6689

Dr. Kristi Henderson: khenderson@avma.org
800-248-2862, x 6651

Additional photos courtesy of FEMA:
<http://www.photolibrary.fema.gov/photolibrary>

What a Difference a Law Makes! The Federal PETS Act of 2006 and PKEMRA

CDC Clinician Outreach and Communication Activity
July 8, 2010

CAPT Stephanie R. Ostrowski, DVM
USPHS Veterinary Category
Career Epidemiology Field Officer Program
CDC, Atlanta, GA

FEMA Special Liaison for Animal Activities, 2005/2006
PETS Mission Area Lead for Evacuation Planning 2006
Companion Animals Management Unit, FEMA LA Warm JFO, 2007



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Before the PETS Act (2005 and before):

- **Under the National Response Plan (NRP)....**
 - ◆ NRP and Annex language did not address service animals or pets.
 - ◆ There was no Annex specific to Animal Emergency Management.
 - ◆ Stafford Act funds could **NOT** be used to support pet-related emergency response (except for limited support of VMAT as part of ESF#8)
- Service animals were covered by the **Americans With Disabilities Act (ADA)** but first responders were given no training regarding their legal responsibility to keep guide dogs, etc., with disabled owners throughout rescue and recovery.
- First responders were **not** authorized to rescue pets with owners; but usually did so anyway as “incidental” to rescue of citizens.
- Veterinary Medical Associations and humane NGOs provided all emergency field services for animals as charitable undertakings following disasters, without benefit of federal acknowledgment, coordination, or Stafford Act Funding assistance.



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New Federal Legislation: October 2006

The P.E.T.S. Act and PKEMRA were signed into law.

- **Pet Evacuation and Transportation Standards (PETS) Act**
 - ◆ Amended Section 403 of the Stafford Disaster and Relief Emergency Assistance Act “to ensure that State and local emergency preparedness operational plans address the needs of individuals with household pets and service animals following a major disaster or emergency.”and authorizes use of Stafford Act funds.
- **Post-Katrina Emergency Management Reform Act (PKEMRA)**
 - ◆ Modified the Stafford Act with PETS Act language, and places significant new responsibilities on **DHS/FEMA** for coordinating implementation of the PETS Act.



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Post-PETS Act and PKEMRA –

- **PETS Act of 2006 and PKEMRA –**
 - ◆ Amended the Stafford Act to provide for emergency management of service animals and pets,
 - ◆ Providing FEMA coordination of federal responders to support and rescue, decon, evacuation, sheltering, mass care and emergency veterinary services utilizing response partners from many sources.
- **FEMA Disaster Assistance Policy 9523.19 (2007)**
 - ◆ Defined “Eligible Costs Related to Pet Evacuation and Sheltering”
- **National Response Framework (NRF; 2008)**
 - ◆ Portions of Annexes for ESFs# 6, 8, 9, and 11 now mention support for companion animals and service animals
- **ABA Model Act Governing Standards for Care and Disposition of Disaster Animals (ABA 2010)**



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PKEMRA tasked **FEMA** to be lead federal agency for PETS Act implementation & overall coordination of animal response operations and resources.



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FEMA re: Provisions of the PETS ACT

The provision does not place the responsibility for evacuation and sheltering activities with FEMA.

These responsibilities continue to reside with the State, Tribal, and Local authorities.

FEMA is coordinating with **USDA/APHIS/Animal Care** and the States to ensure State/Local emergency response operations plans address household pets and service animals, and provide federal coordination and support, when requested.



FEMA

Integration of PETS Act Responsibilities in the National Response Framework (NRF)

In collaboration with **ESF 11 (USDA)**, support for household pets and service animals efforts is coordinated by the Department of Homeland Security (DHS)/FEMA in collaboration with:

- ESF 6 – Mass Care, Emergency Assistance, Housing, and Human Services (FEMA); (“sheltering”)
- ESF 8 – Public Health (DHHS);
- ESF 9 – Search and Rescue (FEMA); and
- ESF 14 – Long-Term Community Recovery (FEMA).



FEMA

National Response Framework (NRF)

ESF #6 (FEMA Mass Care/ Sheltering)

- The NRF states that Emergency Assistance is assistance required by individuals, families, and their communities to ensure that immediate needs beyond the scope of the traditional “mass care” services provided at the local level are addressed. These services include:
- ... evacuation, sheltering, and other emergency services for household pets and services animals ...

ESF #11 (USDA)

The NRF places responsibility for the federal level coordination of “the safety and well-being of household pets” under ESF11, coordinated by the U.S. Department of Agriculture (USDA). USDA works directly with State and local governments to ensure their compliance with Federal laws and regulations.



FEMA

FEMA Disaster Assistance Policy DAP9523.19

Sets parameters for reimbursement of POST-IMPACT expenses)

- DAP9523.19 “Eligible Costs Related to Pet Evacuation and Sheltering”
 - ◆ “...identifies expenses related to State and local governments’ emergency pet evacuation and sheltering activities that may be eligible for reimbursement following a major disaster or emergency declaration”.
 - ◆ Defines Congregate Pet Shelters
 - ◆ Defines **Eligible Parties for reimbursement**;
 - ★ State and Local Governments are the **only eligible applicants**
 - ★ **Contractors or Private Non-Profit** (PNP; NGO) organizations cannot be directly reimbursed/ cannot be applicants.
 - ★ Must work through written agreements (MOAs) whereby they provide assistance to the responsible state/local agencies



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FEMA & USDA Collaborative Planning

Household Pet Support Task Force (HPSTF)

- ◆ Coordinated by and with USDA/APHIS/Animal Care
- ◆ Incorporates other Federal Agencies, ESFs, and Non-governmental Organizations, Private Sector, and State/Local staff
- ◆ Will ensure that support for household pet and service animal needs are coordinated as part of large mass evacuations or sheltering events during Presidentially declared disasters/emergencies

STATUS: Developing charter and protocols and implementation other mechanisms with USDA/APHIS/ Animal Care to speed establishment of the HPSTF staff for assessment and determination of further needs in support of field operations



Making the Connection

- It is not a question of putting animals above people
- It is about supporting people by taking care of what is important to them
- The human/animal bond is never more important to people than in situations of extreme stress
- Household Pets issues ARE People issues



FEMA

AC Emergency Programs: Vision

USDA APHIS Animal Care envisions a nation working together to protect the public through ensuring the safety and well-being of animals during disasters. Emergency Programs maintains consistency with Animal Care's traditional regulatory goals, in advocating for animal safety and well-being, which improves safety and well-being for people.



USDA APHIS Animal Care Emergency Programs

- Sponsors joint exercises with States (pet focus)
 - ◆ 2008 – Louisiana
 - ◆ 2009 – California, North Carolina
 - ◆ 2010 – Georgia, Utah, Massachusetts, Louisiana
- Organizes and sponsors a national meeting of state emergency responders
- Organizes Best Practice Working Groups
- Technical support for pets in response





Veterinary Occupational Health and Safety: Disaster Preparedness and Response

**Renée Funk, DVM, MPH&TM, DACVPM
Emergency Preparedness and
Response Office, National Institute
for Occupational Safety and Health
(NIOSH), CDC**



Emergency Management Plan Components

- Stakeholders
- Goals and objectives
- Background
- Facility evaluation
- Type of emergency
- Guidelines for response
- Operational approach
- Communication
- Appendices
- Future goals

Employee Health and Safety

- Identify hazards
- Use hierarchy of controls
 - Elimination, substitution, engineering controls, administrative controls, personal protective equipment (PPE)
- Educate workers
- Perform medical pre-screening
- Institute surveillance



Infection Control

- Reduce zoonotic disease transmission
- Standard precautions regardless of potential diagnosis
 - whenever in contact with blood or bodily fluids

- NASPHV Veterinary Standard Precautions Compendium:

www.nasphv.org/Documents/VeterinaryPrecautions.pdf



Common Hazards Seen During Response

- Noise
- Bites and scratches
- Dermatologic conditions
- Sharps injuries
- Allergens
- Infectious diseases
- Insects and vectors
- Temperature extremes
- Psychological Stress
- Chemical Exposures



Developing a Health and Safety Plan for Pet Shelters

- **Interim Guidelines for Animal Health and Control of Disease Transmission in Pet Shelters: AVMA and CDC**
 - <http://www.bt.cdc.gov/disasters/animalhealthguidelines.asp>
- **NIOSH Guidelines on Health and Safety Hazards When Working with Displaced Domestic Animals**
 - <http://www.cdc.gov/niosh/topics/flood/pdfs/displacedanimals.pdf>
- **Animals in Public Evacuation Centers**
 - <http://www.bt.cdc.gov/disasters/animalspubevac.asp>



NIOSH Health Hazard Evaluation (HHE) Program

- **Responds to requests for assistance**
- **Provides current health hazard data to employees and employers**
- **Identifies problems and recommends workplace solutions**
- **Precipitates research**
- **Generates human exposure and toxicity data**



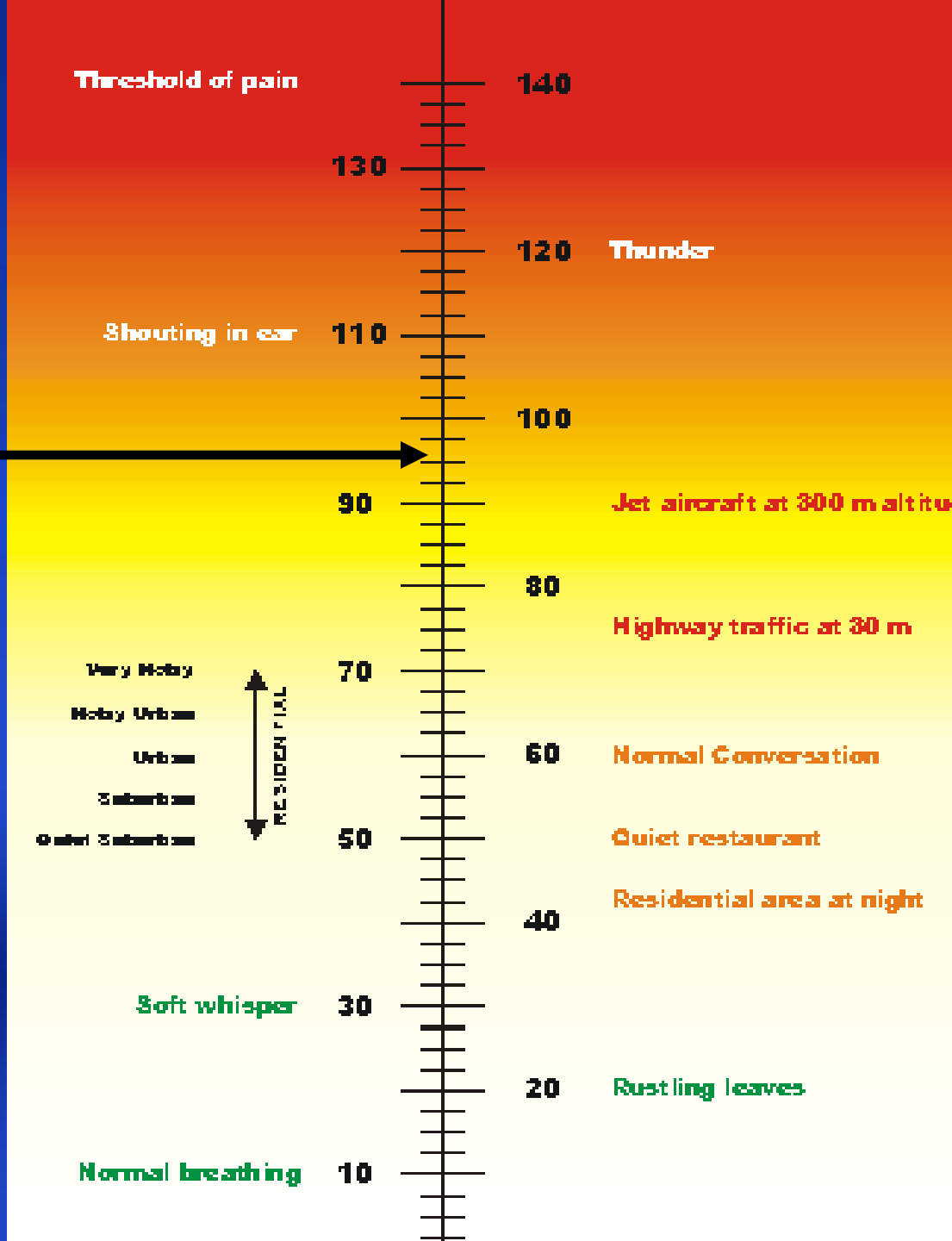
St. Bernard Parish Outdoor Animal Shelter

- Observed work practices
- 9 instantaneous noise readings
- Personal noise exposures measured on 4 workers for 5 hours



Noise Testing Results

- Instantaneous noise levels
 - 90-96 dB on the A-weighted scale
 - At the dog tent

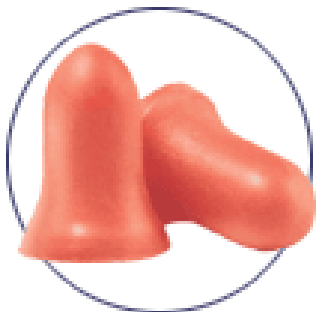


Exposure limits

- **NIOSH Recommended Exposure Limit (REL)**
 - More protective
- **OSHA Permissible Exposure Limit (PEL)**
 - Used for OSHA compliance
- **OSHA Action Limit (AL)**
 - Level at which a Hearing Protection Program must be implemented

Personal Noise Exposures

- **Veterinarian**
 - 128% dose: NIOSH REL
 - 36% dose: OSHA AL
- **Veterinary assistant**
 - 136% dose: NIOSH REL
 - 36% dose: OSHA AL
- **Veterinary technicians**
 - 199% and 337% dose: NIOSH REL
 - 42% and 63% dose: OSHA AL



Protect Your Ears

Recommendations

- Provide hearing protectors when working with dogs
- Enroll volunteers, who regularly conduct similar activities, in an hearing conservation program
 - Monitoring, employee notification, observation, audiometric testing, hearing protectors, training, and record keeping



A. Sussell

Reasons to Request an HHE

- Workers with illnesses from unknown cause
- Exposure to unregulated hazards
- Adverse health effects and exposure below the PEL
- Medical or epidemiological studies needed
- Higher than expected illness rate in an exposed group
- Exposure to a new or unrecognized hazard

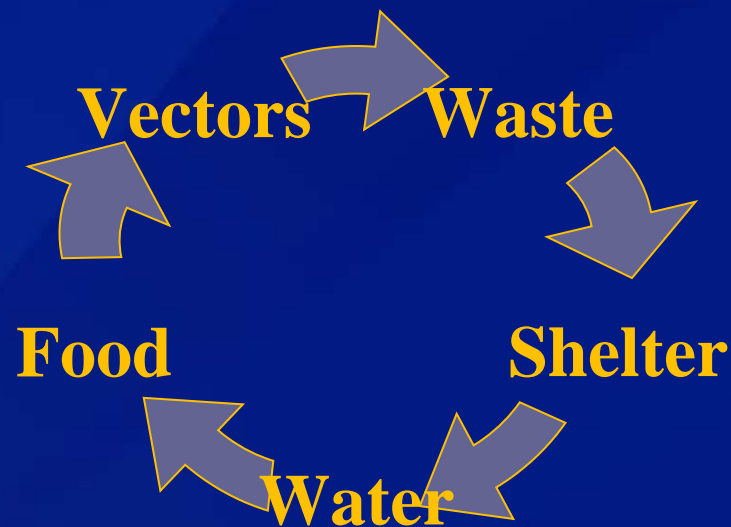


Requesting an HHE

- <http://www.cdc.gov/niosh> and follow links to the HHE program
- Call 1-800-232-4636
- Complete and submit form
- Call to discuss if you think an HHE may be appropriate



Environmental Health Issues in Disasters



CAPT Mark D. Miller, R.S., MPH

NCEH Division of Emergency and Environmental Health
Services

Environmental Health Services Branch



Environmental Health Training in Emergency Response Course

- 10 modules:
 - Disaster Management
 - Responder Safety
 - Potable Water
 - Food Safety
 - Wastewater
 - Shelters
 - Vector Control & Pest Management
 - Solid Waste & HAZMAT
 - Building Assessment
 - Radiation

Free online and in-person training available:

http://www.cdc.gov/nceh/ehs/Workforce_Development/EHTER.htm

Sheltering



Reliant Park – Houston

Pet Friendly Shelters



Pet Care Area – California
Wildfires



Pet Shelter- Florida
Hurricane

Vector Control & Pest Management



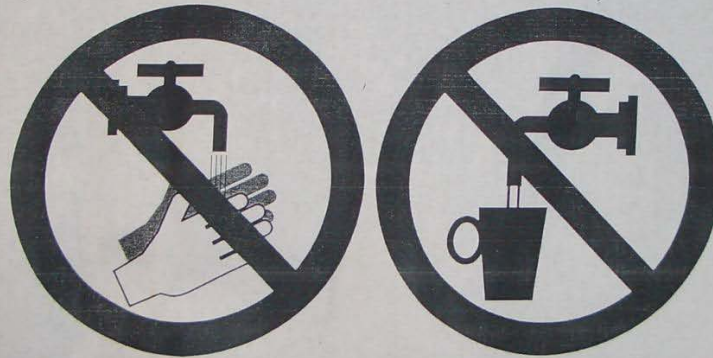




Drinking Water



The Tap Water in this Establishment is UNSAFE TO USE



Do not drink, bathe, use for food preparation, or wash with this tap water until otherwise notified.

Please visit www.dhhemergencynews.com
or call 225-~~753~~-5555 for additional information and updates.
763



By Order of the
Louisiana Department of Health
and Hospitals Office of Public Health



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Wastewater





Food Safety



Buildings



Environmental Health Issues in Disasters



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National Center for Environmental Health

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