2014 CRSCAD International Conference on Disaster Mitigation, Preparedness, Response, and Sustainable Reconstruction

May 8, 2014
University of Massachusetts
Boston, Ma.
Community-Based Emergency Management

ALL DISASTERS HAPPEN LOCALLY

SMART
STATE OF MASSACHUSETTS ANNUAL RESPONSE TEAM
Potential Disasters (Natural and Man-Made)...

- Fires
- Floods
- Hurricanes
- Tornados
- Explosions
- Winter Storms
- Zoonotic Diseases
- Pandemic Diseases
- Radiological Accidents
- Transportation Accidents
- Terrorism

Every community is at risk
Every animal is at risk
Concerns for Animals and Humans

• **Bioterroris**
  Of hundreds of known pathogens, approximately one half are zoonotic (spread from animal to man) and many, such as Anthrax, can be adapted (weaponized) for bioterrorism.

• Naturally occurring zoonotic diseases Bird flu

• **Agroterrorism**
  Foreign Animal Diseases, such as Foot and Mouth, would be economically devastating if they were introduced into the United States.

• **Disasters**
  Hurricanes, floods, fires
Why are we included?

• The **Human-Animal Bond**:  
  Is a mutually beneficial and dynamic relationship between people and animals that is influenced by behaviors that are essential to the health and well-being of both.

• This includes but is not limited to emotional, psychological and physical interactions of people, animals and the environment.
Why Do We Need to Include Animals?

- The likelihood of household evacuation failure increased approximately 30% for every dog or cat owned.
- More than 80% of persons who returned to the evacuated areas did so to rescue their pet.
- Over 60% of households that attempted to rescue pets thought it was appropriate to risk human lives in the process.
Why Do We Need to Include Animals?

- Therefore, in a disaster where evacuation is necessary, safeguarding the public requires attention to the needs of the evacuees and their pets.
Animal-Related Issues in Disasters

Public Health
• Evacuation failure
• Animal Rescue
• Food Safety
• Hazmat

Animal Health
• Abandonment
• Evacuation failure

Economic
• Rural economies

Environmental
• Farm waste

• Issues vary in their prevalence for pets, livestock and wildlife
• Urban and rural populations have different priorities and needs
What Role do Animals Play in Emergencies?

• Media
  – Human Interest Story
    • Empathy
  – Controversial Issues
    • Environmental Impact

• Public Health
  – Human-Animal Bond
  – Sentinel of Disease

• Economics
  – Agriculture
Why Do We Need to Include Animals?

- The Pets Evacuation and Transportation Standards Act of 2006
  - “The (FEMA) Director shall ensure that such (state and local) plans take into account the needs of individuals with household pets and service animals prior to, during, and following a major disaster or emergency.”
  - Funds programs “for animal emergency preparedness purposes, including the procurement and construction, leasing, or renovating of emergency shelter facilities and materials that will accommodate people with pets and service animals.”
Pets Evacuation and Transportation Standards (PETS) Act of 2006

- Supports development of disaster plans that can accommodate people with pets and service animals.
- Supports development of pet-friendly emergency shelter facilities.
- Allows FEMA to provide assistance for individuals with pets and the animals themselves.
  - Prior to, during and following a major disaster or emergency.
Hurricane Katrina, 2005
One Health - It's all connected

One Health is the integrative effort of multiple disciplines working locally, nationally, and globally to attain optimal health for people, animals, and the environment. Together, the three make up the One Health triad, and the health of each is inextricably connected to the others in the triad. Understanding and addressing the health issues created at this intersection is the foundation for the concept of One Health.
The Veterinarian:
State & Local Public Health

Many High Potential Bioterrorism Agents are Zoonoses

*Bacillus anthracis* (Anthrax)
*Yersinia pestis* (Plague)
*Francisella tularensis* (Tularemia)
*Coxiella burnetti* (Q-fever)
*Brucella sp.* (Brucellosis)
*Pseudomonas mallei* (Glanders)
What is the veterinarian’s role?

• AVMA Code of Ethics, “I solemnly swear to use my scientific knowledge and skills for the benefit of society through the protection of animal health, the relief of animal suffering, the conservation of animal resources, the promotion of public health, and the advancement of medical knowledge.”

• AVMA Copyright © 2007
Veterinarians

- Private practitioners
- Local Health Departments
- Veterinarians
- State Health Departments (State Epidemiologist, State Veterinarian)
- Federal Government (CDC, FDA, NIH, USDA/APHIS, EPA, DOD)
- Armed Forces
- Colleges of Veterinary Medicine
- Colleges of Medicine
- Industry
The Veterinarian: State & Local Emergency Management

- Subject Matter Expertise
- Interdisciplinary Leadership
- Role Model
- Public Service
- Trans-disciplinary Collaboration
- Volunteer Service In Place of Unavailable Government Positions
The Veterinarian: Affiliations in Disaster Response

EXAMPLES:

CAREER
STATE OR LOCAL PUBLIC HEALTH
STATE OR LOCAL EMERGENCY MANAGEMENT
UNIVERSITY
US ARMY, US AIR FORCE
US DEPARTMENT OF AGRICULTURE
US DEPARTMENT OF HOMELAND SECURITY
US PUBLIC HEALTH SERVICE

NON-CAREER
MRC, VMRC
NAHERC
NGO
NVRT
SART
VMAT
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• **Naturally occurring zoonotic diseases** Bird flu

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• **Disasters**
  Hurricanes, floods, fires
• Part of the WHOLE COMMUNITY
• Partners on the Emergency Management Team
• Failure to include animals can derail the best plan
Spring Floods 2006

Topsfield Fair Grounds
Jeff Evaul. www.Boston.com Reader’s photos

Middleton firefighters, state agriculture, and animal rescue league response workers help evacuate Acorn, a 5 yr old pony during spring 2006 floods.

Rescue workers free a horse caught in mud after a storm. www.ext.colostate.edu
EF3 Tornado

- June 1, 2011
- Springfield, Wilbraham, Monson, Sturbridge, Brimfield, (and others)
- 3 dead, hundreds injured and even more
Spring Floods

Topsfield Fair Grounds

Middleton firefighters, state agriculture, and animal rescue league response workers help evacuate Acorn, a 5 yr old pony during spring 2006 floods.

Rescue workers free a horse caught in mud after a storm. www.ext.colostate.edu
Superstorm Sandy

- The second-costliest hurricane/storm in US history, over $68 billion, surpassed only by Katrina
- Largest Atlantic hurricane on record
- All roads and transportation shut
- 300,000 people without power

Animal Photos by The Humane Society (HSUS)
SMART Animal Response Teams:

- Shelter Operations
- Search and Rescue
- Animal Control Officer
- Veterinary Services
- Specialized Species
Lessons Learned

• Preparedness starts at home (personal disaster plan)
  – Goal is to be self sufficient for minimum of first 72 hours
Lessons Learned (cont.)

• Local govt needs to have disaster response plans and systems in place to handle emergencies until state/federal agencies can arrive
  – Logistics
    • Getting first responders and supplies (food, water, medical) in and getting people and animals out if evacuation is necessary
    • Govt and private groups work together
    • Control of spontaneous volunteers
Lessons Learned (cont.)

• Preplanned evacuation sites (human and animal shelters) with necessary equipment and supplies

• Improved communication systems
Our new challenge that shouldn’t be ignored......

- Including animals in emergency management:
  - It’s the law (PETS Act)
  - Human companion-animal bond
  - Every community has animals
  - The new message: “Take your animals with you!”
  - Zoonotic diseases and agriculture bioterrorism
  - FAILURE TO PLAN FOR ANIMALS IS PLANNING TO FAIL
SMART website
www.smartma.org

SMART email
smartmass1@gmail.com
Our purpose is to help keep families together (or to reunite them)!