

5th Annual

# 2007 Medical Reserve Corps National Leadership and Training Conference



## FORGING POWERFUL PARTNERSHIPS



April 17–20, 2007

Providence, Rhode Island





# Medical Reserve Corps National Leadership and Training Conference

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# Human Animal Bond

## Economics of Livestock

### Number of Animals in U.S.

Dogs	> 60 million
Cats	> 70 million
Horses	5 million
Pigs	60 million
Cattle	97 million
Poultry	440 million
Wildlife	> 1 billion



# Veterinarians

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
- 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

# Veterinarians

- One Medicine Concept

Dr. Roger Mahr, President of the AVMA, in an address on July 14, 2006, stated that, “Animal health is truly at a crossroads. Its convergence with human and ecosystem health dictates that the ‘one world, one health, one Medicine’ concept must be embraced.” This concept was first introduced in the 1800s by Physician Sir William Osler of Johns Hopkins University.

# Concerns for Animals and Humans

- **Bioterrorism**

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

# Many Agents are Zoonotic

- Zoonotic means diseases transmitted from animals to humans
- Disease may be seen in animals before humans
- Animals are sentinels
  - Pets
  - Livestock
  - Wildlife



# History

- 1999 – Hurricane Floyd hit N. Carolina
- 3 million pets and livestock died
- Local 1<sup>st</sup> responders and state agencies quickly realized changes needed to be made for future disasters and plans were made to improve
- SART (State Animal Response Team) was born

# History

September 11<sup>th</sup> changed many things

- Worst terrorist attack in U. S. History
- More than 3,000 people presumed dead
- Occurred on American soil
- Increased sense of vulnerability



The Daily Progress / Dan Lopez via AP

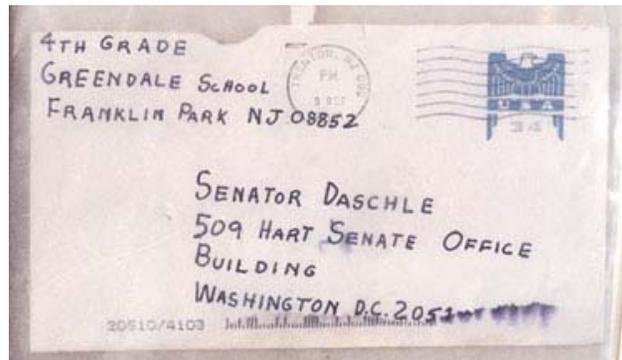


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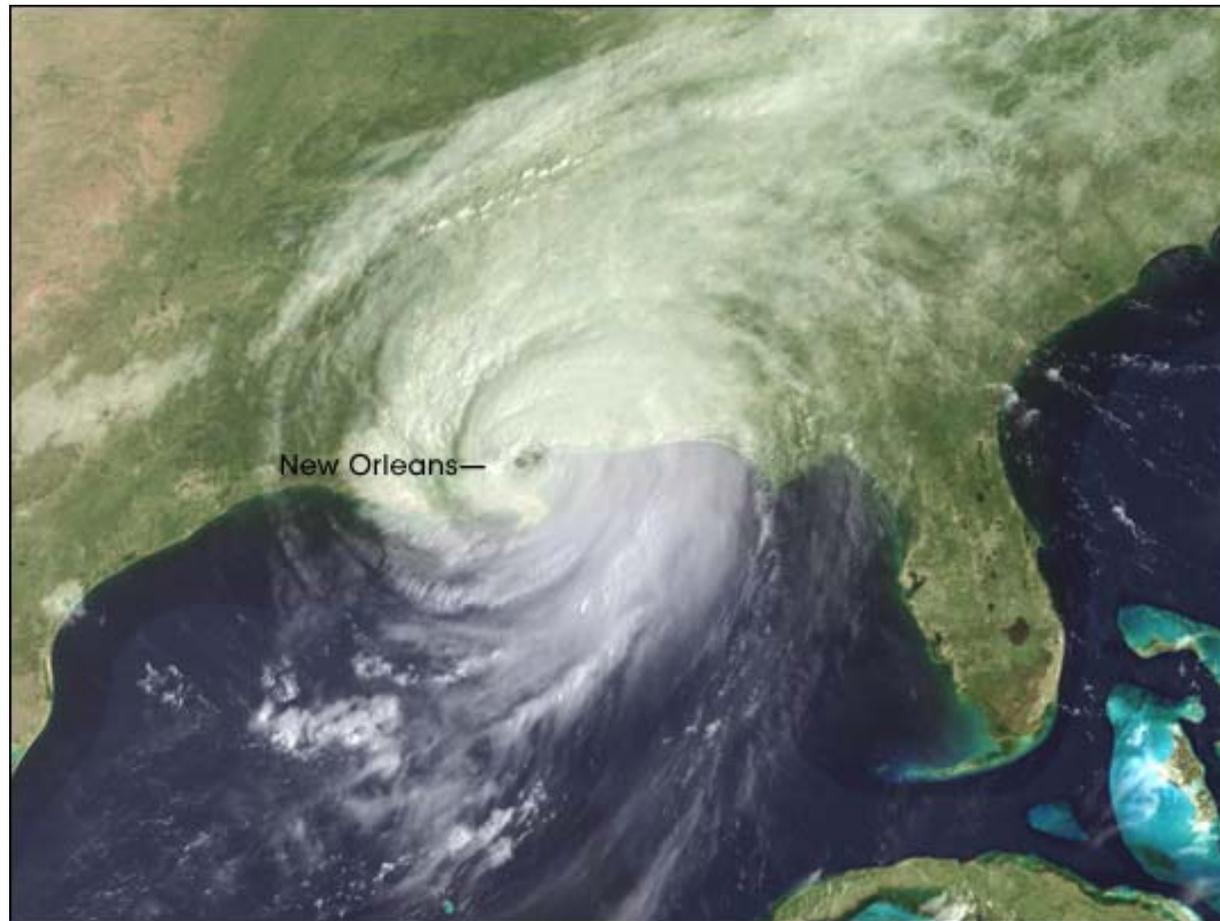


# History

- Bioterrorism attacks of 2001
- Anthrax in postal system
- 22 cases
- 5 deaths
- U.S. public health realm changed forever



# Hurricane Katrina (August 2005)



# Hurricane Rita (September 2005)



# Animal Challenges faced in a Disaster

## Evacuation

- Crates or cages
- Horse trailers/trucks for large animals
- Food and Water
- Medications
- Medical records
- Practice ahead of time!

# Evacuation Order



# Animal Challenges Faced in a Disaster

## Sheltering

- Where to take animals?
- Who is in charge?
- Staffing
- Security
- Animal Waste
- Pet identification
- Abandoned or lost?
- Legal issues
- Euthanasia
- Disposal

# Animal Challenges Faced in a Disaster

- Credentials/licensing
- Donations
  - What is needed?
  - Who is in charge?
  - Inventory and dispersal
    - Quartermaster/banker
- Administration/record keeping
- Spontaneous volunteers

# Animal Sheltering

- Shelter
  - In place (home or ranch) may be an option
- Have plenty of supplies
  - Medications, food, water, etc. for at least 72 Hours

# Animal Sheltering

- Types of temporary shelter (if ordered to evacuate)
  - Large Animal
    - Large animal veterinary facilities
    - Fairgrounds, sale barns or race tracks
  - Small Animal
    - Veterinary hospitals, boarding facilities or animal shelters
  - Large or Small Animal
    - Any vacant building that is structurally sound and hopefully with power and water

# Hurricane Katrina







# Animal Statistics

- Hurricane Katrina killed:
  - 10,000 cattle (\$8 million)
  - 6 million chickens (\$14 million) in Mississippi alone
  - Countless number of pets and horses (priceless to their owners)
- \$3 million worth of milk had to be dumped
- The fishing and shellfish industry lost \$151 million
- 120 Louisiana veterinary hospitals and over 250 veterinarians were affected

# Challenges (Katrina)

- Evacuation of people and animals from New Orleans
- Population of Baton Rouge almost doubled overnight
  - Many people had pets

# Challenges (Katrina)

## Sheltering

- In place not an option, had to evacuate
- Temporary (Red Cross did not accept pets)
  - ICU – LSU Veterinary School expanded ICU and handled triple their normal case load (Ward One)
  - LaMar Dixon
  - LSU AG Center's Parker Coliseum
  - Dixon Correctional Facility – Jackson, LA
  - Pocohontas Correctional Facility – Chesterfield, VA
  - Veterinarians took in what they could

# Challenges (Katrina)

- Pet identification
  - Rescued pets – in many cases shelters didn't know who the pet belonged to
- Who is in charge?
- Spontaneous volunteers
- Waste

# Challenges (Katrina)

- Animal disposal
- Communications
  - No phone service
  - At best only an address was known for pet, but no way to contact owner

# Challenges (Katrina)

- Legal issues
  - Abandoned or lost?
    - Who can adopt or foster pet?
    - Cross state lines?
- Donations
  - What is needed?
  - Who is in charge?
  - Inventory and dispersement

# Parker Coliseum



# Parker Coliseum

## THE CHALLENGE

First 5 days: Accessed over 500 animals

Maximum census (9/11): 1,296 animals

Total animal throughput: > 2,000 animals

©2006, D. Senior

### Maximum Night Census:

Dogs	787
Cats	451
Pigs	1
Rabbits	7
Guinea Pigs	1
Ferrets	6
Hamsters	1
Gerbils	1
Mice	2
Tortoises	9
Birds	30



# Parker Coliseum



# Parker Coliseum



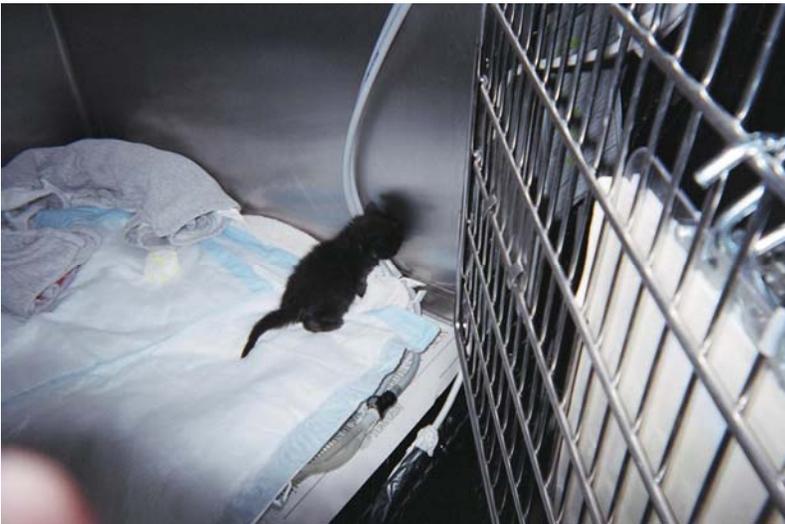
# LSU School of Veterinary Med.



# ICU



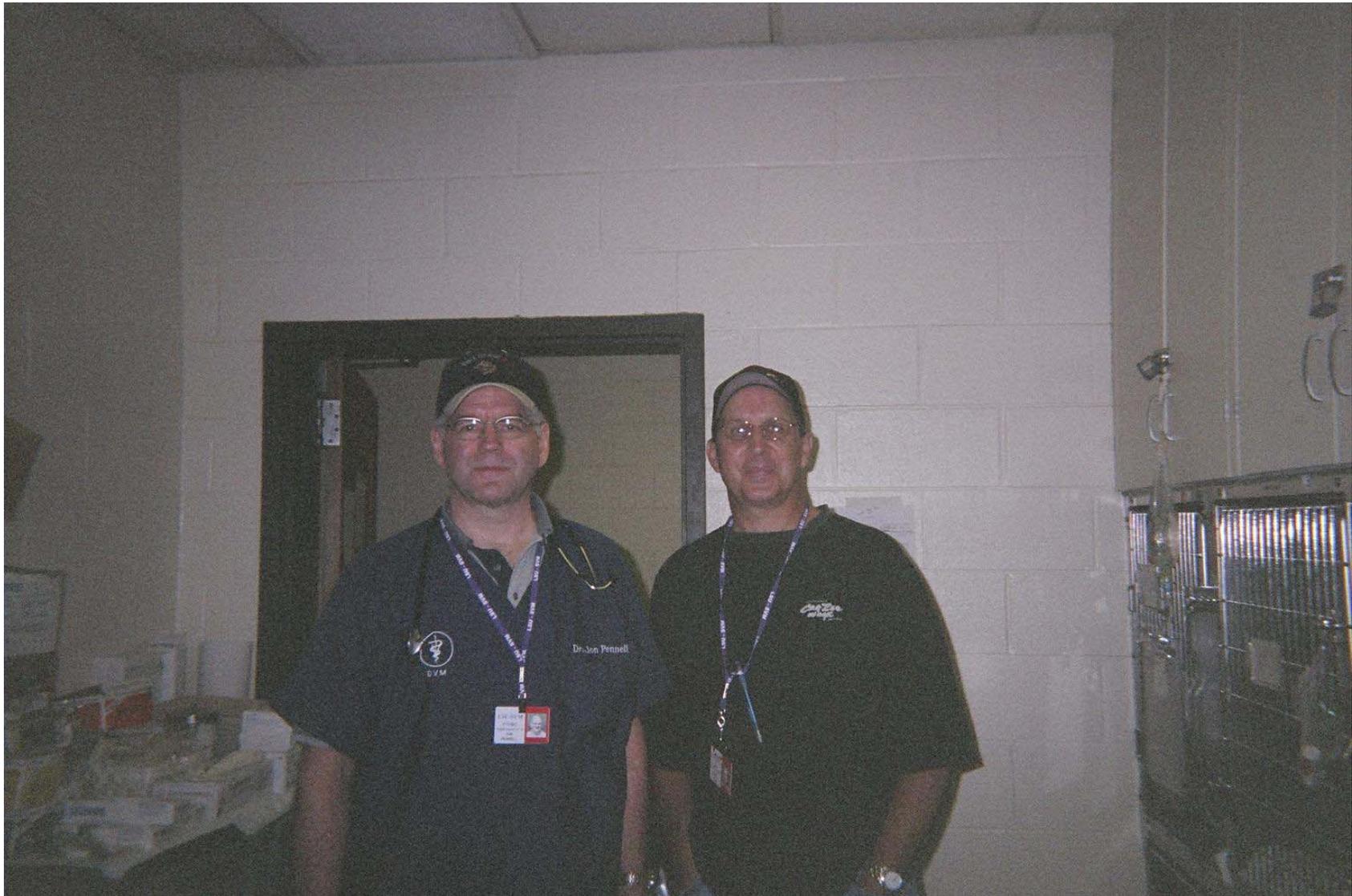
# Ward One



# LSU SVM



# Ward One



# Lamar Dixon

Decontamination



# Dixon Correctional Facility Pocohontas Correctional Facility





# Displaced Squirrel



# Lessons Learned

- Preparedness starts at home (personal disaster plan)
- Local government needs to have disaster response plans and systems in place to handle emergencies until state and federal agencies can arrive
  - Logistics
    - Getting first responders and supplies (food, water, medical) in and getting people and animals out if evacuation is necessary
    - Government and private groups work together
    - Control of spontaneous volunteers

# Lessons Learned

- Preplanned evacuation sites (human and animal shelters) with necessary equipment and supplies
- Improved communication systems
- Personal sacrifice and resiliency of the human spirit are very much alive in our country

# Hurricane Rita (Houston)



# Hurricane Rita Beaumont (Ford Center)



# Beaumont (Ford Center)



# Veterinary Facility Used For Human Surge Hospital

- In preparation for Hurricane Rita, Texas A&M Veterinary School converted their large animal hospital into a human surge hospital
- Ideal because already set up for oxygen, anesthesia gases, suction and had backup power sources
  - Open for 6 days and cared for 260 human patients

# What Could Possibly Happen to Us?

## Disasters: Not in my Community!

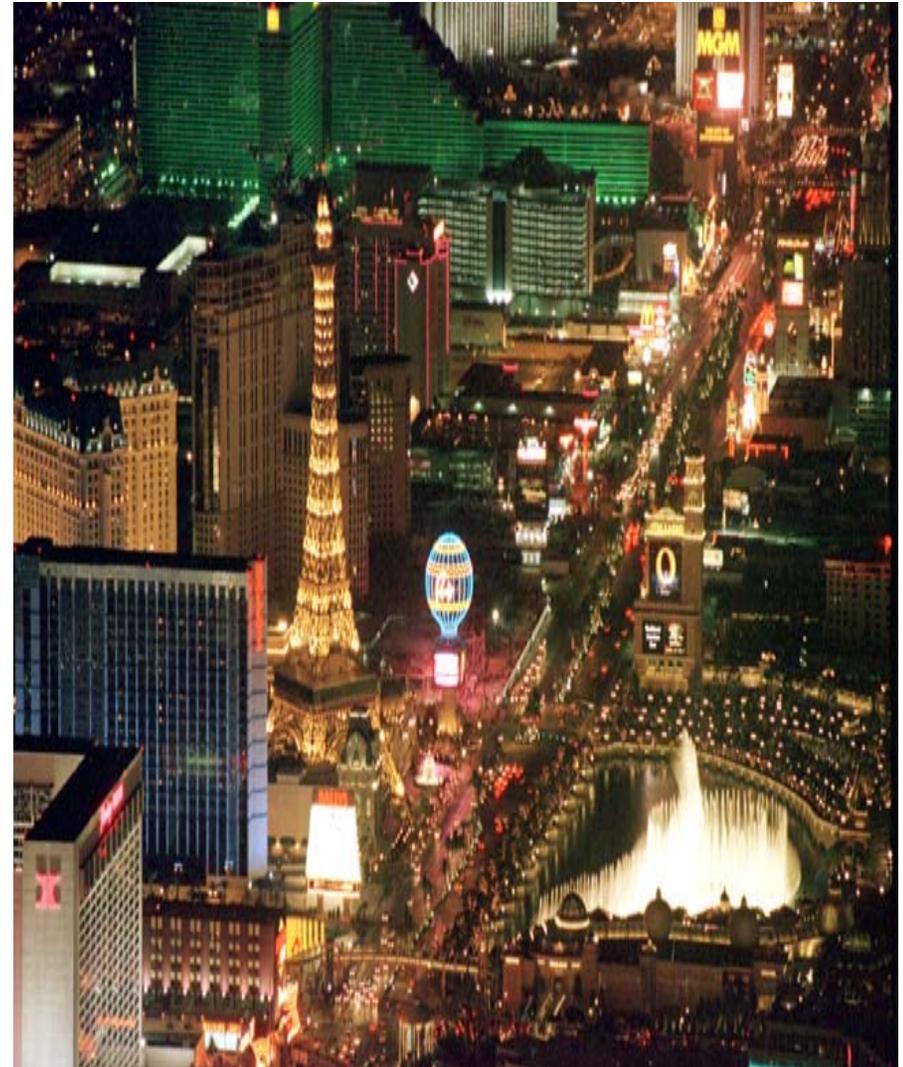
- Fires
- Floods
- Earthquakes
- Power Outages
- Terrorism/Bioterrorism/Agroterrorism
- Haz-Mat Incidents
- Communicable Diseases



# Las Vegas Risk Profile

- International tourist destination
  - Approximately 40 million visitors a year
- Population of over 2 million
- Tightly-clustered high occupancy buildings
- Fast growth
- Nuclear facilities

Center for Food Security and Public Health  
Iowa State University









(AFP PHOTO)

# Preparedness

## Emergency Management Hierarchy

- Local
- County
- State
- Federal

# Preparedness

- Response starts at the local level – you and your family first, then you and your community
- Goal is to be self sufficient for a minimum of 72 hours

# Training

## Operation Rotunda Thunda (July 2005)

- Regional Mobile Emergency Animal Shelter
- NVMA volunteers, Animal Control Agencies and over 70 other federal, state and local agencies



# New Legislation

- **H.R. 3858 Pet Evacuation and Transportation (PETS) Act by Rep. Tom Lantos of California was signed into law by President Bush on October 6, 2006**
  - **The PETS Act requires local and state emergency preparedness authorities to include in their evacuation plans how they will accommodate household pets and service animals in case of a disaster. Local and state authorities must submit these plans in order to qualify for grants from the Federal Emergency Management Agency (FEMA).**

# New Legislation

- Nevada and other states (pending)
- Passed
  - California, Florida, Hawaii, Illinois, Louisiana, Maine, New Hampshire, New Jersey, New York and Vermont

# Veterinary MRC

- Moving forward locally
  - Long term goals
    - Trained volunteers
    - Capability to establish local temporary animal shelters near or in conjunction with human shelters

# Volunteering



# Websites

[www.avma.org/disaster](http://www.avma.org/disaster)

[www.cfsph.iastate.edu](http://www.cfsph.iastate.edu)

[www.redcross.org](http://www.redcross.org)

[www.ready.gov](http://www.ready.gov)

[www.cdc.gov](http://www.cdc.gov)

[www.ncsart.org](http://www.ncsart.org)

[www.lsuemergencyanimalshelter.org](http://www.lsuemergencyanimalshelter.org)

[www.lsuagcenter.com](http://www.lsuagcenter.com)

[www.aphis.usda.gov](http://www.aphis.usda.gov)

[www.usda.gov](http://www.usda.gov)

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