Tactical Field Veterinary Medicine
Part 1. The Role Of Veterinarians and Technicians in Field Disaster Medicine

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Pet Ownership
• 58% of American households have at least one pet
• 75%-99% of pets are considered family members

Human-Animal Bond
The Benefit & the Challenge
• 10% - 25% of animal owners will refuse to evacuate because of their animals
• 20% - 40% of animal owners will leave animals behind in an evacuation
• 50% - 70% of the owners who left animals behind will attempt to rescue those animals

Pet Loss and Separation
• Severe emotional stress
• Emotional depression
• Animals may be primary support
• Studies show suicide rates increase after severe disasters

Food and Economic Issues
• Large economic consequences from animal-related disasters
• Interruption in food supply
• Costs could be billions of dollars
• Economic devastation and loss of jobs both to small operators and large corporations

Media Focus on Pets in Disaster – Human Interest
• Media now focuses on pets in disasters
• Treatment of animals forms the basis of the perceived treatment of people
• Animal issues are public relations issues
• Agencies want to avoid negative press, especially regarding issues with animals
• NO CNN moments!
Veterinary Issues Objectives

- Recognize animal issues that may result from disasters
- Understand the issues between animal disaster issues and public health issues
- Understand the veterinary role in public health during disasters

Veterinary Issues And Objectives In Disasters

- Learn who to contact regarding animal issues during disasters
- Learn about the role of veterinary medical assistance teams
- Importance of economic maintenance
- Biological and chemical decontamination of animals and food sources

Animal Issues in Disasters

- Evacuation failures
- Re-entry attempts to rescue animals
- Livestock evacuation complications
- Lack of adequate exit routes and transportation vehicles
- Relocation and care for animals separated from owners of rescued animals

A Prior Plan and Training is Essential

Public Health Issues

- Water, food and environmental contamination
- Zoonotic diseases
- Dead animal disposal

Local Veterinary Resources

Veterinary hospitals have ready resources

- Antibiotics and fluids
- Surgical supplies, bandages, O₂
- Anesthetic machines and agents
- Laboratory equipment
- Radiology, ultrasound, endoscopy
- Monitoring equipment
Veterinary Resources in Disasters

- Local infrastructure
- County Animal Response Team
- CO Veterinary Medical Reserve Corps
- National Veterinary Response Team (DHHS)
- Veterinary Medical Assistance Team (AVMA)

NVRT Deployment

- We need to be Prepared & Committed
- Local Veterinary Infrastructure Overwhelmed
- State submits request for federal assistance
- Request reviewed by DHHS and USPHS
- NVRT activated and deployed under direction of the NDMS

VMAT Activations

- Examples of VMAT deployments:
  - Hurricane Andrew
  - Hurricane Floyd
  - Alaskan Airlines crash, Point Magoo
  - Democratic National Convention
  - Inauguration
  - State of the Union Address
  - International Winter Special Olympics
  - World Trade Center/Pentagon – September 11, 2001
  - Salt Lake City 2002 Olympics
  - Houston Floods, 2000
  - National Agricultural Disaster – APHIS Avian Influenza
  - VA, NC 2002
  - Various national security trainings

VMAT Deployments 01

- 1/20 Presidential Inauguration
- 2/2 State of the Union Address
- 3/1-3/11 Special Olympics
- 4/3-4/6 Salt Lake City (Olympic plan)
- 5/3-5/4 FMD Contingency Plan
- 6/11-6/15 TS Allison: MST Houston, TX
- 9/11-10/7 New York City (50 members)
- 10/6 – 10/31 VMAT rep on MST in NYC
- 9/11-9/13 Washington D.C., MST
- 9/20-9/25 Somerset Co., Pennsylvania

VMAT in NYC

- Direct FEMA request
- VMAT to provide medical care for US&R dogs
- 48 FEMA dogs on site at any one time
- 300+ total dogs on site at any one time
- Treated 936 medical cases
- Worked with local veterinarians and humane organizations
Our K-9 Friends Were Anxious To See VMAT At The End Of Their Shift!

VMAT 2005

Hurricane Katrina
Hurricane Rita

Dogs Being Treated in the Field

Dogs Arriving for Triage – Back of Trailer
Veterinary Hospital Assessments – Post Katrina

VMAT Deployments 02
- 1/29 State of the Union Address
- 2/3-2/28 Winter Olympics
- 4/15 Rally in Washington DC
- 4/23-8/3 Low Path AI outbreak, VA
- 7/1-7/12 Arizona Wildfires
- 7/4 Fourth of July in DC
- 10/3 Hurricane Lili

VMAT Field Hospital – Gozaes, LA

NVRT Composition
- Safety Officer
- NVRT Commander
- NVRT Deputy Commander
- Operations Chief
- Logistics Chief
- Admin-Finance Chief
- Veterinary Medical Officer
- Logistics Specialist
- Medical Records Specialist
- Animal Health Technician

HEART will need to be ORGANIZED

NVRTMission
- Assess and evaluate the needs of the veterinary infrastructure and provide support in all fields of veterinary medicine

NVRT Responsibilities
- Provide veterinary medical care
- Address public health issues
- Assist the local veterinary infrastructure until operations can resume
- Assist national security and terrorism issues
- Support state and federal agricultural agencies in emergencies
NVRT Characteristics
- Deployable in 24 hrs
- Self-sufficient for 72 hours
- Field hospital capabilities
- Creative veterinary medicine
- National security clearance
- Vaccination requirements

Training Experience
- Biological and chemical warfare and decontamination
- Train with US Army Veterinary Corp / SMART-V Team / Special Forces
- Meet rigid training requirements of HHS/USPHS/NDMS

Veterinarians Play a Role In Modern Terrorism

Veterinarians' Role in Terrorism
- Care of sentry, detection, and security dogs
- Detection of chem/bio-terrorism agents
- Protection and inspection of food supplies
- Management support team members
- National disaster medical system (NDMS) teams
  - Surveillance
  - Monitoring
- Care of private animals in time of disasters
- Support USDA and state agriculture agencies

Challenges of Providing Care for Working Dogs
- Multiple agencies
- Multiple uses
- Varying temperaments of dogs
- Psychology of handlers
- No previous experiences
- Linking NVRTs with NDMS task forces
Working Dogs

- Public exposed to something publicly not discussed – cadaver dogs
- Large pool of dogs to be developed – adding as many as 16,000 dogs

Conclusions

- Disasters are always complex and generally involve animals
- Veterinarians bring a wide range of expertise and experiences - “another perspective to the planning table”

Working Dogs

- Many venues to be protected
- Many handlers needed for dogs
- Addition of breeds previously not used as working dogs

Conclusions

- Disasters usually result in integrated human and animal issues
- Human and veterinary responders must work together to provide a more complete disaster response and recovery
- DHHS recognizes the important of response veterinarians and now includes them in the MST of all major disasters

- Local Teams are a MUST

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