

PROJECTS IN VETERINARY DISASTER MEDICINE

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BACKGROUND

Disaster medicine for animals has recently been recognized as an important aspect of the veterinary profession. An organized program in this area offers the profession an opportunity to demonstrate its intention and competency as stewards of animal care. In Indiana examples of committed and collaborative efforts to show leadership toward this aspect of the Human-Animal Bond have been many. These include the consultation on the sea otter rescue operations after the Exxon Valdez oil spill, care of horses after Hurricane Andrew, feed supplies to drought, flood and fire affected areas of the nation, and the development of a state emergency preparedness plan for animals. Much of this has been possible because of common interests and sharing of ideas on veterinary disaster medicine through groups such as Purdue's Center for Human Animal Interaction, a "get the job done" approach of Hoosiers when it comes to providing help during and after disasters, the proactive attitudes of the state Emergency Management Agency, Indiana Veterinary Medical Association and American Veterinary Academy on Disaster Medicine and extensive support by the citizens of Indiana.

The potential benefits from taking a leading role in veterinary disaster medicine are tremendous. They include national and international recognition, and most of all advancements in veterinary disaster medicine will provide a basis for improved care and well being of animals in our state and nation.

PROPOSAL

There have been a considerable number of delays in getting a program in veterinary disaster medicine off the ground. Slowing progress has been the lack of time that interested people have been able to allocate to this very important mission. At universities funding of coordinated and focused programs would make a substantial contribution to overcome this concern. This could be achieved by sponsoring faculty time.

There is also uncertainty over the length of time for which a commitment will be available to build programs in veterinary disaster medicine. Without at least a three year commitment, any effort runs the risk of remaining no more than a temporary interest in a topical area. To develop a program to a state of self perpetuation takes about a 3 year commitment.

Purdue University School of Veterinary Medicine has the expertise and physical resources to take a leadership role in the area of veterinary disaster medicine through spear heading programs, and by consulting and coordinating related efforts. With the appropriate financial support the school is also prepared to make a substantial commitment to this field.

In the following a number of projects in veterinary disaster medicine are described. The completion of these programs could form the basis of a self supporting program.

Short term projects that provide immediate credence to a school program in disaster medicine include

- Advising the State Emergency Management Agency on Disaster Preparedness Plans for Animals
- Health Care Programs for Search and Rescue Dogs

Intermediate term projects that ensure the persistence of interest and expertise in disaster medicine for animals at Purdue include

- Development of a curriculum for veterinary health professionals in disaster medicine
- Formation of a student chapter of the American Veterinary Academy on Disaster Medicine, and
- Exercise drills involving all potential responders that could help animals

Long term projects that develop scientific data on the needs of animals and their care takers before, during and after disasters. This could be achieved through, e.g.,

- Field studies that compile information on animals that were injured or died during disasters, surveys that identify risk factors of injury and death of animals; studies that characterize owner concerns for animals during disasters.

CURRICULUM FOR VETERINARY HEALTH PROFESSIONALS IN DISASTER PREPAREDNESS

Potential persons involved

Consortium on the Model Disaster Response for Animals (Drs. Sebastian Heath, Jack Casper, Bob Linnabary, Dick Dorn, Kerri Marshal), others may join at a later stage

Projects:

1. Develop 12 -15 module curriculum on disaster management for veterinary health professionals
2. Seek recognition of this course from the Federal Emergency Management Agency, American Veterinary Medical Association and American Animals Hospital Association
3. Disseminate curriculum nationally amongst veterinary health professionals as continuing education program
4. Recruit veterinarians and veterinary technicians as potential Veterinary Medical Assistance Team members for response under the AVMA Disaster Response Guide

Schedule

Projects 1-3 can start immediately: 1994. Plan to complete the bulk of the work within a year

Project 4 would be a spin off from this program and is recognized as one of the reasons why AAHA and AVMA already support this initiative. There is also the potential to integrate this course into the national program of the Public Safety Training Institute.

Resources needed

A small grant has been received for this from American Animal Hospital Association for travel and some development costs. The AVMA Executive Board has also endorsed this Consortium. However, funding is also needed to cover the salary of Dr. Sebastian Heath.

INDIANA STATE DISASTER PREPAREDNESS PLAN FOR ANIMALS (Animal Care Annex)

Persons and agencies involved

Drs. Sebastian Heath (Purdue), Bob Gillespie, John Schnarr, Theresa Luley (Indiana Veterinary Medical Association), Michael Kopp (Indiana Board of Animal Health), RO Stanley, Dave Barrabee (State Emergency Management Agency), Max Champion (Indiana Animal Control), Rose Baker (Indianapolis Zoo), Peggy Swain (Indiana Veterinary Technician Association), Charles Sinclair (Indiana State Board of Health), Doug Pond (Commission of Agriculture), Dave Petritz (Cooperative Extension Service)

Projects:

1. Advise Indiana State Emergency Management Agency on needs of animals and their care takers before, during and after emergencies.
2. Consult on contents and practicality of an Animal Care Annex to the State Emergency Preparedness plan
3. Help with the organization of potential responder groups
4. Develop informational materials for owners and care takers of animals in Indiana

Schedule

Projects were started in 1993. Anticipated progress: completion of state plan: 1994; organization of responder groups: 1995; first full scale exercise: 1996.

Resources needed

State Plan: largest expense will be the production and distribution of informational material for animal care takers. Expenses will be associated with medical illustrator salary, production materials, printing, distributing, office expenses, travel and phone calls.

CONFERENCE ON THE STUDY OF ANIMALS AND THEIR CARE TAKERS IN DISASTERS

Currently there are only very limited factual data available that can be used to make valid recommendations on how owners and care takers of animals should prepare themselves before and behave in response to disasters. In the human field information is gathered following major disasters to identify risk factors of injury and death, so that recommendations on how to avoid these in future can be made. This information is urgently needed for animals, and the generation of this might prove to be one of the most fruitful areas of research in the field of disaster medicine for animals.

Potential persons and agencies involved

Center for Human Animal Interaction, Department of Veterinary Pathobiology (Epidemiology), persons with practical experience, American Veterinary Academy on Disaster Medicine, Armed Forces Institute of Pathologists, Center for Disease Control, Red Cross

Projects:

1. Stage conference of 12 - 15 experts in disaster medicine to define informational needs on animals and their care takers before, during and after disasters
2. As outcome of the conference develop survey instruments to gather factual information on animals and owners before, during and after disasters that allows a rational basis for recommending preventive measures
3. Use survey instruments in disaster situations
4. Develop data supported guidelines for minimization of suffering of animals and their owners
5. Publish findings and use this information to establish safety guidelines for animal husbandry systems.

Resources needed

Budget would cover meeting costs, travel and accomodation of participants, proceedings and development of survey instruments.

Individual studies should be funded independently of the conference as these require individual proposals.

Schedule

Projects 1 and 2 could be completed this year.

Projects 3-5 start 1994.

STUDENT CHAPTER OF THE AMERICAN VETERINARY ACADEMY ON DISASTER MEDICINE

Involvement of students in disaster medicine for animals has been met with enthusiasm. The support for Purdue students to go to Florida to take care of injured horses after Hurricane Andrew was seen as a tremendous learning experience by both the students and the public. Meetings to discuss disaster response and care of animals are often well attended by students. Preliminary contacts with "Intervet", the student magazine of the AVMA, have indicated that they would appreciate reports on student involvement with responses to disasters. Currently there is eagerness at at least three veterinary schools in the United States to establish this group.

Potential people involved

Drs. Sebastian Heath (Purdue University), Dick Mannsman (North Carolina State University), Robert Linnabary (University of Tennessee), others at Pennsylvania State University, University of California, Davis.

Projects:

1. Start student oriented interest group in disaster medicine for animals by inviting speakers once a month in the evenings
2. Encourage active involvement in the discussions surrounding the development of the curriculum on disaster medicine for animals.
3. Organize field trips for students to gain first hand experience in issues related to disaster medicine, such as to flood control centers, Emergency Operations Centers, training exercises
4. Establish a data base for students to access and find out about disasters involving animals and how they are dealt with
5. Encourage permanency of this group by establishing a student chapter of the AVADM

Resources needed

Costs for this project would be to invite speakers, allow student participation in field trips, scholarships for students to attend the AVADM annual meeting, and subscription to an international data base on disaster medicine.

Schedule

Start immediately by advertising and submitting articles to Intervet, the student veterinary medical journal, and by providing updates on the progress of all of these programs. By the end of three years (1997) the responsibility for this program would be delegated to a national body of veterinary students.

HEALTH CARE PROGRAM FOR SEARCH AND RESCUE DOGS

Search and Rescue Dogs are an integral part of the response to disasters. They have saved many human lives. Currently there are no guidelines for the health care for dogs in training nor for first aid of working dogs. Many of these needs could be developed at Purdue, partly because we have the expertise, but also because the national training center for Search and Rescue Dogs is at Camp Attebury, Indiana, about two hours drive from Purdue.

Potential persons and agencies involved

Small Animal Surgery clinicians, ophthalmology clinicians, Medical Illustration, Federal Emergency Management Agency, National Association for Search and Rescue, Indiana State Emergency management, American Veterinary Academy on Disaster Medicine

Projects:

1. First Aid Handbook for Search and Rescue Dogs in action
2. Guidelines for preventive health care and disease screening procedures for qualified Search and Rescue dogs. (e.g., frequency of veterinary health checks, dewormings, vaccinations, health certificates for interstate and international movement)
3. Guidelines to determine physical and behavioral suitability of puppies and growing dogs to be used for Search and Rescue. (e.g., detection of hip dysplasia, eye defects, suitable attitude)
4. Research in exercise physiology to determine ideal physical and behavioral training schedules to maintain dogs in optimal working condition.

Schedule

Projects 1 and 2 could be completed by July 1995.

Project 3 could be developed in cooperation with the Federal Emergency Management Agency and the Camp Attebury, IN, search and rescue training facilities.

Resources needed

Largest expense would be for salary of medical illustrator and materials to prepare the first edition.

The goal for project 3 would be for the program to become self supporting. These dogs need care and there should (will) be money to pay for it - probably by their owners.

EXERCISE DRILLS

Exercise drills are an important component of the development and maintenance of disaster plans. They are the occasion when the effectiveness of a plan can be tested. They are also important opportunities for the different responder groups to practice team work.

Potential agencies involved

Armed Forces Institute of Pathologists, Animal and Plant Health Inspection Service, Federal Emergency Management Agency, Department of Defense, State Emergency Management, Indiana State Plan Participants, Purdue University School of Veterinary Medicine.

Projects

1. Stage full scale exercise of response to major disaster with specific emphasis on care of animals

Schedule

Conduct exercise once Indiana state plan is in place and participating groups are organized: 1996.

Resources needed

Salary time for Dr. Sebastian Heath to propose to and coordinate the input of Federal Emergency Management Agency, US Department of Defense and the Indiana State Emergency Management Agency.