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## Putting a Plan in Place

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# PUTTING A PLAN IN PLACE

Dr. Lisa Murphy's expertise is called on to help animals while protecting people in Japan

BY SALLY SILVERMAN



On April 29, six weeks after the Fukushima Daiichi nuclear power plant began leaking radiation following the devastating earthquake and tsunami in Japan, Lisa Murphy, VMD traveled to the country to assist in relief efforts.

Dr. Murphy, an assistant professor at Penn Vet, was part of a team dispatched by the International Fund for Animal Welfare (IFAW)

at the invitation of the Fukushima Prefecture Department of the Environment. The goal was to assist rescue groups, veterinary associations and government agencies to determine the best way to cope with animals affected. Part of the group addressed agricultural livestock, another subgroup dealt with wildlife and Dr. Murphy's team focused on companion animals.

While the Japanese are devoted to their pets, and companion animals are living in homes in increasing numbers, there was no plan for their care when disaster struck. In addition, there was little understanding of the effects of radiation. While displaced residents longed to be reunited with their pets, concerns about whether the animals were contaminated, and how that could impact their owners, were very real.

## PLANNING FOR DISASTER

Dr. Murphy was involved in the care of animals after Hurricane Katrina, as well as in the medical treatment of search and rescue dogs following 9/11. Since 1993 she has been a member of the American Veterinary Medical Association's (AVMA) Veterinary Medical Assistance Team (VMAT).

"During a disaster or emergency we can be called upon to do pretty much anything a veterinarian's qualified to do and that's how we've been trained," said Dr. Murphy.

It's that training that made Dr. Murphy a go-to expert to respond to the disaster in Japan.

Research has shown that up to 30 percent of evacuees attempt to re-enter a disaster zone to rescue pets. It was known that rogue rescue groups in Japan were entering restricted zones without protection, exposing themselves and others to chemical, biological and radioactive contaminants. This was a human health and safety issue as well as an animal welfare issue.

"You can't see radiation, or smell it or taste it," said Dr. Murphy. "With people, you can remove 90 percent of external radioactive contamination by removing clothing. You can't do that with dogs and cats."

Dr. Murphy co-chairs the National Alliance of State Animal and Agricultural Emergency Programs (NASAAEP) best practices working group responsible for developing guidelines for animal decontamination. Deciding on the team to travel to Japan, Dick

Green, EdD, emergency relief manager-disasters for IFAW, said that radiation expertise was key.

"In most of our responses," he explained, "we don't have a vet with us but have access to a veterinarian, back at the receiving end, who can triage an animal."

He emphasizes the importance of having a planning committee comprised of people with the knowledge and experience on the impact of radiation on humans and animals.

"This is huge from an animal welfare standpoint," said Green, "and huge as far as the potential impact on all species."

## CREATING GUIDELINES FOR THE JAPANESE GOVERNMENT

Dr. Murphy and her team made recommendations for the rescue, decontamination, transport and housing of pets with the goal to keep people and animals together. The initial evaluation and decontamination process would be conducted in the warm zone, the region where animals were exposed to radiation, but at potentially tolerable levels, by teams with proper personal protective equipment. The area would also serve as a sheltering location.

A cutoff of 100,000 counts per minute, a measurement of radiation determined by a Geiger-counter-like instrument, was set for livestock. For pets, the cutoff was 10,000 counts per minute as an added margin of safety. If an animal, after two baths, still registered higher, it was likely internally contaminated by self-grooming or by eating or drinking contaminated food or water. These animals were at risk for systemic damage, and could spread radiation through feces and urine; they were reevaluated on a 10-day cycle.

As a result of the summit, the Japanese government launched an operation to remove abandoned animals from inside the evacuation zone in Fukushima Prefecture. A "Temporary Coming Home Project" was created, allowing residents to return to the evacuation zone to locate their pets for removal by authorized personnel. Officials have reportedly allowed evacuees to bring pets out of the danger zone to live with their people in temporary housing.



Above images courtesy of IFAW