Shortly before Christmas last year, multiple strains of highly pathogenic avian influenza were discovered on the West Coast, and the United States Department of Agriculture (USDA) asked the Association of Zoos and Aquariums (AZA) to help spread word of the outbreak. Steve Olson, AZA vice president of federal relations, had a staffer email Association members in the region.
While the response was “amazing” according to Dr. Jeleen Briscoe, USDA’s avian specialist, Olson knew the notifications could have been delivered more effectively.

“Two days later, I’m getting calls from vets at some of those (West Coast) institutions saying, ‘we never heard about this,’” Olson said. Emails had gone to a few officials who were away for the holidays.

To assure that notifications get through in the future, the Association is compiling a directory of at least three contacts at each AZA member facility. It’s one of the first projects of the Zoo and Aquarium All Hazards Preparedness Response and Recovery Fusion Center (or ZAAHP Fusion Center), which AZA is developing with the USDA’s support.

As its name implies, the Center will help zoos and aquariums identify and protect against threats and to recover when disaster does strike. Eventually, the Center plans to reach out to all managed wildlife facilities in the U.S. and to the broader communities where those institutions are located.

Interest in preparedness heightened after the 2005 hurricane season, during which Hurricane Katrina closed Audubon Nature Institute facilities in New Orleans, La., and Hurricane Wilma closed zoos in Florida, Olson said. “USDA was concerned that not all of its licensed exhibitors have adequate contingency plans.”

In 2008, USDA proposed to require that its 2,800 licensed exhibitors develop plans for emergencies. The Department then began working with AZA and Lincoln Park Zoo’s Animal Health Network to create guidelines, in addition to seeking input from individual zoos and aquariums, other government agencies and educational institutions. Last year, USDA approved a grant for AZA to consolidate the efforts in the Fusion Center because “they had been working with us since 2008 and have a history of successful federal partnerships,” Briscoe said.

“The Center can look to programs already operating in various agricultural industries. But the Center must also develop plans to address zoos’ and aquariums’ unique circumstances for guidance,” Briscoe said.

“We found that zoos play many roles in society – conservation, education, science,” she said. “They’re cultural icons. They have a pretty big economic impact on their communities. They have unique facilities and unique emergency management needs.” Compared with most agricultural operations, she noted, zoos and aquariums have “animals that cannot be replaced, that can’t have monetary values placed on them and that may be endangered species.”
In addition to compiling the emergency notification directory, the Center's initial work includes conducting a "gap analysis" to assess members' current state of preparedness, creating a "Secure Zoo" prototype of best practices for continuing or resuming operations in or after an emergency and developing and offering training programs.

At most facilities, the notification list will at a minimum include the director, the chief veterinarian or contract veterinarian and a public-relations professional, Center Program Manager Yvonne Nadler said. Notifying the PR office is important because "missing information, rumor and innuendo often are some of the biggest problems you have in managing an emergency," she said.

To do the gap analysis, the Center is interviewing directors at approximately 20 AZA-accredited institutions that represent facilities of all sizes, including some that have experienced disasters and some that have not. "A lot of our members have mechanisms in place" for responding

“While the response was ‘amazing’ according to Dr. Jeleen Briscoe, USDA’s avian specialist, Olson knew the notifications could have been delivered more effectively.”
to crises, Olson said. Others “say we’re thinking about that but we haven’t operationalized it yet.”

The analysis – which Nadler hopes to complete by mid-summer – will inform the Center’s strategic plan, set to be in place early next year.

In building the Secure Zoo prototype, the Center is studying existing “Secure” programs in the meat, dairy and egg industries, Nadler said. But there are key differences in these programs.

Government officials’ response to a disease outbreak in agriculture can be destruction of a facility’s livestock, Nadler said, but that is “not an acceptable answer” at a zoo or aquarium.

“We understand that they are concerned about the spread of disease outside the zoo or moving from a nearby farm into the zoo,” she said. “But we have to be able to say, ‘here are the things we can do that allow us to maintain our collections. We can isolate our animals. We have excellent veterinary care. ‘Th e Center has convened meetings with state animal health officials, zoo and aquarium representatives and people from the pork and milk industries, who have dealt with disease outbreaks, Olson said. Among the “go-to people,” Nadler said, is Larry Rivarde Sr., executive vice president and managing director of the Audubon Nature Institute’s Zoo and Park in New Orleans, which Hurricane Katrina closed for three months.

A facility must identify the employees who will work through an emergency; plan how to protect, support and communicate with them; and be able to send in relief workers if a situation drags on, Rivarde said. Adequate insurance is essential, including insurance for income lost when a facility closes, he said. The Fusion Center should provide information on such topics as how to obtain federal disaster assistance and alternative communication methods when lines are down.

Some of the Center’s work will ramp up services that AZA already provides, such as offering best-practices information online and conducting training programs. The Center’s training and information activities are likely to address a wide range of topics, including emergency management, crisis communication, managing emergency volunteers and working with emergency response agencies such as police and fire departments. They also will address many types of incidents, such as floods, fires, tornados, hurricanes, other storms, earthquakes, animal escapes and foreign animal disease outbreaks.

Some topics would affect just a small number of facilities. “You may be near a railway system and have a rail car emitting noxious gases or spilling oil,” for instance, Olson said. “What happens if you have a couple of thousand people in your zoo at that time?”

Other needs will be discovered as time goes on. During the Deep Water Horizon oil spill in the Gulf of Mexico, for example, some AZA members wanted to help clean animals that had been contaminated with oil, Nadler said. Unfortunately, while the zoo and aquarium personnel were experts at handling animals, most didn’t have the education needed for that circumstance, which included hazardous materials training, she said.

Nadler, who is based in Chicago, Ill., currently is the Center’s only full-time employee. Olson devotes part of his time to the project, and the Center has a part-time worker at AZA headquarters in Silver Spring, Md. The USDA supports the Center financially and with expertise. Nadler hopes the Center eventually will be self-sustaining and can have at least one employee who can travel to facilities that need expert advice during a crisis.

Nadler already spends significant time connecting with community organizations – such as police, fire and medical agencies – that would respond to certain types of emergencies at zoos and aquariums.

“We want to be a resource to those managers who may not have worked with their local (managed wildlife) facilities but may be called in” during a crisis, she said. “We don’t want people exchanging business cards for the first time or explaining

“Interest in preparedness heightened after the 2005 hurricane season, during which Hurricane Katrina closed Audubon Nature Institute facilities in New Orleans, La., and Hurricane Wilma closed zoos in Florida ...”
the facilities emergency protocols at the beginning of an incident.”

Many AZA-accredited facilities do conduct drills with first responders, she said, mentioning one zoo’s public relations director, who trains with emergency personnel and found the knowledge gained there to have been extremely valuable when her institution faced a crisis.

“We want to have a seat at the table when decisions are made regarding our facilities,” Nadler said, “and the best way to do that is to speak the common language of emergency management.”

The large number of agencies that could respond to a zoo or aquarium crisis was demonstrated at a table-top exercise that simulated response to a crisis at Omaha’s Henry Doorly Zoo in Omaha, Neb., Briscoe said. “They had more than 90 people there,” she said, listing zoo personnel, public health officials, police, the fire chief, the FBI and various other local, state and federal officials.

The Center may prove most valuable to facilities with fewer resources, Olson said. But Rivarde said it “can serve probably as a think-tank for most people to tap into. It’s a never-ending learning curve. There’s always something that you can learn from someone else.”

Tom Price is a writer based in Washington, D.C.