



Internet Functional Exercise

After-Action Report

September 2015

The After-Action Report/Improvement Plan (AAR/IP) aligns exercise objectives with preparedness doctrine to include the National Preparedness Goal and related frameworks and guidance. Exercise information required for preparedness reporting and trend analysis is included; users are encouraged to add additional sections as needed to support their own organizational needs.



EXERCISE OVERVIEW

Exercise Name	Zoo Ready 15 Functional Exercise
Exercise Dates	07/13-15/2015
Scope	This exercise was an internet based functional exercise, conducted on 07/13-15/2015. Exercise play was limited to pre-selected zoological institutions and partner regulatory agencies.
Mission Area(s)	Response & Recovery
Core Capabilities	Operational Coordination Operational Communication On-Scene Security & Protection Situational Assessment
Objectives	Demonstrate the facility's ability to prepare for natural hazards Demonstrate the communication system within their facility Demonstrate the facility's ability to communicate with first responders Demonstrate the facility's ability to work with the Incident Command System (ICS). Demonstrate the ability for facility personnel to work with established Emergency Operation Plans for their facility. Demonstrate the facility's ability to deal with long term consequences after a disaster.
Threat or Hazard	Natural Hazard (Tornado)
Scenario	A scenario was developed that required participating zoological parks and

	partner regulatory agencies to simulate response to a tornado.
Sponsor	University of Illinois, College of Veterinary Medicine, Center for One Health Illinois
Participating Organizations	Invited zoological institutions and partner regulatory agencies.
Point of Contact	Exercise Director: Yvette Johnson Walker DVM, MS, PhD: Clinical Epidemiologist, University of Illinois College of Veterinary Medicine, Center for One Health Illinois. University of IL at Urbana-Champaign 1008 West Hazelwood Drive M/C 004 - 227 LAC Urbana, Illinois, 61802 217-333-1903 yjjohn38@illinois.edu

ANALYSIS OF CORE CAPABILITIES

Aligning exercise objectives and core capabilities provides a consistent taxonomy for evaluation that transcends individual exercises to support preparedness reporting and trend analysis. Table 1 includes the exercise objectives, aligned core capabilities, and performance ratings for each core capability as observed during the exercise and determined by the evaluation team.

Objective	Core Capability	Performed without Challenges (P)	Performed with Some Challenges (S)	Performed with Major Challenges (M)	Unable to be Performed (U)
Demonstrate the facility's ability to prepare for natural hazards	Situational Assessment		(S)		
Demonstrate the communication system within their facility	Operational Communications		(S)		
Demonstrate the facility's ability to communicate with first responders	Operational Coordination		(S)		
Demonstrate the facility's ability to work with the Incident Command System (ICS).	On-Scene Security & Protection		(S)		
Demonstrate the ability for facility personnel to work with established Emergency Operation Plans for their facility.	Operational Coordination, Situational Assessment	(P)			
Demonstrate the facility's ability to deal with long term consequences after a disaster.	Operational Coordination, On-Scene Security & Protection		(S)		

Objective	Core Capability	Performed without Challenges (P)	Performed with Some Challenges (S)	Performed with Major Challenges (M)	Unable to be Performed (U)
<p>Ratings Definitions:</p> <ul style="list-style-type: none"> • Performed without Challenges (P): The targets and critical tasks associated with the core capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. Performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws. • Performed with Some Challenges (S): The targets and critical tasks associated with the core capability were completed in a manner that achieved the objective(s) and did not negatively impact the performance of other activities. Performance of this activity did not contribute to additional health and/or safety risks for the public or for emergency workers, and it was conducted in accordance with applicable plans, policies, procedures, regulations, and laws. However, opportunities to enhance effectiveness and/or efficiency were identified. • Performed with Major Challenges (M): The targets and critical tasks associated with the core capability were completed in a manner that achieved the objective(s), but some or all of the following were observed: demonstrated performance had a negative impact on the performance of other activities; contributed to additional health and/or safety risks for the public or for emergency workers; and/or was not conducted in accordance with applicable plans, policies, procedures, regulations, and laws. • Unable to be Performed (U): The targets and critical tasks associated with the core capability were not performed in a manner that achieved the objective(s). 					

Table 1. Summary of Core Capability Performance

The following sections provide an overview of the performance related to each exercise objective and associated core capability, highlighting strengths and areas for improvement.

Exercise Objective 1:

Demonstrate the facility's ability to prepare for natural hazards

Situational Assessment (*Provide all decision makers with decision-relevant information regarding the nature and extent of the hazard, any cascading effects, and the status of the response.*)

The strengths and areas for improvement for each core capability aligned to this objective are described in this section.

Organizational Capability Target 1: The institution has incorporated Incident Command into their emergency response including the Disaster Intelligence and Damage Assessment component.

Strengths

The partial capability level can be attributed to the following strengths:

Strength 1: The participants were well versed on the needs and implications of natural disasters on their individual facilities.

Strength 2: Good integration with governing authorities was demonstrated by all institutions.

Areas for Improvement

The following areas require improvement to achieve the full capability level:

None were identified.

Organizational Capability Target 2: The institution has worked with local emergency management to be part of local damage assessment, including financial loss and indirect losses to the institution.

Strengths

Strength 1: The participants as a general rule have worked with local emergency response agencies.

Strength 2: The zoological institutions are well aware of the potential threats which rest within their facilities, to include but not limited to the collection animals.

Areas for Improvement

The following areas require improvement to achieve the full capability level:

Area for Improvement 1: The zoological institutions need to be fully integrated into their local emergency management planning and response networks so the institution can be involved in situational assessment for the community as a whole and not as an individual entity.

Reference: National Incident Management System (NIMS)

- **Analysis:** Provide all decision makers with decision-relevant information regarding the nature and extent of the hazard, any cascading effects, and the status of the response.

Exercise Objective 2:

Demonstrate the communication system within their facility.

Operational Communications (*Ensure the capacity for timely communications in support of security, situational awareness, and operations by any and all means available, among and between affected communities in the impact area and all response forces.*)

The strengths and areas for improvement for each core capability aligned to this objective are described in this section.

Organizational Capability Target 1: The zoological institution is able to communicate internally with all stakeholders.

Strengths

The partial capability level can be attributed to the following strengths:

Strength 1: All participants seem to have plans in place for alerting staff, guests and vendors/contractors of approaching and changing weather. The use of a staff-wide text alert system is an excellent application for this technology

Areas for Improvement

The following areas require improvement to achieve the full capability level:

None were identified.

Organizational Capability Target 2: The zoological institution is able to communicate with local emergency resources including police, fire, and emergency medical personnel.

Strengths

This partial capability level can be attributed to the following strengths:

Strength 1: Many participants indicated weather radios are in place (very commendable), and a few have security personnel monitoring weather conditions.

Areas for Improvement

The following areas require improvement to achieve the full capability level:

Area for Improvement 1: Institutions should insure adequate communications, and redundancy in their communications between the shelter areas and Incident Command Post or Emergency Operations Center.

Area for Improvement 2: Communications between zoo and local services should be verified, redundant, and tested.

Reference: National Incident Management System (NIMS)

- **Analysis:** Ensure the capacity for timely communications in support of security, situational awareness, and operations by any and all means available, among and between affected communities in the impact area and all response forces;

Organizational Capability Target 3: The zoological institution is able to provide information on the incident to the public through a multi-model plan.

Strengths

This partial capability level can be attributed to the following strengths:

Strength 1: During daily activities the institutions are familiar with communicating with the public through a multi-modal system.

Areas for Improvement

The following areas require improvement to achieve the full capability level:

Area for Improvement 1: Zoological institutions should insure they are able to quickly and efficiently communicate public warnings to guests at their institution, to include the use of pre-scripted messages for identified emergencies.

Area for Improvement 2: There was no mentions of Joint Information Center (JIC) interaction. However, this would be a crucial component in the event of a direct hit or debris field scenario.

Reference: National Incident Management System (NIMS)

- **Analysis:** Ensure the capacity for timely communications in support of security, situational awareness, and operations by any and all means available, among and between affected communities in the impact area and all response forces;

Exercise Objective 3:

Demonstrate the facility's ability to communicate with first responders.

Operational Coordination (*Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of core capabilities.*)

The strengths and areas for improvement for each core capability aligned to this objective are described in this section.

Organizational Capability Target 1: The zoological institution has institutionalized the Incident Command System into their emergency response planning.

Strengths

The partial capability level can be attributed to the following strengths:

Strength 1: Zoological institutions as a general rule have worked with local emergency service agencies for response to the facility.

Strength 2: As event unfolded, scaling-up of the ICS structure was generally very good.

Areas for Improvement

The following areas require improvement to achieve the full capability level:

Area for Improvement 1: Zoological institutions should work with local emergency planners, and outside zoological institutions to insure the needs of the facility are identified prior to an event.

Reference: National Incident Management System (NIMS)

- **Analysis:** Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of core capabilities.

Organizational Capability Target 2: The zoological institution has developed emergency response plans and trained their staff in response operations

Strengths

The partial capability level can be attributed to the following strengths:

Strength 1: Zoological institutions as a general rule have worked with local emergency service agencies for response to the facility.

Strength 2: Staff training, and an understanding of roles and responsibilities, was clear from the beginning for all zoos.

Areas for Improvement

The following areas require improvement to achieve the full capability level:

Area for Improvement 1: Institutionalization of the Incident Command System (including training of staff) needs to be expanded for both daily operations and events affecting the institution.

Reference National Incident Management System (NIMS)

- **Analysis:** Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of core capabilities.

Organizational Capability Target 3: The zoological institution has planned for emergency shelter of collection animals with sufficient food, and necessary supplies and staff

Strengths

The partial capability level can be attributed to the following strengths:

Strength 1: Zoological institutions are generally well coordinated for daily operations and handling of rare, often times dangerous animals.

Strength 2: Several institutions discussed strategies for the use of social media to help with message mapping.

Areas for Improvement

The following areas require improvement to achieve the full capability level:

Area for Improvement 1: Zoological institutions should develop a resource inventory for their institution to include equipment, facilities, and staffing (e.g. subject matter experts). This would also include immediate access to specialized resources needed for collection animals.

Reference: USDA APHIS AZA, Management Guidelines for Avian Influenza: Zoological Parks & Exhibitors, Outbreak Management Plan & National Incident Management System (NIMS).

Analysis:

- Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of core capabilities.

Exercise Objective 4:

Demonstrate the facility’s ability to work with the Incident Command System within their facility.

On-scene Security & Protection (*Ensure a safe and secure environment through law enforcement and related security and protection operations for people and communities located within affected areas and also for all traditional and atypical response personnel engaged in lifesaving and life-sustaining operations.*)

The strengths and areas for improvement for each core capability aligned to this objective are described in this section.

Organizational Capability Target 1: The zoological institution is able to establish a perimeter around the facility.

Strengths

The partial capability level can be attributed to the following strengths:

Strength 1: Facilities have demonstrated they are able to provide a safe and secure environment for the public, staff, and collection animals.

Areas for Improvement

The following areas require improvement to achieve the full capability level:

Area for Improvement 1: Institutionalization of the Incident Command System (including training of staff) needs to be expanded for both daily operations and events affecting the institution.

Reference: National Incident Management System (NIMS)

- **Analysis:** Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of core capabilities.

Organizational Capability Target 2: The zoological institution has sufficient planning completed to keep the collection animals safe, as well as the public.

Strengths

The partial capability level can be attributed to the following strengths:

Strength 1: Zoological institutions are well prepared for escaped animals and threats from collection animals.

Strength 2: All zoos show sufficient planning to contain collection animals in a safe and secure environment.

Strength 3: Zoological institutions are able to act as subject matter experts when dealing with escaped collection animals and proper care and handling of animals.

Areas for Improvement

The following areas require improvement to achieve the full capability level:

Area for Improvement 1: Zoological institutions should work with local emergency services to insure there is a shared operating picture to include priorities and limitations of the ability of the zoo and their animals.

Reference National Incident Management System (NIMS)

- **Analysis:** Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of core capabilities.

Exercise Objective 5:

Demonstrate the ability for facility personnel to work with established Emergency Operations Plans for their facility.

Operational Coordination & Situational Assessment (*Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of core capabilities * Provide all decision makers with decision-relevant information regarding the nature and extent of the hazard, any cascading effects, and the status of the response.*)

The strengths and areas for improvement for each core capability aligned to this objective are described in this section.

(Operational Coordination)

Organizational Capability Target 1: The zoological institution has institutionalized the Incident Command System into their response planning.

Strengths

The partial capability level can be attributed to the following strengths:

Strength 1: Many of the zoos identified or referenced ICS positions as listed in their plans of who was in charge during an emergency

Areas for Improvement

The following areas require improvement to achieve the full capability level:

Area for Improvement 1: Institutionalization of the Incident Command System (including training of staff) needs to be expanded for both daily operations and events affecting the institution.

Reference: National Incident Management System (NIMS)

- **Analysis:** Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of core capabilities.

Organizational Capability Target 2: The zoological institution has developed emergency response plans and trained their staff in response operations.

Strengths

The partial capability level can be attributed to the following strengths:

Strength 1: Zoological institutions considered who was in charge and documented their roles and responsibilities.

Strength 2: They also indicated how priorities of operations would occur at their facilities.

Areas for Improvement

The following areas require improvement to achieve the full capability level:

None were identified.

Organizational Capability Target 3: The zoological institution has planned for emergency shelter of collection animals with sufficient food, and necessary supplies and staff.

Strengths

The partial capability level can be attributed to the following strengths:

Strength 1: Some zoos identified an existing MOU with outside agencies for assistance considering the needs of temporary relocations for animals if the conditions warranted.

Strength 2: Many zoos also indicated agreements with contractors for resources and with other zoological institutions/universities and local animal facilities.

Areas for Improvement

The following areas require improvement to achieve the full capability level:

Area for Improvement 1: Institutionalization of the Incident Command System (including training of staff) needs to be expanded for both daily operations and events affecting the institution.

Reference: National Incident Management System (NIMS)

Analysis: Zoological institutions should develop a resource inventory for their institution to include equipment, facilities, and staffing (e.g. subject matter experts). This would also include immediate access to specialized resources needed for collection animals.

(Situational Assessment)

Organizational Capability Target 1: The institution has contingency plans in place to guide staff for dealing with emergencies in the facility.

Strengths

The full capability level can be attributed to the following strengths:

Strength 1: Zoo personnel identified various documents (e.g., Emergency Operations Plans, Severe Weather Plans, Contingency Plans, etc.) used during an emergency or natural disaster.

Strength 2: Each zoo identified their shelter locations, capacities, and most importantly a method of communication (two-way radios, PA system, text, satellite phone) both within the zoo and to the outside community (e.g., responders and emergency management)

Areas for Improvement

The following areas require improvement to achieve the full capability level:

None were identified.

Organizational Capability Target 2: The institution has trained in the facility on the Emergency Operations Plans.

Strengths

The partial capability level can be attributed to the following strengths:

Strength 1: Each institution identified personnel who would be responsible as the Incident Commander or Director with some listing detailed positions such as safety, logistics, and public information. Many indicated “as written in the plan” when identifying roles and responsibilities.

Strength 2: It was clearly observed that the zoos considered their resource needs for supplies and tasks with personnel trained to organize and communicate the initial actions needed when a disaster was forecast.

Areas for Improvement

The following areas require improvement to achieve the full capability level:

None were identified.

Organizational Capability Target 3: The zoological institution has planned for emergency shelter of collection animals with sufficient food, and necessary supplies and staff.

Strengths

The partial capability level can be attributed to the following strengths:

Strength 1: Some zoos identified an existing MOU with outside agencies for assistance considering the needs of temporary relocations for animals if the conditions warranted.

Strength 2: Many zoos also indicated agreements with contractors for resources and with other zoological institutions/universities and local animal facilities.

Areas for Improvement

The following areas require improvement to achieve the full capability level:

None were identified.

Exercise Objective 6:

Demonstrate the ability for facility's ability to deal with long term consequences after a disaster.

Operational Coordination & On-Scene Security & Protection (*Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of core capabilities * Ensure a safe and secure environment through law enforcement and related security and protection operations for people and communities located within affected areas and also for all traditional and atypical response personnel engaged in lifesaving and life-sustaining operations.*)

The strengths and areas for improvement for each core capability aligned to this objective are described in this section.

(Operational Coordination)

Organizational Capability Target 1: The zoological institution has institutionalized the Incident Command System into their response planning.

Strengths

The partial capability level can be attributed to the following strengths:

Strength 1: The participating institutions have done well identifying the Incident Commander.

Areas for Improvement

The following areas require improvement to achieve the full capability level:

Area for Improvement 1: Additional ICS staffing should be fleshed out more specifically in terms of responsibilities specific to animal care, grounds assessment, security, etc.

Area for Improvement 2: ICS positions should be maintained throughout the recovery process.

Reference: National Incident Management System (NIMS)

- **Analysis:** Establish and maintain a unified and coordinated operational structure and process that appropriately integrates all critical stakeholders and supports the execution of core capabilities.

Organizational Capability Target 2: The zoological institution has developed emergency response plans and trained their staff in response operations.

Strengths

The partial capability level can be attributed to the following strengths:

Strength 1: Very likely, each of these facilities has experience operating their parks with minimal staffing (during extreme winter weather for example). This should provide a framework for identifying the most essential roles and responsibilities and the number of staff required.

Areas for Improvement

The following areas require improvement to achieve the full capability level:

Area for Improvement 1: Additional planning should involve covering essential administrative functions (financial, personnel and equipment tracking, particularly as it relates to the requirements of FEMA disaster declarations).

Area for Improvement 2: Human resources management (Module 5) needs to be clearly and appropriately defined within the ICS system.

Reference: National Incident Management System (NIMS)

Analysis: Zoological institutions should develop a resource inventory for their institution to include equipment, facilities, and staffing (e.g. subject matter experts). This would also include immediate access to specialized resources needed for collection animals.

(On-Scene Security & Protection)

Organizational Capability Target 1: The zoological institution is able to establish a secure area within the institution.

Strengths

The full capability level can be attributed to the following strengths:

Strength 1: Zoos indicated specific personnel (e.g., Park Rangers, Security/Safety, etc.) who are designated to secure the facilities as well as the safety of guests and staff.

Strength 2: Safety and security personnel were identified, but most importantly their roles/responsibilities for the animals, staff, and public were detailed from how to secure the front gate and enclosures to the general public and staff.

Areas for Improvement

The following areas require improvement to achieve the full capability level:

None were identified.

Organizational Capability Target 2: The zoological institution has sufficient planning completed to keep the animals safe, as well as the public.

Strengths

The partial capability level can be attributed to the following strengths:

Strength 1: It was observed that zoos considered power shortfalls during a disaster or emergency as they listed specific resources (e.g. generators, fuel, etc.) and also backups such as siphoning fuel from vehicles if supplies ran low

Strength 2: They also indicated existing MOUs with outside contractors or emergency management/law/fire agencies to assist with resource shortfalls and priorities.

Areas for Improvement

The following areas require improvement to achieve the full capability level:

None were identified.

Organizational Capability Target 3: The zoological institution has planned for emergency shelter of collection animals with sufficient food, and necessary supplies and staff.

Strengths

The partial capability level can be attributed to the following strengths:

Strength 1: Some zoos identified an existing MOU with outside agencies for assistance considering the needs of temporary relocations for animals if the conditions warranted.

Strength 2: Many zoos also indicated agreements with contractors for resources and with other zoological institutions/universities and local animal facilities.

Areas for Improvement

The following areas require improvement to achieve the full capability level:

None were identified..