

Functional Exercise Outline

UCD Veterinary Medicine Extension

Introduction

Functional exercises provide an animal facility the opportunity to physically practice their contingency plan in a realistic, yet low-stakes environment during a simulated emergency or disaster. A functional exercise aims to test coordination, communication, command and control functions of staff as well as many others and protocols of a facility team, plan, etc. Determining realistic time constraints as players move through their roles and responsibilities is integral to assessing efficiency and effectiveness of the contingency plan and preparedness of the facility and its staff. This exercise promotes inter-agency communication and relationship building. Through a functional exercise, a facility can validate plans and protocols, identify resource and capability gaps and improve response operations.

The goals and objectives of a functional exercise are determined by the Exercise Planning Team. The Exercise Planning Team can be composed of facility staff, as well as outside entities that can bring different perspectives and backgrounds to test the facility's existing plans. During the exercise, the Exercise Planning Team can function as players or fill needed roles such as evaluators, facilitators or simulators. As applicable for certain exercises, representation from the county or region and/or subject matter experts can provide new insights and ability to challenge the facility in diverse ways. Development of a functional exercise begins with clarifying purpose, establishing scope, setting goals and objectives, developing evaluation parameters, creating a scenario and developing documentation.

Functional exercises allow facility staff, leadership and others to validate training and practice strategic and tactical skills in a risk-free environment. By individuals enacting their specific role, the facility is able to gauge current levels of staff understanding of responsibilities, test their capabilities and develop their skill to effectively perform that role. A functional exercise scenario is multifaceted. The scenario needs to allow actionable problems for all groups participating. It is necessary to create a realistic scenario that encompasses a clear threat, scope and emergency conditions. Additional inputs that modify the scenario ("injects") continue to challenge players to adapt to changing circumstances. Injects should be directed to drive operations-based play or to provide additional opportunities to meet exercise objectives. The scenario and the injects steer discussions and problem-solving from players.

Part of a functional exercise is understanding that there are intrinsic artificialities and assumptions. It is important that the Exercise Planning Team steers players to treat the scenario as plausible and provides sufficient detail to allow players to react to presented information and situations as if the simulated incident were real. Exercise communication and coordination is limited to participating exercise organizations and venues and there are limits to exercise play in order to focus work and exclude distraction.

Lastly, safety is the utmost priority of a functional exercise, as people may be moving quickly to act out response actions. It is necessary to have Safety Officer focused on the actions of all participants and calling out risks if observed. Safety focuses on ensuring the physical and emotional well-being of players when tasked with challenges. There should be clear identification of participating agency affiliation and exercise roles.

Exercise Objectives and Core Capabilities

Before determining the exact scenario of the functional exercise, it is critical to identify clear exercise core capabilities and objectives that will be assessed. It is impossible to test every component of a disaster in a single exercise, and therefore each exercise should be focused on two to four core capabilities relating to disaster or emergency response. It is necessary to select achievable objectives that will lead to emergency and disaster planning improvements. Additionally, objectives and capabilities need to be reflective of the current facility plans, protocols and policies.

For animal emergency and disaster response situations, core capabilities can include topics such as operational communication, coordination, mass care for animals and transportation. Objectives further clarify exercise capabilities and create tangible outcomes. Objectives should be SMART – Specific, Measurable, Achievable, Relevant, Time-bound.

Scenario

The exercise scenario is an event at a simulated time that reflects a natural or human-caused disaster situation threatening the facility. It is critical to draw from regional geographic risks and historical data to ensure this is as realistic as possible. The scenario is documented in the form of an Exercise Plan, Master Scenario Events List and presentation, which help guide participants over the course of the exercise scenario.

Through the course of the exercise, the scenario should continue to drive player action. This allows players the opportunity to apply their knowledge and skills to problems presented by the scenario. These problems should be discussed by the group and resolution or lack of resolution will be documented for later analysis. The presentation of the scenario should be led by a facilitator to remain on task and keep players appropriately involved. A well-crafted scenario should identify potential events that stress preparedness capabilities.

Participant Roles and Responsibilities

During the functional exercise, participants can be separated into roles or areas that reflect their degree of participation in the exercise scenario.

Role	Responsibility
Player	Players are facility staff and appropriate agencies. Players should be reflective of people that have a critical role during a facility emergency or disaster. They will actively engage in conversation and initiate actions in response to the scenario.
Observer	Observers are not direct stakeholders for the facility but possible resources that would be called upon during an emergency or disaster and therefore should be aware of the facility plan of action. This may also include individuals hoping to learn from exercise.

Controller	Controllers monitor exercise progression, ensure everyone remains involved and focused on exercise play and manages the exercise staff.
Safety Officer	The Safety Officer is an individual that is responsible for ensuring safety during the exercise. Any safety concerns are reported to the Safety Controller.
Simulator	Simulators are responsible for delivering scenario inputs to the players.
Evaluator	Evaluators assess player performance against exercise objectives. They identify and document strengths and areas for improvement. They provide a global perspective of the exercise as a whole.

Exercise Participant Invitation List

It is critical for a successful functional exercise to invite the appropriate individuals and agencies for participation. A scenario should mimic real-life emergency and disaster events and therefore should include not only all relevant facility internal staff but also the outside agencies and resources that would be called upon in time of disaster.

Facility	City/County/Local Jurisdiction*	State/Federal/Tribal	Groups & NGOs
Facility leadership	County Office of Emergency Services	State Department of Fish and Wildlife	Relevant exotic/zoo animal facilities for the region
Facility animal care staff	County Fire Department	State Department of Food and Agriculture	County animal response team (CART)
Facility veterinary staff	County Sheriff's Office	State Veterinarian	Facility collaborators/partnering entities (mutual aid or MOU)
Facility maintenance staff	County Animal Services	State Office of Emergency Services	Zoo animal disaster response groups
	County Public Information Office	USDA Animal Care Specialist	
	County Health and Human Services	USDA Facility Inspector	
	Local Law Enforcement		

*This table section is applicable to the state of California. If outside of this location, ensure the appropriate juristical authorities for your state/territory/tribe are included.

Documents

Documents help guide the participants of a functional exercise, both during the scenario and afterwards to collect needed feedback.

Document	Description
Exercise Plan	A document with a detailed, chronological timeline of the exercise scenario. To be shared with all participants.
Master Scenario Events List	A document that includes the injects of additional information to challenge player actions. To be shared with exercise staff and observers but NOT players.
Presentation	Mutli-media presentation is a visual representation of the Exercise Plan and Master Scenario Events List to make all exercise play accessible by all participants. Keeps exercise play on topic.
Participant feedback form	A feedback form for player comments on exercise activity and design. Ensure to capture observed strengths and areas for improvement. Should be collected at the end of the hot wash.
Exercise evaluation guide	A standardized document for all evaluators to collect data and capture performance results. This should be developed alongside the exercise objectives and core capabilities, specific to the facility's current plan, protocols and policies.

Post-Exercise Activities

The conclusion of the functional exercise needs to include two components for all exercise participants: the hot wash and the participant feedback form. These are critical for allowing open discussion of the exercise and more importantly to develop an Implementation Plan for improvement. A hot wash focuses on the players' actions, communication and coordination and is reflective of the facility's plans, protocols and policies. Through this, strengths, weaknesses and areas of improvement are identified. The participant feedback form is a document that captures the feedback on the functional exercise itself, including the exercise organization, facilitation, documents, participation and learning opportunities provided.

Within 30 days of the functional exercise, exercise evaluators should complete the exercise evaluation report. This form of data collection pairs exercise play and observations in relation to the original exercise objectives and core capabilities. It supports the development of the After Action Report and Improvement Plan. The entire Exercise Planning Team is involved in the creation and completion of the After Action Report and Improvement Plan. It is a document that includes an exercise overview, analysis of capabilities, and a list of corrective actions and timelines for improvements. This document is then shared with all relevant stakeholders in the facility.

Relevant Resources

1. FEMA. (2020). Homeland Security Exercise and Evaluation Program (HSEEP). Homeland Security. <https://www.fema.gov/emergency-managers/national-preparedness/exercises/hseep>
2. FEMA preparedness toolkit.
<https://preptoolkit.fema.gov/web/hseep-resources/design-and-development>