



2019 Statewide Medical and Health Exercise Series – Orange County

Fundamentals of Exercise Evaluation

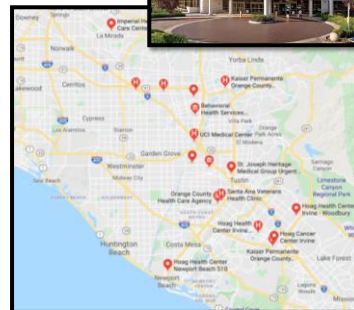
CPARS Consulting, Inc. 



Housekeeping



- ▶ Sign-In
- ▶ Restrooms
- ▶ Emergency exits
- ▶ Comms devices on silent/vibrate
- ▶ Sidebar conversations or phone calls outside
- ▶ Your Experiences and Questions are Welcome



Training Objectives

- ▶ Importance of Exercise Evaluation
- ▶ Planning the Evaluation
 - Resources and Tools
- ▶ How to Conduct an Evaluation
- ▶ Analyzing Results and Developing an After-Action Report



3

Exercise Participants

- ▶ **Players:** Active role performing their actual roles and responsibilities in response to the scenario. Performance is evaluated.
- ▶ **Controllers:** Controllers plan, manage and ensure the integrity of the exercise. Direct the pace, may prompt certain player actions, and ensure exercise continuity.
 - **Simulators:** Simulators role play non-participating organizations or individuals. Provide injects to players to prompt actions in accordance with scenario.
 - **Actors:** Portray real people needing assistance/ services and have face-to-face contact with players.
 - **Simulators & Actors may offer evaluation insights.**



4

Exercise Participants (Cont.)

► Evaluators:

- Assess the performance of players toward achieving exercise objectives (systems, equipment, plans, processes, training, etc.)
- Provide feedback on designated functional areas being exercised
- Identify strengths, areas for improvement, and offer recommendations for achieving identified improvements
- May also offer feedback on the exercise design and structure



5

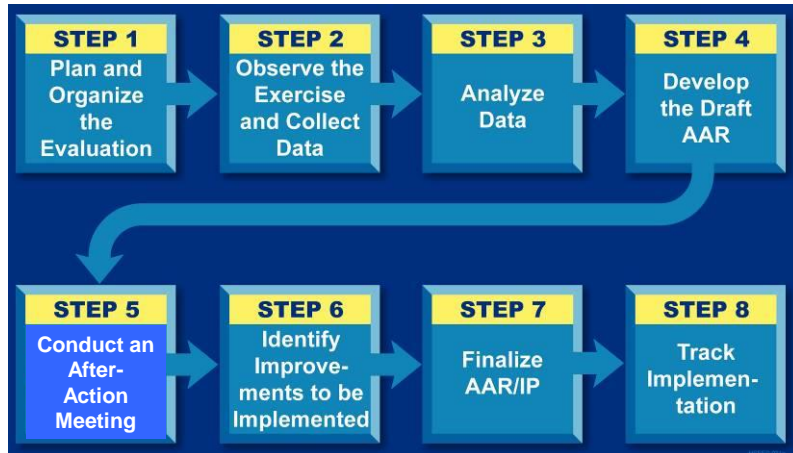
Evaluation Purpose

- The fundamental purpose of an EXERCISE
- Training vs. Exercise
 - Training (and Planning, Organizing, Equipping)
 - Intended to create a capability and prepare/educate personnel to perform that capability
 - Exercises
 - Assumes preparations of the capability have occurred
 - Opportunity to rehearse the capability (reinforce training), but more importantly, determine the effectiveness (a.k.a. evaluate) previous training, planning, organizing and equipping efforts
 - Without the evaluation, there is no purpose to the exercise
 - Would you give a test without grading it?
- Provide the foundation for the After Action Report (AAR) and Improvement Plan (IP)



6

Evaluation Process



7

Objectives: Foundation of ALL Exercise Activities

- ▶ **Information Sharing**
 - Assess the ability of local healthcare organizations within the HCCOC to share emergent information with internal and external stakeholders, ensuring communication feedback from the OCHCA Operations Center.
- ▶ **Resource Management**
 - Assess the capability of healthcare organizations within the HCCOC to identify the need and request various logistical resources (e.g., personnel, supplies and equipment) through identified channels of coordination.
- ▶ **Other facility-specific objectives you select**
- ▶ **Unfair to evaluate capabilities the exercise was not designed to test**



8

Preparing for the Exercise



Evaluation Planning

- ▶ Begins along with initial exercise planning
 - Objectives (what are you testing/evaluating)
- 1. Identify evaluation requirements/measures
- 2. Develop evaluation methodology



Evaluation Requirements/ Measures



- ▶ **A deeper look into the specific tasks/actions/equipment associated with each objective**
- ▶ **Sources of evaluation measures:**
 - Industry standards/regulations (Joint Commission, Centers for Medicare/Medicaid Services, CA Hospital Association, OCHCA)
 - Grant requirements (e.g., Hospital Preparedness Program, Public Health Emergency Preparedness)
 - Other National standards (e.g., DHS Core Capabilities, NFPA 1600, ISO 22301)
 - Facility-specific plans, procedures, policies
 - Administration/executive directives
 - Scenario (if it requires unique application of capabilities)



11

Evaluation Requirements/ Measures (Cont.)



- ▶ **Example:**
 - **Information Sharing: Assess the ability of HCCOC members to share emergent information and ensure communication feedback from the OCHCA**
 - Report and document incident by completing and submitting required forms, reports, documents, etc.
 - Information is communicated clearly in a timely manner and acknowledged by the recipient
 - Information includes all essential elements of information relevant to the type and purpose of the message
 - All communications systems (e.g., telephone, radio, CAHAN, email, etc.) are functioning
 - Communications systems are available in sufficient quantity and with sufficient bandwidth to support the demand for communications
 - Sensitive information is safeguarded or protected as appropriate



12

Evaluation Requirements/ Measures (Cont.)



▶ Example 2:

- Resource Management: Assess the capability of HCCOC members to identify the need and request various logistical resources through appropriate channels
 - Establish communications with potential channels of resources
 - Determine availability of existing supplies, stockpiles, contracts, etc. and the need for external resource support
 - Receive requests for resources and identify resource needs/shortfalls
 - Objectively prioritize resource requests where there are competing demands and/or limited supplies
 - Request or acquire resources through appropriate channels using appropriate communications systems and documentation
 - Receive confirmation and understanding of resource requests
 - Track the status of resource requests through fulfillment



Evaluation Requirements/Measures (Real-World Example)



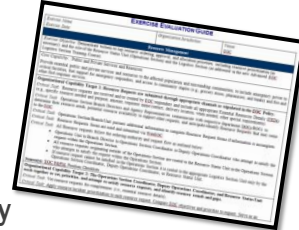
Objective	Evaluation Measures
Demonstrate an effective full activation of the EOC appropriate and proportionate for the public health emergency and medical countermeasures response anticipated.	<ul style="list-style-type: none"> • Role of the EOC Director in coordinating policy during a public health emergency. • Integration of representatives from DPH and other applicable partner organizations in appropriate positions in the EOC. • Effective Management Section leadership and direction of Section Coordinators (e.g., by the EOC Director). • Effective leadership and management of EOC Sections by Section Coordinators and Branch Directors (including oversight of assignments, ensuring communications, maintaining situational awareness, enforcing EOC policy/procedures, load balancing, etc.). • Staffing EOC units appropriate to the public health emergency and the EOC's objectives.



Exercise Evaluation Guides (EEGs)

▶ **Evaluation measures translate into EEGs**

- Identify the activities the evaluator should be observing
- As simple or as detailed as necessary
- Link tasks to positions/locations/outcomes



- ▶ **EEGs are only guides; not report cards**
- ▶ **Generally, one EEG for each objective/capability**
- ▶ **Provide consistency across multiple exercises or locations**
- ▶ **Guide data collection as a reference for evaluators**



Evaluation Methodology

▶ **Organization and composition of evaluation team**

- **Lead Evaluator (Exercise-wide and Site-specific)**
 - Greatest knowledge of exercise and evaluation measures
 - Preferably the lead for developing the AAR
 - Supervises all other evaluators

- **Supporting Evaluators**

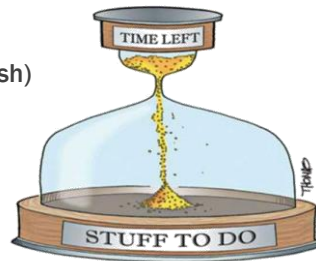
- **By Location or Topic/Objective**
- **Determine Quantity**
 - Span of Control
 - Access/Ability to Observe
- **Expertise**
- **Writing skills**
- **Recruitment**
 - Internal, partner organizations, planning team members



Evaluator Recruitment

► **Must have the TIME to COMMIT and RELIABILITY to FOLLOW THROUGH!**

- Pre-exercise briefing/training
- Time to prepare (understand plans, EEGs, capabilities, etc.)
- Time to participate in the exercise (arrive early, stay for Hot Wash)
- Evaluation debriefings/meetings after the exercise
- Write up notes and/or inputs to After-Action Report

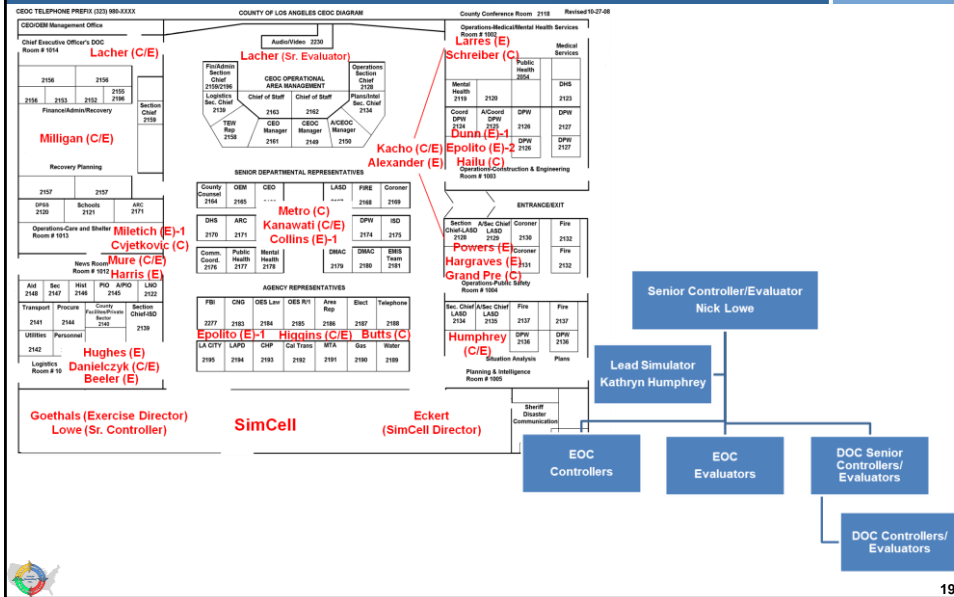


Evaluation Staffing Plan (Real-World Example)

Location	Position/Function	Agency	Last Name	First Name
Roaming	Exercise Director	CPARS	Low	Nick
ONT Hangar	Safety Controller (ONT)	ONT	Richy	Ann
		Ontario Conventino Center	Shaw	Christopher
Roaming	DAFN Controller/Evaluator	LA City Disability	Pope	Rick
UCG/JIC	UCG/JIC Controller/Evaluator	CalOES	Klofitt	Kristina
UCG/JIC	UCG/JIC Controller/Evaluator	CDSS	Linker	Kori
UCG/JIC	UCG/JIC Controller/Evaluator	CPARS	Gregory	Michael
ONT Hangar	FIS Controller/Evaluator	CBP	Smith	Kim
ONT Hangar	FIS Controller/Evaluator	CBP	Rials	Cornelius
ONT Hangar	Arrival/FIS/General Info Controller/Evaluator	SBC DPH	Flores	Ashley
ONT Hangar	Arrival/FIS/General Info Controller/Evaluator	CDSS	Lussier	Brian
ONT Hangar	Arrival/FIS/General Info Controller/Evaluator	CalOES	Brown	Sonia
ONT Hangar	Arrival/FIS/General Info Controller/Evaluator	ONT	Sosa	Stephanie
ERIC	ERIC General Controller/Evaluator	CPARS	Humphrey	Kathryn
ERIC	ERIC General Controller/Evaluator	CDSS	Dulay	Jennifer
ERIC	ERIC General Controller/Evaluator	CDSS	Ruffanti	LeAnn
ERIC	ERIC General (&Registration) Controller/Evaluator	SBC OES	Mears	Anniah
ERIC	ERIC General (&Temp Lodging) Controller/Evaluator	City of Ontario	Cheung	Raymond
ERIC	ERIC General (&Registration) Controller/Evaluator	CalOES	Olson	Lynne
ERIC	CPS/DAAS/TAD Controller/Evaluator	SBC HS	Misener	Sherri
ERIC	Medical/Health Controller/Evaluator	SBC DPH	Smith	Scott
ERIC	DBH Controller/Evaluator	SBC DBH	White	Dynthia
ERIC	ABC Controller/Evaluator	ABC	Hyatt	Tom
ONT Hangar	Lead Actor Controller	CPARS	Lindsay	Robin
ONT Hangar	Actor Support Controller	LA County DPW	Ezell	Lailani
ONT Hangar	Actor Support Controller	SCE	Medina	Breanna
ERIC	Actor Support Controller	LUPD	Kendall	Shannon
ERIC	Actor Support Controller	SR City USD	Vetere	Eric
ONT Hangar/ONT Host	ONT Host	DoD		
ERIC Observer A	ERIC Host 1	SBC DBH	Lee	Jonathan
ERIC Observer A	ERIC Host 2	SBC HS	Miller	Nicholas
SimCell	Simulator 1	HHS/ASPR	Wallace	Monte
SimCell	Simulator 2	RDMHS	Mayer	Donna
SimCell	Simulator 3	SBC HS	Bissett	Gregory
SimCell	Simulator 4 (OMEGA)	HHS/ACF	McMillan	Benjamin
SimCell	Simulator 5 (Federal Finance)	HHS/ACF	Meliah	Nahlah
Videography	Videographer	CalOES	Larimore	John
Videography	Videographer	CalOES	Boyd	Shawn
Videography	Videographer	SBCFPD/SBC HS	Lopez	C.L.
Videography	Videographer	SBCFPD	TBD	



Evaluation Staffing Plan (Cont.) (Real-World Example)



Evaluation Methodology Documents/Resources



- ▶ **Controller and Evaluator (C/E) Handbook**
 - Evaluation instructions
 - Scenario overview
 - Assignments, locations, times
- ▶ **Plans, procedures, and other facility-specific documents**
- ▶ **Master Scenario Events List (MSEL) or Actor Scripts/Cards if applicable**
- ▶ **Situation Manual (if applicable)**
- ▶ **Exercise Evaluation Guides (EEGs)**
- ▶ **Communications Directory**



MSEL and Injects



- ▶ **Master Scenario Events List (MSEL)**
 - Lists all of the planned injects for the exercise
 - Identifies expected participant actions
 - Serves as the “script” for simulators/actors
- ▶ **Injects**
 - Include several items of information
 - Inject time, intended recipient, who is being role-played (inject originator), inject type, a short description of the event/message, and the **expected player action**



What's in a MSEL? (Real World Example)



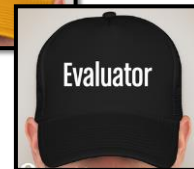
#	Simulator	INJECT TIME (in minutes from StartEx)	INJECT RECIPIENT	INJECT ORIGINATOR (SIMULATED)	INJECT MESSAGE	MODE	EXPECTED ACTION	CATEGORY
6		40	Ground Support Unit	Resource Status Unit	process) Date Requested: Today Time Requested: Now Priority: Medium Type: New Request Description: More than 250 DOT (contracted) and Metro buses are currently mobilized in support of the evacuation effort. CNG buses have very little range and require frequent refueling. Right now, Metro and DOT are sharing CNG supplies and have enough to support the evacuation effort, but stockpiles will be depleted by tomorrow, which will inhibit future DOT service for emergency purposes. DOT's vendors are unable to resupply in time. 7500 MMBTUs are needed to support operations until DOT's next scheduled refueling. Time Required: Today, 12:00 hrs Request For: Tangible Resource NIMS Type: Other NIMS Type (if other): Compressed Natural Gas (CNG) Quantity: 7500 Unit: Other Size of Resource: Million British Thermal Units (MMBTUs) Operator: No Fuel: No	WebEOC or Hard Copy	This is a formal resource request originated in the EOC, Field or at a DOC, received by the Operations Section, processed by the Resource Status Unit, and pushed to the Logistics Section to be satisfied. The Logistics Unit should input this data into the WebEOC Resource Management tool and should then seek out the resource using all available means (City resources/caches, small purchases, contracts, pre-existing agreements, donations, etc.). The SimCell may role play a number of possible sources. The Logistics Unit should update WebEOC as appropriate and notify the requestor when the resource has been identified, ordered, and is en route (SimCell).	resource request



Evaluator Training

► Conduct Evaluator (and Controller) Training prior to the exercise

- Preferably 1 week prior if time permits
- Instructions on assignments, expectations, details of exercise, logistics, writing assignments, etc.
- Familiarity with plans, procedures, and other documentation
- Walk through of exercise site(s) for lay of the land



During the Exercise



Player Expectations

- ▶ Should not have prior knowledge of the scenario beyond the Player Handout
- ▶ Need to follow real world procedures and act as if the emergency were real
- ▶ Demonstrate all actions necessary to meet exercise objectives
- ▶ Respect artificialities of exercise/scenario
- ▶ All documentation should be turned into a Controller/Evaluator



25

Participant Interaction

- ▶ Requests from players for additional info or role playing go to Controllers/Simulators/Actors (not Evaluators)
- ▶ Players and Evaluators should NOT engage in casual conversation
- ▶ Evaluators may ask players to “verbalize” their responses/actions or ask questions if something was missed
- ▶ Players must adhere to all Controller instructions
- ▶ Per Exercise Director, Controllers may be allowed to provide some coaching (Evaluator should document)



26

Participant Interaction (Cont.)

- ▶ Evaluators should not provide players with feedback or guidance on their actions/ performance, unless directed by the Exercise Director
 - Including during the Hot Wash



27

Evaluator Guidance

- ▶ No fault exercise
 - Learning environment
 - Judge the plans and capabilities, NOT the players
 - Identify lessons
 - Best Practices
 - Areas for Improvement
 - Assess the level of preparedness
 - Ensure opportunities for Player demonstration
 - Be patient



28

Evaluator Guidance (Cont.)

► Observe and Record

- During exercise and Hot Wash
- Tips and Key Focus Areas:
 - Activities that directly relate to objectives
 - Expected actions associated with injects
 - Decision-makers and key decisions
 - Critical events/initiating scenario and significant events
 - Deviation from plans/procedures
 - Include times (both start and end)
 - Use plans/procedures and Exercise Evaluation Guides



29

Evaluator Guidance (Cont.)

► Tips and Key Focus Areas (Cont.)

- What to look for
 - What happened? When?
 - How did Players coordinate?
 - How did Players use plans and procedures?
 - Adequacy of equipment/facilities/resources to support task accomplishment
- Focus on process and outcomes/quantity/quality
 - Do not focus exclusively on specific tasks, but they may play a role
 - What they accomplished and how they accomplished it



30

Evaluator Guidance (Cont.)

► Be aware of

- The integration of different functions
- Coordination of the overall response
- Timeline
 - Discrepancies may indicate issues

Don't come to judgment until you have all the facts from all the various sources. There are many activities an Evaluator may not see during the exercise!



31

Evaluator Guidance (Cont.)

► During the Exercise

- Capture detailed notes, photos, video, etc.
- Gather player documentation
- Position yourself so you can hear/see
 - Don't be intimidated by players
- Ask questions of players as necessary
 - But don't interfere with exercise play
- Notify a Controller of any exercise issues



32

► Immediately After the Exercise

- Capture notes during the Hot Wash
 - Opportunity for PLAYERS to discuss their initial reactions to the exercise
- Collect documentation from players
 - Player Logs
 - Player products: Forms, Logs, Resource Requests, Action Plans, etc.
 - Electronic files/records/entries
- Collect Participant Feedback Forms



Post-Exercise Activities



Controller/Evaluator Debriefing

- ▶ Develop a comprehensive understanding of exercise activities and performance
- ▶ Select priorities and prepare inputs for initial After Action Report (AAR):
 - Best practices/strengths
 - Areas for improvement
 - Initial corrective actions/recommendations
- ▶ As formal or informal as necessary, proportionate to complexity of exercise
- ▶ **November 21, 2019 (Time/Location TBD)**



35

Timeline Development

- ▶ Reconstruct exercise events as a team
 - Major “player” activities during exercise
 - Activities that directly relate to objectives
 - Expected actions associated with injects
 - Decision-makers and key decisions
 - Initiating scenario and significant events
 - Deviations from plans/procedures
 - Exercise Evaluation Guide items
- ▶ Resolve discrepancies between collected data



36

Assessments by Objective

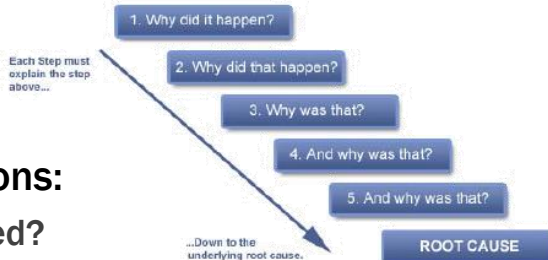
▶ Compare performance against expected actions/anticipated outcomes

- Identify strengths by objective
- Identify improvement areas by objective
 - Conduct root cause analysis
 - Suggest initial corrective actions/recommendations



37

Root Cause Analysis



▶ Use Six Questions:

- What happened?
- What was supposed to happen?
- If there is a difference, why?
- What is the impact of that difference?
- What should be learned from this?
- How should the issue be fixed?



▶ Avoid symptoms, but use them to justify case

38

Capability-Level Analysis

- ▶ **Assesses if the participants, as a whole, achieved the expected capability outcomes**
- ▶ **Focus is on outcomes instead of processes**

**Answers the Question:
How prepared is the organization as a whole to prevent, protect against, respond to, and/or recover from the scenario?**



Activity-Level Analysis

- ▶ **Performance measures and tasks that demonstrate proficiency in part of a capability and reflect plans and procedures**
- ▶ **A set of individual tasks typically make up an Activity**

**Answers the Question:
Did the team adequately perform all critical tasks in accordance with approved plans, policies, procedures, and agreements to achieve the Activity?**



Task-Level Analysis

- ▶ A specific action required to complete a function or activity
- ▶ Helps determine if personnel, training, and equipment are sufficient
- ▶ Linked to Activities and Capabilities

Answers the Question: Did the individual(s) or team(s) carry out the tasks as expected, and did the completion of the tasks contribute to the achievement of the activities?



41

Sources of Evaluation Information

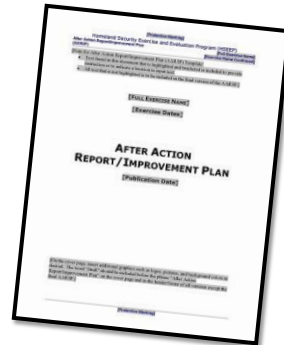
- ▶ Evaluator notes
 - Yours and others
- ▶ Player documentation
- ▶ Electronic records (e.g., computer/system logs, dispatch records, information system entries)
- ▶ Video/audio recordings and photographs
- ▶ Player feedback forms
- ▶ Simulator/actor documentation
 - Any notes on the player's responses



42

What is an AAR?

- ▶ Document which provides feedback to participating organizations on their performance during an exercise
- ▶ AAR provides organizations with information needed to:
 - Assess preparedness
 - Identify needed resources, actions, and support
- ▶ AAR includes:
 - Summary of what happened
 - Analysis of performance of essential activities
 - Analysis of major strengths and areas for improvement
- ▶ Format, length, and development timeline dependent on complexity of the exercise



43

Evaluator Responsibilities

- ▶ Within a specified time after the C/E debriefing, evaluators submit evaluation write-ups
 - Identify strengths and areas for improvement for each objective
- ▶ Full AAR usually drafted by one principal writer; preferably the Lead Evaluator



44

How to Write an AAR Narrative

► Identify the Objective or Capability

– **Observation:** Listed as a *Strength* or *Area for Improvement*. If AFI, should be followed by a general observation summary which includes:

- **References:** Identify local plans, policies, procedures governing the activity
- **Analysis:** Detail the root cause of the observation, and identify the consequences, positive or negative, of the action. Justify the observation. Explain what happened during the exercise. Provide concrete details.
- **Recommendations:** Provide SPECIFIC yet flexible suggestions for addressing the AFI.
 - Planning, Organization, Equipment, Training, Exercise



45

How to Write an AAR Narrative

(Cont.)

- Be concise, yet accurate and sufficiently detailed
- Cite times and responsible functions, positions, etc.
- Use correct and appropriate grammar, formatting, and tense
- Use complete sentences
- Define acronyms
- Spell check



46

Note on Performance Ratings

Objective	Core Capability	Performed without Challenges (P)	Performed with Some Challenges (S)	Performed with Major Challenges (M)	Unable to be Performed (U)
[Objective 1]	[Core capability]				
[Objective 2]	[Core capability]				
[Objective 3]	[Core capability]				
[Objective 4]	[Core capability]				

Table 1. Summary of Core Capability Performance

Ratings Definitions:

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).



After-Action Meeting

- ▶ **Presentation of the Draft AAR**
 - Preferably released early for advance review prior to the meeting
- ▶ **Organizational leadership, EPT members, key partners or stakeholders**
- ▶ **Populate Improvement Plan (IP)**
 - Commitment by organizations to corrective actions
 - Assignment of responsibility
 - Establish timeline/milestones



Improvement Plan (IP)

- ▶ Provides the organization with a common approach toward corrective actions
- ▶ Allows organizations to chart and monitor progress
- ▶ Assigns responsibility and milestones for corrective actions
- ▶ Identifies potential fiscal needs/issues
- ▶ Provides tangible steps to improve preparedness

Core Capability	Issue/Area for Improvement	Corrective Action	Capability Element ¹	Primary Responsible Organization	Organization POC	Start Date	Completion Date
Core Capability 1: [Capability Name]	1. [Area for Improvement]	[Corrective Action 1]					
		[Corrective Action 2]					
		[Corrective Action 3]					
	2. [Area for Improvement]	[Corrective Action 1]					
		[Corrective Action 2]					

49

Corrective Actions

- ▶ Recommendations in AAR are just that
 - Organization may accept, modify, ignore/disagree
 - Typically once corrective actions are selected, recommendations may be removed in final AAR iteration
- ▶ Improvement Plans are comprised of corrective actions
 - What the organization has accepted and committed to doing
 - Any format appropriate to the organization

50

Corrective Actions (Cont.)

- ▶ **Take into account the current operating environment**
 - Targeted to a realistic/reasonable timeframe
 - Budgetary concerns and grant performance periods may be limiting
 - Resources may be limited
 - Should address both short- and long-term goals
 - Short-term goals should be completed within one exercise planning cycle
 - Long-term goals may stretch over multiple exercises or exercise planning periods
 - Stress improvements that have the highest impact-to-cost ratio (root causes vs. symptoms)



51

Other AAR/IP Considerations

- ▶ **OCHCA will not create any facility-/ organization-specific corrective actions in its AAR**
- ▶ **Public vs. private (confidential) results**
- ▶ **Liability/over-commitment**
- ▶ **Other questions?**

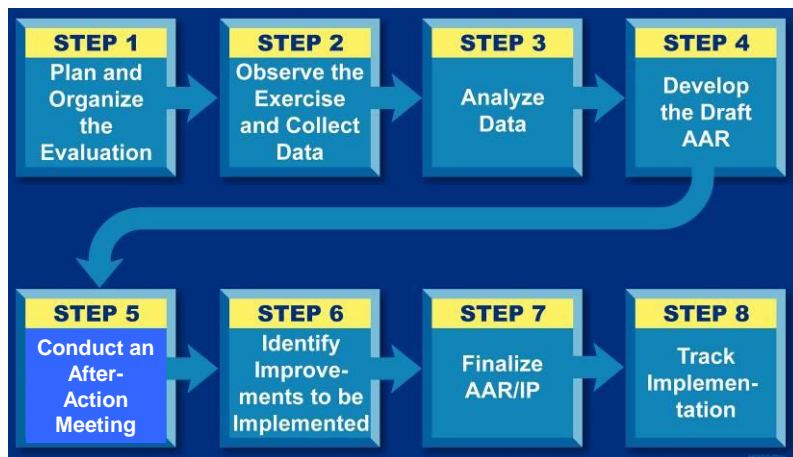


52

In Conclusion



Evaluation Process



Objectives Review

- ▶ Importance of Exercise Evaluation
- ▶ Tips for Evaluation Planning
 - Resources and Tools
- ▶ How to Conduct an Evaluation
- ▶ Analyzing Results and Developing an After-Action Report



55

Contact Information

- ▶ **Nick Lowe**, CEM, CBCP, MEP
President/CEO
CPARS Consulting, Inc.
710 S. Myrtle Ave., #296
Monrovia, CA 91016
626-320-0218
NLowe@CPARSconsulting.com



56

Thank You for Participating!

