

# Cost of State/Local Preparedness Exercises: Current Activities, Options for Future Data Collection

National Healthcare Preparedness Evaluation and Improvement Conference



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# OMB Disclaimer

***The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention***

# Presentation Objectives

- Describe DSLR's current process for collecting and evaluating state/local exercise cost data
- Identify at least three possible options to track state/local public health preparedness exercise expenditures
- Facilitate a discussion to solicit recommendations for the use of exercise cost data to inform future data collection efforts

# Acknowledgements

## Sincere Appreciations:

- Connecticut Public Health (Mary Pettigrew, Leonard Guercia, Jon Bergeson)
- Florida Public Health (Jack Pittman, Kelly Nelson, Margo Blake)
- Ohio Public Health (Adriana Pust)
- South Carolina Public Health (Doug Skroback, Brendan Cafferty)

# Background Questions

- Are exercises themselves a cost-effective mechanism to document performance measurement?
  - ◆ June 2006 command post exercise for the 4th Top Officials exercise (TOPOFF) cost \$3.5 million; “*exercises could be done in 30 cities for the price of a two-city TOPOFF*” (quote by Michael Wermuth, Director of Homeland Security Programs, RAND in “Emergency preparedness exercises remain an imperfect science”, Government Executive.com, November 2006)
- Is the exercise process and its cost incrementally improving the nation’s ability to gain additional knowledge, skills and abilities to detect, respond, and recover from a public health emergency?

# Current Data Collected From Exercises

- Minimum of 2 preparedness exercises required of Public Health Emergency Preparedness (PHEP) awardees per budget period
- Awardees must ensure completion of suite of Strategic National Stockpile (SNS) drills by local jurisdictions
- PHEP awardees' budgets commonly contain exercise sub-contracts
- Exercise coordinators funded by PHEP vary; exercise participation included as part of PHEP-funded position job descriptions

# Current Data Collected From Exercises

- Bi-annual PHEP reports collect “priority project” narrative descriptions; lessons learned or lessons observed are identified from exercises if the exercise was part of a “priority project”
- PHEP performance measures collect the time to develop After Action Reports (AARs) and the time corrective actions from exercises are retested in an exercise or a real-world event

# Current Data Collected From Exercises

- Minimum of two AARs to be submitted as a program assurance – compliance variable
- Bi-annual Financial Status Reports (FSR) collect aggregate cost of supplies, travel, salaries
- No discrete exercise budget required as part of PHEP application or for FSR

# Current Data Collected From Exercises

Currently collected in PHEP application:

- Contractor name, amount of contract, period of performance, scope of work, method of accountability, budget justification
- Costs related to hiring of full-time or part-time staff or contractors

# Current Data Collected From Exercises

Currently not routinely collected in PHEP documents:

- Training costs for HSEEP\* implementation
- Overtime
- Travel
- Supplies (unless in contractor budget justification)
- Planning time/costs
- Evaluation time/costs
- Improvement plan time/costs

\*Homeland Security Exercise and Evaluation Program

# Exercise Data Collection and Reporting Project

# Pilot Intent and Background

- Pilot project to organize an “Exercise Data Collection and Reporting Project”
- Purpose of the Exercise Data Collection and Reporting Project:
  - ★ To create an evidence base of components related to the exercise process that will help demonstrate performance
  - ★ To determine how exercises (deemed as aids to validate plans and test operational proficiency) should be leveraged in a cost-effective manner when funding is limited

# Pilot Intent and Background

## Process for Project:

- ◆ Step 1: Identify total cost of each exercise in the baseline schedule
- ◆ Step 2: Review PHEP awardees' budget submissions to identify contractual or other amounts dedicated to exercises
- ◆ Step 3: Select a cohort of states to retrospectively review exercise costs vs. costs of results, identified improvements, and corrective actions

# Pilot Intent and Background

Process for Project (continued):

- ◆ Step 4: Identify how the cost of exercise execution and corrective action program (CAP) implementation influence subsequent exercise development
- ◆ Step 5: Identify promising practices for federal, state, or local government planners who may participate in state/local exercise design, execution, and evaluation

# Why a Pilot?

- Step 1 completed August 2008: review of awardees' database revealed that database could not clearly identify costs related to exercises identified in the baseline or whether or not baseline exercises even occurred
- Step 2 completed August 2008: review of awardees' submissions revealed variations in awardees' identification of contractual or other amounts dedicated to exercises
- Recognized attempting Steps 3-5/Phase II in general would be challenging without better understanding of the exercises that actually occurred and the cost information collected by awardees
- Hence, pilot created to inform a process to formally query all 62 PHEP awardees

# Pilot Methodology

- 7 PHEP cooperative agreement awardees contacted based upon the completeness of 2007-2008 exercise schedule submissions
- Criteria for inclusion: submission included actual dates for exercises, exercise objectives, planning conferences, multi-year training calendar
- Survey conducted via [www.surveymonkey.com](http://www.surveymonkey.com)
- Purpose of survey:
  - ◆ Confirm whether or not scheduled exercises actually occurred;
  - ◆ Level and type of participation by public health staff, hospitals, other agencies, paid contractor;
  - ◆ Amount of time spent and hourly employee cost for exercise planning, execution, and evaluation activities

# Survey Respondents

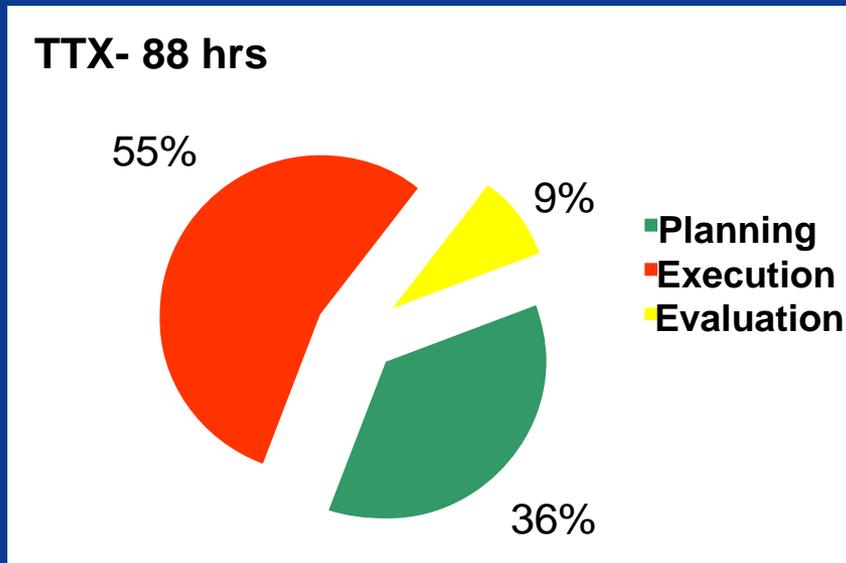
Responses received from:

- ◆ Connecticut
- ◆ Florida
- ◆ Ohio
- ◆ South Carolina

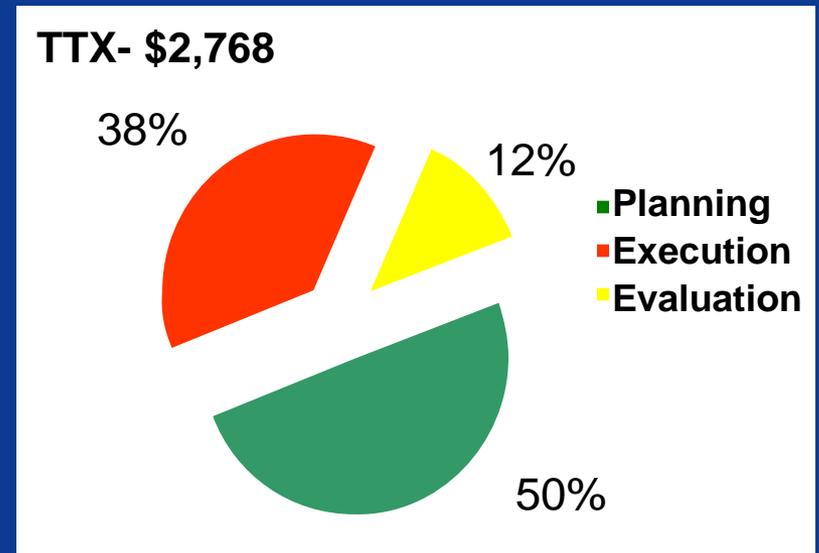
# Results

# State A Time and Staff Exercise Cost Exercise #1

## Public Health Staff Time (%)



## Public Health Staff Cost (%)

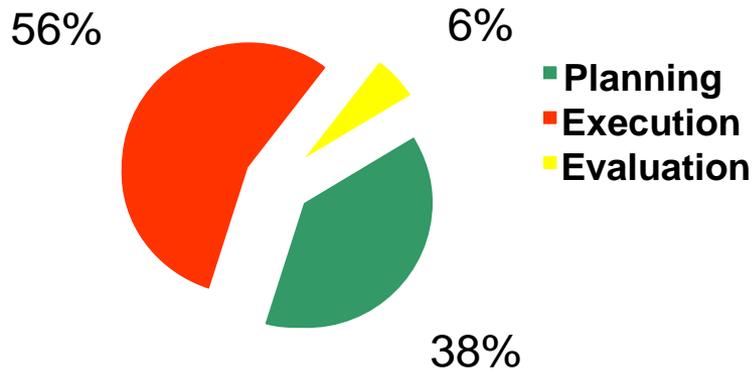


TTX = Tabletop Exercise

# State A Time and Staff Exercise Cost Exercise #2

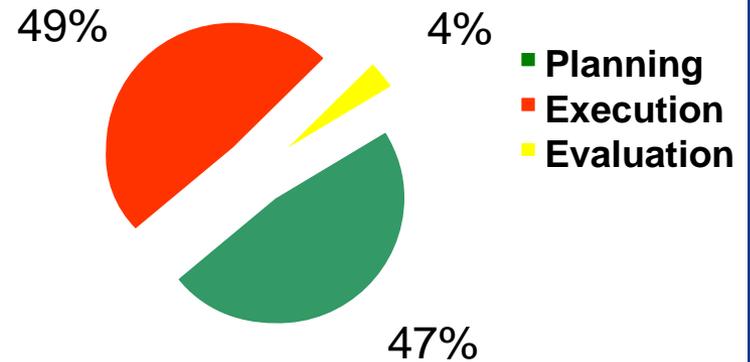
## Public Health Staff Time (%)

TTX- 128 hrs



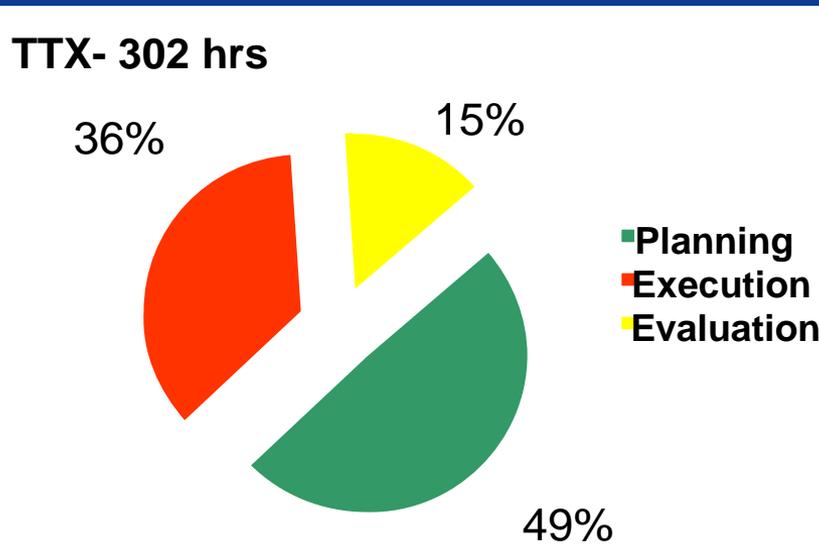
## Public Health Staff Cost (%)

TTX- \$9,230

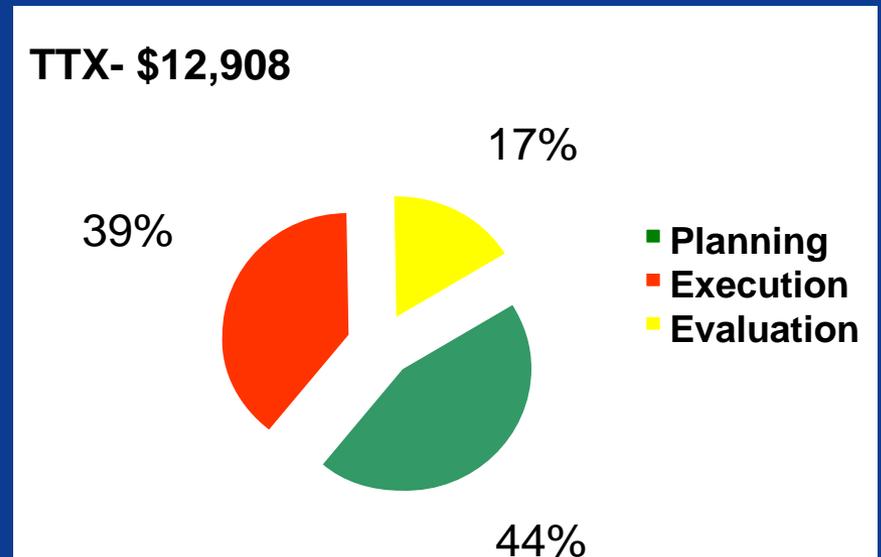


# State B Time and Staff Exercise Cost Exercise #1

## Public Health Staff Time (%)



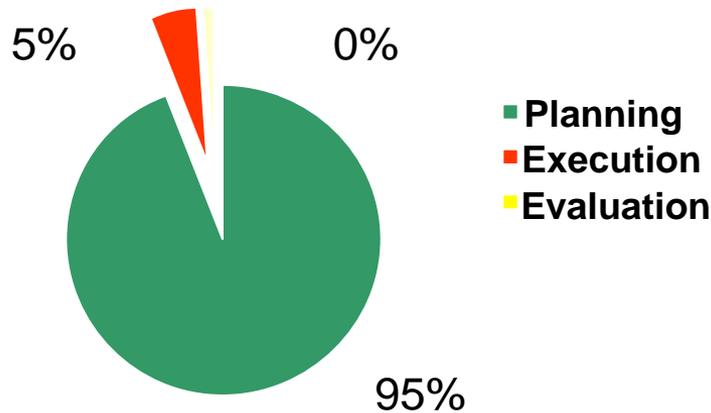
## Public Health Staff Cost (%)



# State B Time and Staff Exercise Cost Exercise #2

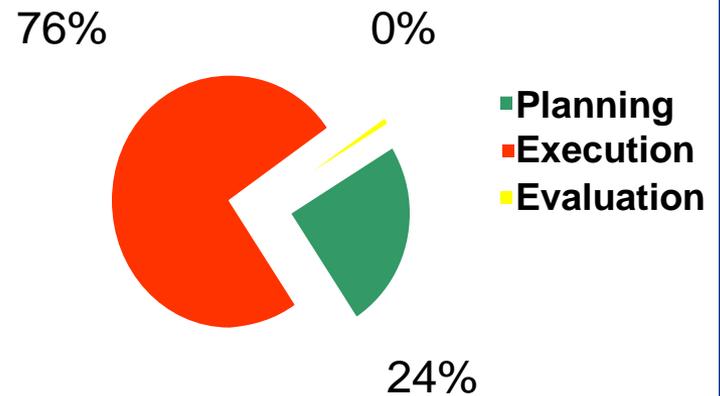
## Public Health Staff Time (%)

Wksp/FE- 8,848hrs



## Public Health Staff Cost (%)

Wksp/FE- \$29,992

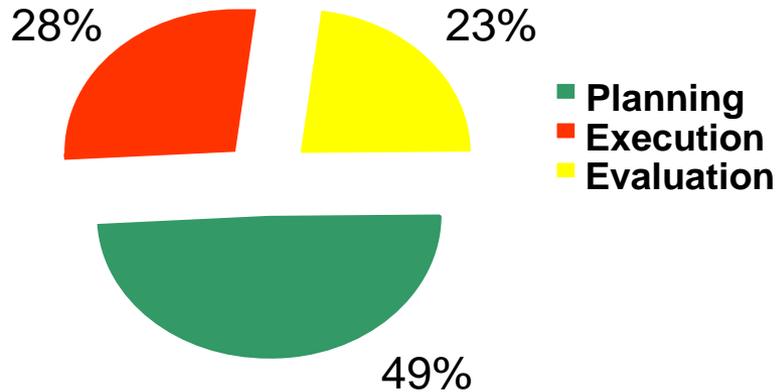


Wksp= Workshop; FE = Functional Exercise

# State C Time and Staff Exercise Cost Exercise #1

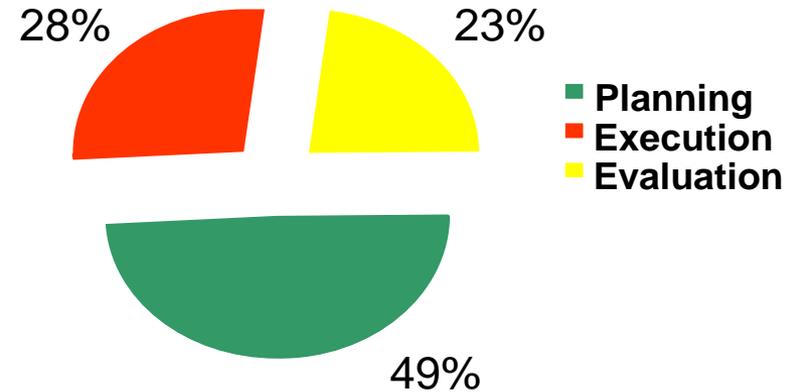
## Public Health Staff Time (%)

TTX- 256 hrs



## Public Health Staff Cost (%)

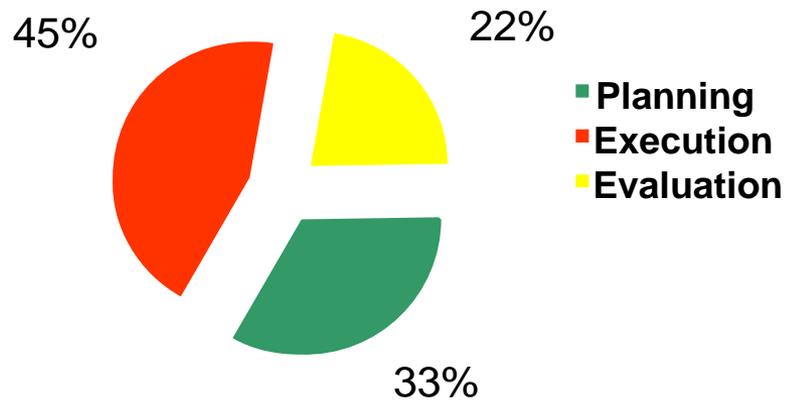
TTX- \$8,818



# State C Time and Staff Exercise Cost Exercise #2

## Public Health Staff Time (%)

Drill- 36 hrs



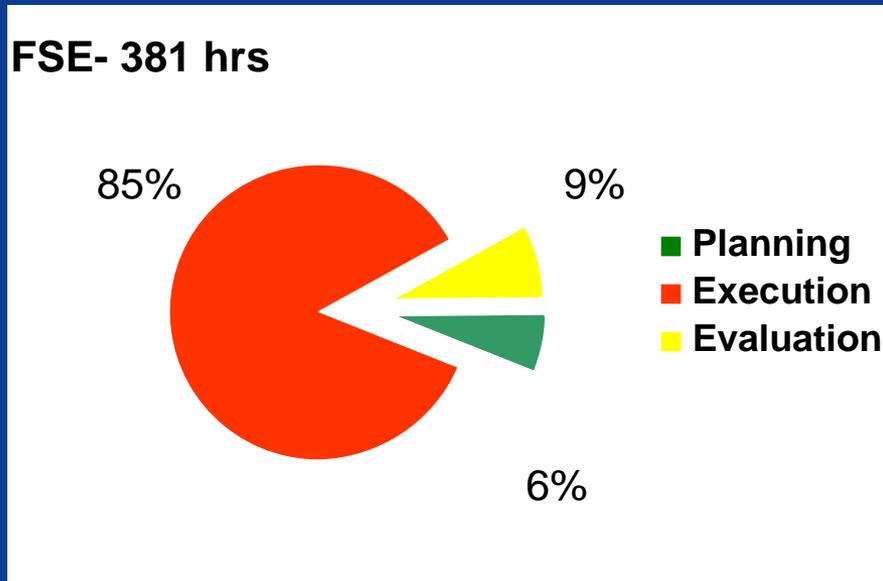
## Public Health Staff Cost (%)

Drill-\$1,366

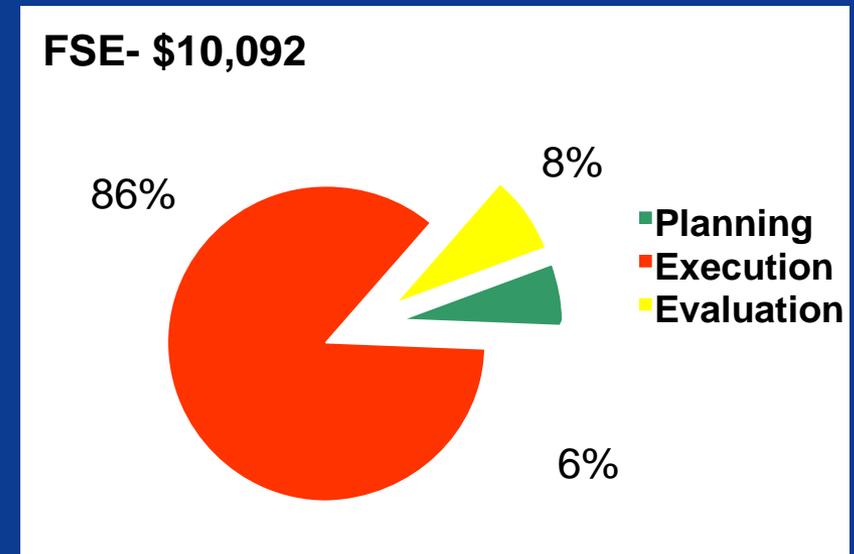


# State D Time and Staff Exercise Cost Exercise #1

## Public Health Staff Time (%)



## Public Health Staff Cost (%)

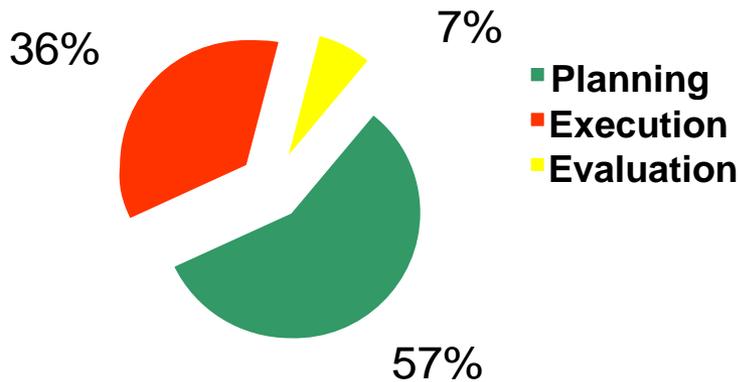


FSE = Full Scale Exercise

# State D Time and Staff Exercise Cost Exercise #2

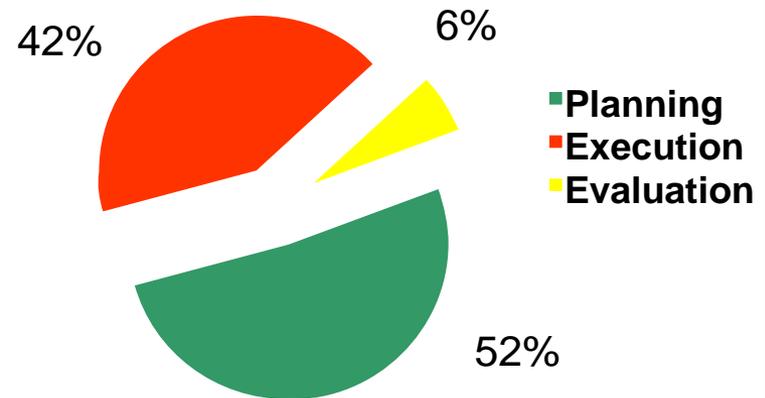
## Public Health Staff Time (%)

TTX- 42 hrs



## Public Health Staff Cost (%)

TTX- \$1,172



# Summary of Costs to Engage Public Health Staff in Exercises \*

	Amount spent (in dollars)		Breakdown of time spent by activity (in hours)	
	Min- Max	Median	Min- Max	Median
Planning	\$430- \$7200 **	\$2,816	12 - 8,422 **	40
Execution	\$497- \$22,792**	\$3,511	15 - 474 **	72
Evaluation	\$0- \$2175	\$346	0 - 58	8
Total	\$1172- \$29,992 **	\$9,024	36 - 8896 **	192

\* Includes 1 Drill,5TTX,1FE,1FSE) \*\* Wksp/FE exercise with federal involvement included in this range

# Pilot Preliminary Findings Summary

- Number of exercises per jurisdiction ranged from 8-18; data presented from the 2 exercises per jurisdiction that had the most complete responses to survey questions
- Respondents were unable to report cost data for hospitals/non-public health disciplines, hence only public health cost data for staff participation reported
- Public health senior staff cost reporting varied between states; when senior staff were present, planning/execution costs increased

# Pilot Preliminary Findings Summary

- Exercise costs predominately clustered in planning and execution, not in evaluation/improvement plan development
- Exercise costs and employee time contribution varied by grantee and exercise type;
- Burden and cost of planning, executing, and evaluating exercises shared with other agencies; hospital staff attended
- A contractor was used by only 1 respondent; that respondent not able to obtain contractor's costs to report to the survey

# Pilot Project Limitations

- PHEP awardees' budget submissions varied in identification of contractual or other amounts dedicated to exercises
- Respondents' ability to document number, duration, and time spent by attendees present at the full suite of planning meetings varied
- Needed better mechanisms to track:
  - ◆ Time needed to derive exercise objectives
  - ◆ Costs of conducting after-action conferences
  - ◆ Exercise improvement plans/corrective action plans in order to determine corrective action costs
- Sample size limited by convenience sample

# Discussion

# Respondents' Recommendations for Future Data Elements

- Discrete “Exercise Budget”
- Collect cost for improvements, rather than execution
- Support (fund) and collect data on one smaller, agency based FSE/FE and one large multi-agency response FSE
- Create a standardized methodology for exercise costs tracking; exercise costs are currently tracked by expenditure (usually for times, meeting space, etc.)

# Possible Options Identified From Pilot to Track State/Local Public Health Exercise Expenditures

- Continue to utilize current requirement of two PHEP exercises as data sources
- Possible Options Identified:
  1. Track time to conduct full suite of planning meetings (concepts/objectives, interim, mid, final, associated subcommittees)
  2. Track public health participants
  3. Track improvement plan item costs
  4. Track CAP costs
  5. Coordinate with other federal exercise programs to identify common data elements that can be easily leveraged and tracked

# Possible Options Identified From Pilot to Track State/Local Public Health Exercise Expenditures

- Possible Options Identified:
  1. Coordinate with other federal exercise programs to identify common data elements that can be easily leveraged and tracked
  2. Clarify options for single exercises to meet exercise requirements of both CDC and HPP programs
  3. Explore options for improving use of HSEEP methodology when planning/executing/evaluating joint hospital/public health exercises

# Questions?

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