

Sound Shake 2008 Functional Exercise March 5, 2008

After Action Report



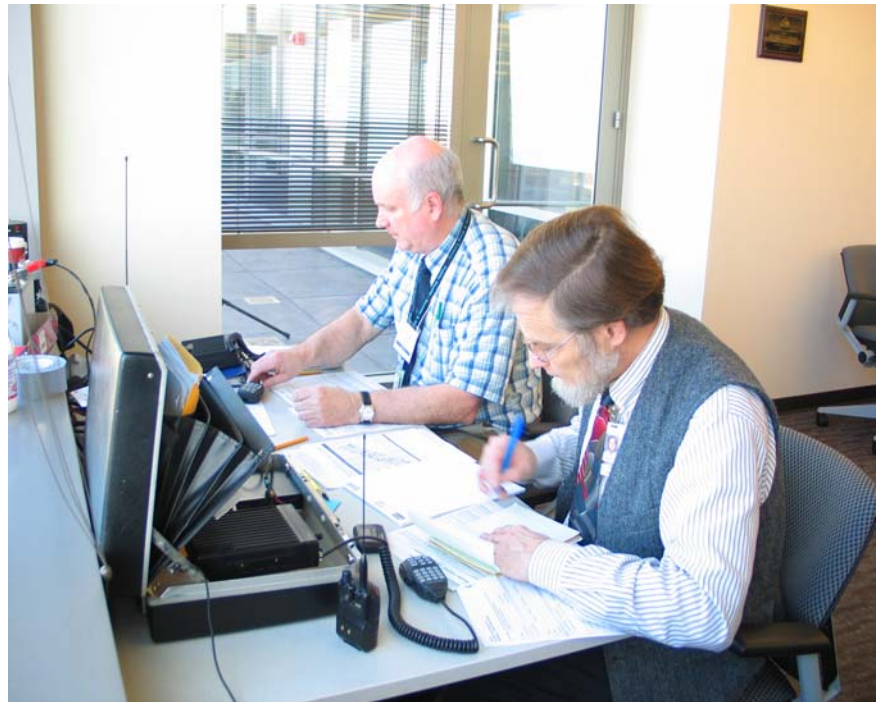


Table of Contents

I.	Executive Summary	4
II.	Exercise Overview	5
III.	Exercise Objectives	6
IV.	Exercise Events Synopsis	6
V.	Analysis of Mission Outcomes	7-9
VI.	Conclusions	9

Appendices

Appendix A: Participant Evaluation Tools and Summary of Results

I. Executive Summary

On March 5, 2008 Public Health – Seattle & King County participated in *Sound Shake 2008*, a tri-county catastrophic earthquake functional exercise.

To ensure a coordinated exercise with regional partners, Public Health's exercise objectives were aligned with the existing regional objectives. Specifically, PHSKC tested communications and coordination with other agencies, the newly formed EOC structure as the Emergency Support Function-8 (ESF-8) Area Command, and departmental business continuity response. The goals of the exercise for ESF-8 were to determine whether the ESF 8 Area Command could gain initial situational awareness, share impact assessment and analysis information with regional response partners, and assess the effectiveness of business continuity plans.

Public Health had a total of 78 Players at multiple sites throughout the County.

A number of items were identified as successes within the ESF 8 Area Command Center:

- Coordination between the Operations Section and Command Staff
- Communication between Planning and Logistics Sections
- Timeliness of approval of risk communications messaging
- Incident Command briefings
- Increased logistical knowledge of resources available and needed through the City of Seattle EOC
- 800 MHz radio team/tactical communications successfully fielding information from various sources
- Participation among PHSKC staff and sites
- Introduction of Business Continuity in the Operations Section of the EOC

A number of improvement planning items were identified including:

- Strengthen the business continuity function by operationalizing the department and division continuity plans
- Improve the Logistics and Planning functions within the ESF 8 Area Command Center
- Increase and expand the weekly 800 MHz radio roll call drill, to include more detailed information exchange
- Provide additional training to staff on relaying information via multiple communications systems between sites
- Identify types of information and mechanisms for resource support that the EOC will provide to PHSKC sites, including clinic sites

Overall, players noted the value of testing new functions within ESF-8 Area Command to enhance future response efforts.

II. Exercise Overview

Exercise Name:	Sound Shake 2008
Duration:	7 Hours
Exercise Date:	March 5, 2008
Sponsor:	Public Health – Seattle & King County
Type of Exercise:	Functional
Funding Source:	Public Health – Seattle & King County
Focus:	Response
Classification:	Unclassified
Scenario:	Earthquake
Location:	ESF-8 Emergency Operations Center, Seattle, Washington King County Regional Communications and Emergency Coordination Center, Renton, Washington City of Seattle Emergency Operations Center, Seattle, Washington Nine Public Health sites: Columbia Health Center, Downtown Health Center, Federal Way Health Center, Kent/Alder Square Health Center, King County Medical Examiners Office, North Health Center, Public Health Administration in Chinook Building on floors 9, 11, 12, and 13, Vital Statistics, Yesler Building,
Participants:	78 Players: <ul style="list-style-type: none">• 42 Players; PH EOC and Business Continuity -- CNK 1300• Two ham radio operators; CNK 1300• Two ESF-8 Liaisons; City of Seattle EOC and King County Coordination Center• Four PIOs; City of Seattle EOC and King County Coordination Center• Nine PH Clinic sites 2 Controllers 1 Evaluator
Exercise Evaluation:	Homeland Security Exercise Evaluation Program (HSEEP) Exercise Evaluation Guide Post Exercise Participant Evaluation

III. Exercise Objectives

1. Test utilization of ESF-8 Incident Command System
2. Test ESF-8 EOC coordination and communication with response partners
3. Test ability to conduct timely and accurate Situation Assessment of Public Health Centers, healthcare sectors and key community based organizations, and to report that data to King County and Seattle EOCs
4. Test Business Continuity Team's ability to determine necessary program or service suspensions due to damage or staffing concerns
5. Test interoperable communication systems (800 MHz and Ham radios)
6. Test ability to incorporate health messages into public information releases issued by the Joint Information Center (JIC) and the ability of the VPAT Network to conduct message outreach.

IV. Exercise Events Synopsis

The exercise scenario began at 7:54 am with a 6.7 magnitude earthquake along the Seattle Fault. It was a shallow earthquake lasting between 30 and 60 seconds. There were intermittent aftershocks throughout the day of exercise play. The Scope of impact included the entire Puget Sound Region.

Players were briefed by the ESF-8 Area Commander who set initial operational objectives;

1. Fully activate and staff the ESF 8 Area Command Center by 0900 AM
2. Identify the status of all PH facilities and account for all PH staff at our facilities by 11:00 AM
3. Assess the status of critical healthcare functions, facilities and supporting infrastructure by 12:00 PM
4. Assess the need for field response operations to address EH hazards, medical surge needs, and mass fatalities response – complete assessment by 12:00 PM
5. By 9:00 AM, initiate contact with community based organizations within the impact area who serve vulnerable populations
6. By 9:00 AM, identify how timely, consistent and accurate health messages will be developed, approved and disseminated across the county

For the first two hours of play, landline phones were down and power was out regionally. Cell phone use was sporadic. The tactical radio communications team fielded messages from Public Health sites, Hospital Control (see Healthcare Coalition AAR for Region 6 hospital play reporting), and both the City of Seattle's EOC and King County's Regional Emergency Communication and Coordination Center (RCECC). Public Health policy advisors, public information officers and liaisons were at both the county and city emergency operations centers. Radio operators at PHSKC sites ended play at 10:30 A.M. Additional injects into the ESF-8 EOC were simulated from the Control Cell, Hospital Control and regional EOC's.

Hospitals ended play at 12:00 p.m. The ESF-8 EOC ended play at 3:00 p.m.

V. Analysis of Discussion Outcomes Based on Objectives

1. Test utilization of ESF-8 Incident Command System

Success:

- Participation in the EOC by Department staff who were new to EOC operations
- Coordination between Operations and Command staff
- Tactical Planning by Operations Section

Areas in Need of Improvement:

- Establish planning team to revise ESF-8 EOC organization chart based on Sound Shake lessons learned. eg. Increase Logistics Section staffing, identify scribes and runners for EOC, revise Planning Section to represent response specific roles
- Identify and test new space for ESF 8 Area Command Center for large events with increased staffing needs
- Increase ability to post information throughout EOC room
- Increase training of ICS/NIMS for staff in EOC
- Develop protocol for information sharing and communication within EOC
- Train EOC staff on communication protocol between Sections within EOC
- Develop protocol for how intelligence is received into and distributed from EOC
- Develop protocol for how to prioritize intelligence and requests coming into the EOC
- Increase status update information within EOC (not sure what this means – needs clarification)
- Ensure use of NIMS standard terminology/resource typing in PHSKC EOC

2. Test ESF-8 EOC coordination and communication with response partners

Success:

- Use of 800 MHz radios for Liaisons at EOC's
- Coordination with Public Information Officers at City of Seattle and King County EOC's
- Joint Information Center was a cooperative atmosphere

Areas in Need of Improvement:

- Enhance logistical planning and coordination with partner EOC's to identify resources available to assist the healthcare community during a disaster
- Develop communication plan between EOC and community partners, to include expectations of community partners for forwarding PH EOC messages
- Create a system to update EOC staff on power, roads, hazards
- Increase number of liaisons at King County and Seattle EOC's to include a Planning role
- Train staff on job cards for King County and Seattle EOC liaisons
- Increase status updates to liaisons at partner EOC's

3. Test ability to conduct timely and accurate Situation Assessment of Public Health Centers, health system and key community based organizations, and to report that data to King County and Seattle Office of Emergency Management

Success:

- Increased understanding of prioritizing information

Areas in Need of Improvement:

- Review and revise Planning Section forms
- Incorporate into briefing tools reasonable expectations for decision makers and response partners on the level of impact information available
- Identify and communicate what support PHSKC sites can expect from EOC

- Establish briefing schedule for EOC, not to coincide with response partners briefing schedule
- Develop Logistics tracking system to log incoming requests (Resource Request form)

4. Test Business Continuity Team's ability to determine necessary program or service suspensions due to damage or staffing concerns

Success:

- Integrated Business Continuity in PHSKC EOC
- Strengthened Business Continuity Team's understanding of coordinating with response
- Assisted with further Business Continuity planning on Divisional and Departmental levels

Areas in Need of Improvement:

- Develop communication protocol between Business Continuity Team and General Staff within the EOC
- Develop protocol to obtain accurate and timely intelligence from Planning Section regarding site and staffing status
- Develop protocol to communicate back to the Area Commander with policy and staffing recommendations
- Identify and establish anticipated needs of Business Continuity team prior to an event (e.g. phone lists, communication devices, mapping, site supply needs, team resources)
- Identify information needed from PHSKC sites to provide policy and staffing recommendations prior to event
- **Include Business Continuity intelligence gathering needs in Planning Section priorities**
- Develop protocol for role of Business Continuity team, to include at what stage continuity plan is activated.
- Complete Critical Functions list/Essential Services within each Division
- Develop job cards for Division essential services to be continued during an event
- Determine staffing required to maintain essential services within each Division
- Review, revise and update draft each Division's Continuity of Operations Plan.
- Identify alternate work sites for PHSKC sites
- Provide training to site management on progress of Business Continuity planning within Department
- Increase updating of Workforce database by PHSKC supervisors for more accurate and up to date site staffing information
- Develop electronic version of PHSKC site attendance forms for easy access during an event

5. Test interoperable communication systems (800 MHz and Ham radios)

Success:

- Increased capability of PHSKC staff to communicate using alternate forms of communication (800 MHz radios)
- Radio team was well staffed

Areas in Need of Improvement:

- Identify information needed from sites to be relayed to EOC
- Identify what information and resource support EOC will provide to sites
- Identify medical and emergency supplies at all PHSKC sites
- Develop tracking form to follow where information is being delivered after information is received by radio operators
- Train staff on intel strategy protocol for proactively gathering intelligence rather than just monitoring radios for information – revise intel protocol as necessary

6. Test ability to incorporate health messages into public information releases issued by the Joint Information Center (JIC) and the ability of the VPAT Network to conduct message outreach

Success:

- Successful message development for VPAT Network.

Areas in Need of Improvement:

- Did not have process to test usefulness or get feedback on content from providers
- Re-evaluate Communication Team staffing model during an emergency
- Increase ability to monitor information as it comes into the EOC
- Improve communication plan among Communications staff
- Increase and prioritize communication to PHSKC staff
- Develop guidelines on priority of communicating information
- Create protocol for CCN providers to respond to outreach messages
- Train all JIC staff to use interoperable communication devices – eg. Satellite phones and 800 MHz radios
- Develop operational objectives to include expected timeline of information to be available based on initial situational assessment
- Train staff to use KHealthTrac for ESF-8 intelligence and communication
- Provide consistent status updates to all response partner EOC's.
- Strengthen media monitoring. In a localized event national media will want immediate information and interviews.
- Maintain communications devices in RCECC JIC
- Ensure proper use of terminology – e.g. Shelter in place versus stay in place

VI. Conclusions

PHSKC activated the newly formed ESF-8 Emergency Operations Center for the first time during Sound Shake 2008. It provided lessons for improvement and initiated new players to emergency roles, as well as introducing PHSKC Business Continuity to the Operations Section of the EOC. PHSKC sites eagerly participated and requested additional training and exercise opportunities.

King County and the City of Seattle both participated in Sound Shake 2008, testing new EOC procedures. This provided both a challenge to the operations at the ESF-8 EOC, and a successful learning experience for players.

In coordination with healthcare, emergency management and community based partners, PHSKC will incorporate the lessons learned from Sound Shake 2008 into ESF 8 response plans and procedures.

**APPENDIX A
SOUND SHAKE 2008
PUBLIC HEALTH – SEATTLE & KING COUNTY**

POST-EXERCISE EVALUATION

March 5, 2008

Thank you for completing the following survey. This evaluation is designed to collect your feedback about today's event and how it contributes to your understanding of Public Health's role in an emergency supporting Emergency Support Function (ESF) 8.

Confidentiality Statement

Your responses are confidential and will be analyzed collectively with other participant responses. Aggregate data are used to provide the event designers with feedback regarding the quality of the event and the benefit to the participants.

Directions

Please mark only one answer for each question unless otherwise requested.

The following questions relate to current knowledge and practices regarding the specific objectives of this event. (Please check the box that best represents your level of confidence in regard to each statement.)

1. After completing the exercise, I am confident:

	Statement	0 = Not confident at all			5 = Neutral				10 = Completely Confident			
		0	1	2	3	4	5	6	7	8	9	10
		a.	I understand my potential role in the ESF-8/Public Health EOC during an earthquake						2	5	6	4
b.	I understand how Public Health will support the health system in King County during an emergency		1	1	1		1	1	6	8	2	1
c.	I understand how Public Health would coordinate and communicate with regional partners during an emergency		1	1	2	3	2	1	4	7	1	1
d.	I understand how business continuity at Public Health would occur (BC TEAM AND PLANS SECTION ONLY)		1	1	1	2	1	2	1	2		1
e.	I understand how to communicate using 800 MHz radios (TACTICAL RADIO COMMUNICATIONS TEAM ONLY)	1			1		1				2	2
f.	I understand how to develop health messages for release through the Joint Information Center and VPAT network (PIO's and PHIC ONLY)				1	1	2		2		1	1

The following questions relate to the exercise overall. (Please check the box that best represents your level of agreement with the statement.)

	Strongly Agree	Agree	Disagree	Strongly Disagree	N/A
2. The exercise was well organized.	10	12	1		
3. The scenario was realistic and credible.	6	15			
4. The exercise met the stated objectives.	7	13	1		1
5. Participating in the event increased my understanding of my role in a response	11	9	2		
6. Participating in the event increased my understanding of the new Unified Command Structure at Public Health	3	15	2	2	

7. The length of the exercise was:

- Too short **0**
- About right **15**
- Too long **5**

8. Please rate the exercise in terms of its **overall usefulness** to you and your agency.

- Excellent **5**
- Very Good **10**
- Good **3**
- Fair
- Poor

9. What was the **most valuable part** of the exercise?

- Learning about common challenges we will face
- What supplies are needed
- Enjoyed the hands on aspect of the training
- Gathering intel and disseminating it
- Understanding my role
- Opportunity to test our emergency plans
- Scenarios where realistic
- Testing business continuity plans
- Knowing who the key participants for my site are
- Meeting other players from around the area

10. How could the exercise have been improved?
 - Build in regular reporting intervals between EOC and BC
 - Test less things in a training of this length
 - Shorten the training and offer more “take home” data
 - Confusion in weeks prior to the exercise about KC vs. Seattle play
 - Make sure that communications and the JIC have enough space, staff and technology needed
 - Narrow the scope of the training
 - Better understanding of your design roles
 - More staff in the planning and logistics section
 - Less extreme scenario
 - Not necessarily important to make planning decisions
 - Need more updates on infrastructure status, clinic status and staff status
 - More planning into the individual roles of each section and the communication between them
 - Need to prioritize communication and communications role

**APPENDIX A
SOUND SHAKE 2008
PUBLIC HEALTH – SEATTLE & KING COUNTY**

TACTICAL COMMUNICATIONS POST-EXERCISE EVALUATION

March 5, 2008

Thank you for completing the following survey. This evaluation is designed to collect your feedback about the event and how it contributes to your understanding of the role of Public Health’s Emergency Operations Center in communicating and supporting the Public Health sites throughout King County Washington.

Confidentiality Statement

Your responses are confidential and will be analyzed collectively with other participant responses. Aggregate data are used to provide the event designers with feedback regarding the quality of the event and the benefit to the participants.

Directions

Please mark only one answer for each question unless otherwise requested.

The following questions relate to current knowledge and practices regarding the specific objectives of this event. (Please check the box that best represents your level of confidence in regard to each statement.)

1. After completing the exercise, I am confident:

	Statement	0 = Not confident at all			5 = Neutral					10 = Completely Confident		
		0	1	2	3	4	5	6	7	8	9	10
		a.	I understand my potential role during an earthquake.				1			1	4	
b.	I understand how sites communicate with Public Health’s Emergency Operations Center using alternate methods of communication.						1		2	2	2	2
c.	I understand how Public Health’s Emergency Operations Center would coordinate and support Public Health sites during an emergency.						1	2	1	1	2	2
d.	I understand what information Public Health’s Emergency Operations Center may need from Public Health sites during an emergency.									5	2	2
e.	I understand how to communicate using 800 MHz radios		2				1			2	2	2

The following questions relate to the exercise overall. (Please check the box that best represents your level of agreement with the statement.)

	Strongly Agree	Agree	Disagree	Strongly Disagree	N/A
2. The exercise was well organized.	1	6	2		
3. The scenario was realistic and credible.	2	6			1
4. The exercise met the stated objectives.	2	4			
5. Participating in the event increased my understanding of my role in a response	3	5	1		

6. The length of the exercise was:

- Too short **1**
- About right **7**
- Too long

7. Please rate the exercise in terms of its **overall usefulness** to you and your agency.

- Excellent **4**
- Very Good **1**
- Good **2**
- Fair **1**
- Poor

8. What was the **most valuable part** of the exercise?

- Finding potential limitations and challenges that might arise during an emergency
- We should also have RTTY capability
- Teaching us what to look for and how to use the radios
- Realizing the potential mayhem that can arise during an emergency
- Learning all the parts that each organization and person will play
- Learning about the communication forms
- Realizing we have no idea how the process works
- Showed our weakness in alternative systems for communications

9. How could the exercise have been improved?

- More work time on actual equipment and more training on types of equipment we might need to use
- A clear ending would have been helpful
- Sites seemed confused about what their role was
- No response from EOC about handling over flow from NW hospital
- More instructions to keep for radio communications are needed
- Would like a written radio protocol
- Add in some real feedback from staff
- More training around alternative language patients

10. Provide feedback on the form used to communicate information. What information would you like to communicate that was not on the form? What information on the form did you have trouble communicating, if any?
- We need to revamp our forms to more easily follow the hospital forms and protocols
 - I felt like none of my questions were being answered via radio
 - Radio communication seemed very “one way”
 - Add which channel to speak in on each form
 - Add specific phone numbers to call to the forms
 - All sites need to train all staff on handling the radio functions
 - Would like the sites to have more training ahead of time regarding what is expected from them
 - Would like more clarification around the information that was sent out