Conducting a ‘Man Down’ Functional Drill at the State Hygienic Laboratory

Drew Fayram, M.S.
Safety Officer

June 28, 2017

Iowa’s Environmental & Public Health Laboratory
Purpose of Conducting this Drill

Federal Select Agent Program Requirement

• Annual drills or exercises
  – Evaluate procedures and competency
Types of Exercises

• Discussion-based Exercises
  – Seminar
  – Workshop
  – Tabletop Exercise
  – Games
  – *Electronic/virtual exercises (email)*

• Operations-based Exercises
  – Drill – coordinated/supervised activity that tests a single function
  – Functional Drill/Exercise – validates coordination, command, and control between multiple agencies *without* “real-time” response

SHL Drill Summary

• Goal – Exercise Biosafety, Incident Response, and Security Plans

• Scenario
  – Medical emergency
  – Biological spill
  – Emergency evacuation
  – Maintain containment

• Functional drill – multiple procedures in real-time, but focus on internal staff

• Internal planning and real-time response

• Observed and evaluated by program administrators and external partners
Exercise Planning and Development

Step 1: Identify SMEs & determine type of drill/exercise
Step 2: Design scenario
Step 3: Gather resources and Communicate
Step 4: Execute Drill
Step 5: Conduct “hotwash” or “after action debrief”
Step 6: Follow through on corrective actions

November 2015 – February 2016
February 2016
March – June 2016
Step 1: Identify SMEs/Determine Type of Drill

- What are YOUR goals/objectives?
- Compliance vs. best practice
- Which types of drills best address capabilities that need to be assessed?
- Internal vs. external
- New connections?

Step 2 – Design Scenario

Keep your eye on the ball!
• Stay within your scope
• Bigger isn’t always better
• Ask yourself, “How likely is this scenario?”


http://www.disclose.tv/news/metropolitan_council_fullscale_drill_simulating_complex_terror_attacks_in_dc_area_on_wednesday/138683
Step 3: Gather Resources and Communicate

- Who needs to plan vs. participate?
  - Divide and conquer
  - Exercise coordinator
- Materials needed?
- Communications!

Who?
- Participants
- Observers/evaluators
- Other staff
- External/general public?
- Press?

How?
- Email
- Signage
- Attend meetings
Step 4: Execute

• Hold a briefing to define:
  – Purpose
  – Scenario
  – Limits
  – Language
  – Debrief items

• Execution
  – Expect the unexpected
  – Don’t get discouraged
  – Allow the drill to play out, but...
  – Coordinator must keep the drill moving
Step 5: Conduct Hotwash/After Action

• Debrief
  – What went right/wrong?
  – What should change?
  – Communication issues?
• Multiple perspectives
  – Participants
    • What did they feel/think?
    • What was hard?
  – Observers/Evaluators
    • What did they notice?
    • What did they expect?
    • Partners – what would they want us to do instead?

Step 6: Follow Through

• Generate list of corrective actions
  – SHL drill resulted in 20 corrective actions

• Follow up and document in timely manner
  – Some quick and easy
    • Ex. Mock 911 call did not communicate a HazMat emergency.
    • Staff trained to state this during call.
  – Some took longer
    • Ex. Took too long to don PPE and enter lab to help victim.
    • New PAPRS and donning/doffing protocols implemented. Staff retrained to recognize value of life over containment.
Other Lessons Learned

- Identify multiple people to video tape and/or take photos
- Many changes/updates to procedures and equipment
- Identified new training
- Need to involve more staff in hands-on components
- Need to bring partners back to discuss changes and “re-drill”
Thank you!

Drew Fayram, MS, Safety Officer
State Hygienic Laboratory at the University of Iowa
drew-fayram@uiowa.edu

Mission: The State Hygienic Laboratory at the University of Iowa protects and improves quality of life by providing reliable environmental and public health information through the collective knowledge and capabilities of our organization.