BSL-3 Training Exercise

Umwersity of North Carolina at Chapel Hill

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Regulatory Requirements:

7 CFR §331.14, 9 CFR §121.14 and 42 CFR §73.14

Scope

This Exercise was a multi-agency, multi-jurisdictional exercise, conducted in real time on the campus of UNC -Chapel Hill, and involve participants in a simulated role-play of their responsibilities as emergency responders. It required an actual response, mobilization of apparatus and resources, and commitment of personnel. The participants made decisions and took appropriate actions as if it was a real emergency, testing their personnel, equipment, communications systems, and procedures as outlined in their respective emergency plans and protocols. Participants expect to experience the problems and stresses of a real event.

Objectives:

General:

◆Provided an interactive training experience for the Chapel Hill Fire Department (CHFD), Department of Public Safety (DPS), Orange County EMS, UNC Hospitals, Orange County Health Department, Environment, Health and Safety (and others) to a fire, environmental release of a select agent and a downed victim event.

Training Objectives:

 Video tape drill as a training tool for future BSL3 training for outside and internal responders.

Stakeholder Objectives:

•Provide assurance to the community and stakeholders that EHS is competent in responding to a BSL3 emergency in a prompt, professional manner to decon and debrief responders involved in a BSL3 incident.

Specific Objectives:

- ◆Test the alarm and emergency contact system.
- ◆Test response time and actions of CHFD.
- ◆Test response time and role DPS plays.
- ◆Test EHS emergency response.
- ◆Test EHS remediation response
- Promote interagency collaboration and coordination.
 Improve individual and team performance.

Specific Objectives (continued)

- ◆Test communication and coordination between agencies and personnel.
- ◆Test data collection and analysis procedures.
- *Test BSL3 lab safety procedures.
- Identify training and resource needs.

Test the emergency response plans, procedures, capabilities, & systems of:

- Department of Environment, Health and Safety
- Department of Public Safety
- ◆Chapel Hill Fire Department
- Orange County Emergency Management System
- ◆UNCH Emergency Department
- ◆UNC Facilities Services
- ◆Campus 911 Emergency System
- Orange County Health Department

Participants

- Laboratory personnel
- UNC Department of Environment Health and Safety
- ◆UNC Department of Public Safety
- ◆Chapel Hill Fire Department
- Orange County Emergency Management Services
- ◆Campus Health Services
- UNCH Emergency Department
- Orange County Health Department
- Campus Fire MarshalUniversity Employee Occupational Health Clinic
- ◆UNC Facilities Services

Exercise Control Rules

Reinforce the participation requirement that all phone or over the air communications must begin and end with the announcement: "This is a Drill."

If at any time a real emergency or situation arises that requires the "drill" to end, the key word will be "KNOCK IT OFF" repeated 3 times verbally and announced over the operations channel an additional 3 times. When Command confirms the drill has been stopped by acknowledging the "KNOCK IT OFF" order, s/he will assess the situation and take necessary steps to mitigate the problem. Additionally, the term "MAYDAY" will only be used in a true emergency and will not be part of the drill/exercise.

Exercise Scenario:

On a Sunday morning, in a BSL 3 lab on the top floor of a research building, sparks from an electrical short of an ultra-centrifuge ignites a 5-gallon container of ethanol and fire spreads across the room. A researcher pulls the fire alarm in the dirty corridor of the north side of the suite and then becomes incapacitated by the smoke. Lab animals are in one of the rooms and water from the sprinkler system drains to all floors below, forcing complete building occupant evacuation and relocation.

Lessons Learned

- 1. The fire panel needs to have the words "BSL3" next to all fire response items associated with the BSL3 lab at the beginning of the description in the panel.
- 2. The access cards and combination number should be attached to a elastic band so fire personnel can wear the cards around their wrist when entering. Small pieces of paper can be hard to hold onto while wearing fire-fighting gloves.
- 3. Personnel have requested annual classroom training and drills that will allow them the opportunity to gain more confidence and comfort with responding to and handling issues in BSL3 labs.
- 4.Lab signage needs to be more prominent (larger lettering) and lab assignments need to correspond with the information that is displayed on the fire alarm panel. For example, if the fire alarm panel display indicates "9th floor BSL III north" then the signage on the lab needs to read the same way to eliminate confusion and improve response time.
- 5. Any written documentation/information for emergency responders should utilize a large font. It can be difficult to read smaller font printed material while wearing an SCBA face piece.
- 6.In the event a lab worker is hurt it may not be suitable to use the disinfectant in the room on an injured person. Can an alternative decon solution like iodine be made available in a response kit?

