

# **NOT A ZOMBIE APOCALYPSE, BUT STILL A BSL-3 EMERGENCY DRILL**



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# WHY IS THIS IMPORTANT?

- PLANNING AN EXERCISE CAN BE INTIMIDATING & TIME CONSUMING
- ROAD MAP WHAT STEPS TO FOLLOW TO HAVE AN EFFECTIVE EXERCISE
- LESSONS LEARNED

# PURPOSE

- PRACTICE & TEST EMERGENCY RESPONSE PROCEDURES FOR THE BSL3 LABORATORY
- *IN THE PAST:* TABLETOP EXERCISES HAVE BEEN USED TO ACCOMPLISH THIS REQUIREMENT





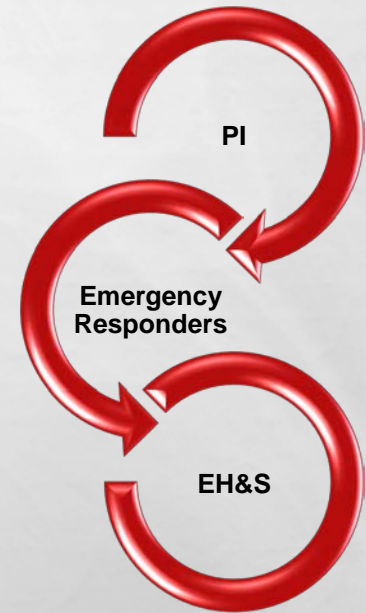
# A LONG LONG TIME AGO....

- CORNELL VISIT-2010
  - BSL3 EMERGENCY DRILL
  - TRAINING EXERCISE PLAN
- THREE EH&S STAFF
  - LET'S PLAN A DRILL (APRIL)
- CAMPUS POLICE, AMES FIRE, HOSPITAL PARAMEDICS (MAY-AUG)



# GOALS TO BE DEMONSTRATED

1. RESPONSE TO EMERGENCY IN BSL3 AREA
2. ENTRY INTO THE SPACE
3. DECONTAMINATE & PACKAGE VICTIM FOR TRANSPORT
4. CLEAN-UP
5. NOTIFICATIONS FROM PI

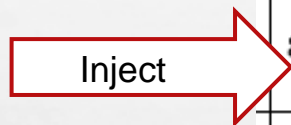


# SCENARIO

**AN UNCONSCIOUS RESEARCHER IN A BSL3 LAB  
REQUIRED RESPONSE BY THE PI TO  
DECONTAMINATE AND EVACUATE VICTIM FROM  
THE BUILDING**

- PRACTICE & TEST THE WRITTEN PROCEDURES FOR LAB PERSONNEL & EMERGENCY RESPONDERS AT A HIGH-RISK SECURE FACILITY.

# TIMELINE



Time	Scenario Event, Simulated Player Inject, Player Action	Event/Action
8:30am	Spouse of victim	Calls DPS and reports spouse cannot be contacted after going into the lab early. <i>Caller must tell dispatcher "This is a drill".</i>
8:40	DPS officer	Arrives at Bldg. 46
8:50	DPS officer	Contacts dispatch after looking around
8:50	Spouse of victim	Contacts Principal Investigator to report spouse cannot be contacted after going into the lab early
9:20	Principal Investigator	Arrive on scene
9:30	Principal Investigator	Contact DPS
9:30	ISU Police Dispatch	Dispatch AFD/MGMC
9:40	AFD/MGMC	Arrive on scene
10:00	Principal Investigator	Victim packaged and delivered outside to ambulance
10:30	DPS/AFD/MGMC	Leave the scene with victim (simulated) End exercise – on scene hot wash
10:35	Principal Investigator	Clean spill – Don PPE
11:30		Exercise is Over



# ACTORS



Worried Spouse



BSL3 User-Victim



# PLAYERS



# EVALUATORS







**POLICE**

**Demonstrate proper response to  
emergency in BSL3 area**

**✓ No deficiencies**



Appendix III: Sample Laboratory Sign In/Out Log

Name and Affiliation	Date	Time In	Time Out	Reason for Entry	Registered Escort of Visitor

## Demonstrate proper entry into space

- ✓ Must check digital readers to ensure proper pressure
  - ✓ Sign in/out must be checked



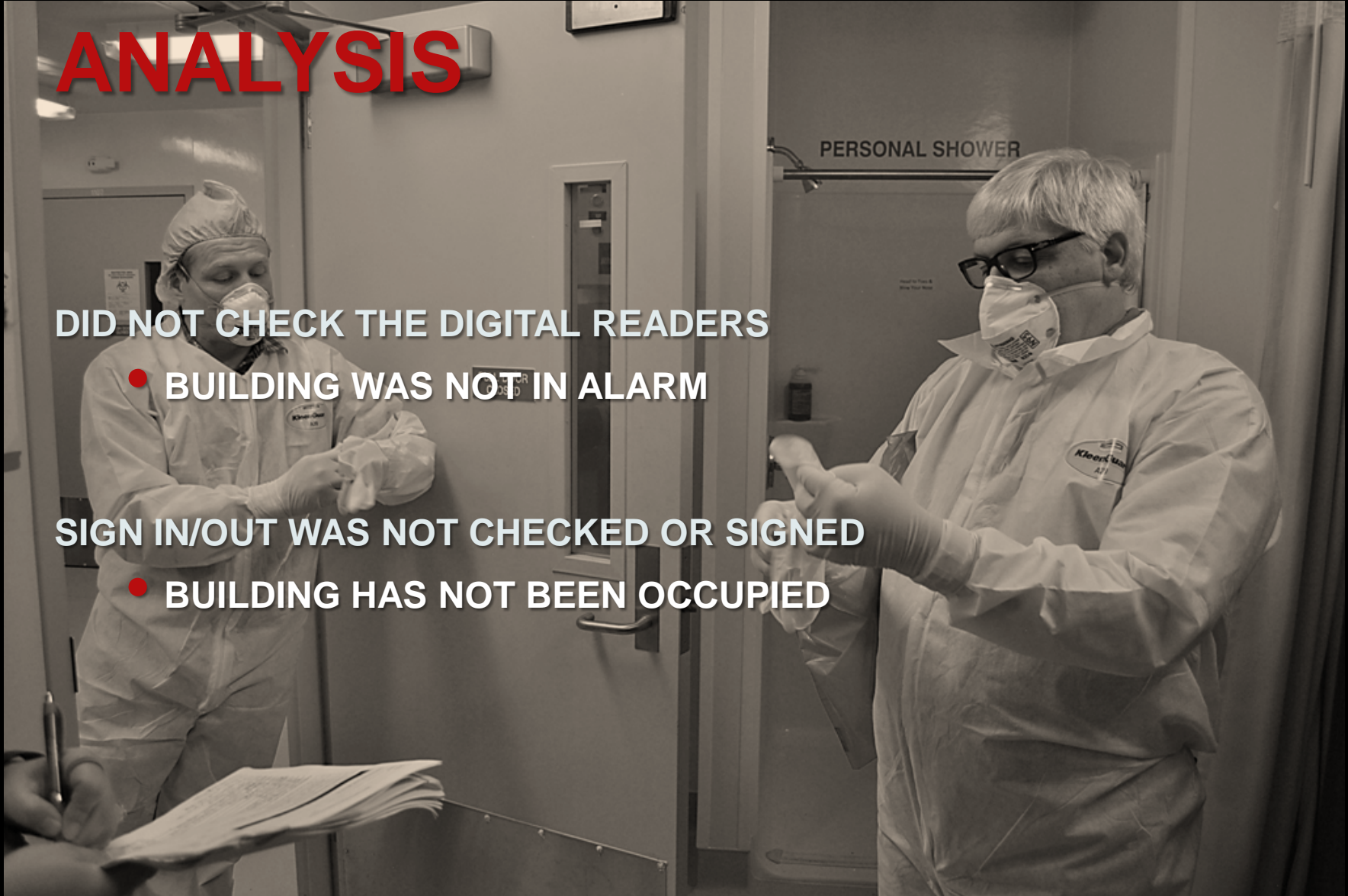
# ANALYSIS

DID NOT CHECK THE DIGITAL READERS

- BUILDING WAS NOT IN ALARM

SIGN IN/OUT WAS NOT CHECKED OR SIGNED

- BUILDING HAS NOT BEEN OCCUPIED



# **Decontaminate and package victim for transport**

- ✓ **PPE was not removed in the corridor**
- ✓ **Occupational Medicine letters were not sent with victim**

# ANALYSIS

## PPE NOT REMOVED IN CORRIDOR

- WORRIED ABOUT SPINE INJURY
- ASSUMPTION NO WORK WITH INFECTIOUS MATERIAL

## LACK OF OCCUPATIONAL MEDICINE LETTERS

- INFORMATION NOT FROM OCC MED
- SDS FOR AGENT SHOULD ACCOMPANY VICTIM

## Demonstrate proper spill clean-up

- ✓ Absorbent towels were not placed over spill
- ✓ Not wearing a full face respirator, head cover, coveralls, boots and aprons
- ✓ All exposed surfaces were not wiped or mopped with disinfectant





# ANALYSIS

ASSUMPTION NO WORK WITH INFECTIOUS MATERIAL

- ABSORBENT TOWELS NOT PLACED OVER SPILL
- LACK OF PPE
- EXPOSED SURFACES NOT WIPED



# **Demonstrate proper notification by laboratory staff**

- ✓ **Occupational Medicine was not contacted**

# ANALYSIS

- OCCUPATIONAL MEDICINE WAS NOT CONTACTED**
  - DURING SITE SPECIFIC TRAINING, FOLLOW UP MONITORING AT OCC MED IS DISCUSSED**

# **STRENGTHS**

**PLANNING AHEAD BY HAVING MULTIPLE  
EVALUATORS & DEDICATED PHOTOGRAPHER**

**NEARLY ALL AREAS OF THE  
EXERCISE WERE EVALUATED**



# STRENGTHS



PI COMMUNICATION WITH  
EMERGENCY RESPONDERS AND EH&S  
WAS VERY GOOD

# STRENGTHS



PI RESPONDED LIKE IT WAS A REAL  
LIFE EVENT

HE UNDERSTOOD THE IMPORTANCE OF  
HIS SOPS

# LESSONS LEARNED

- SUBJECT MATTER EXPERTS IN STAGING LABORATORY  
(I.E. SET UP BSC)
- WE DID NOT HAVE ALL THE PPE



QUESTIONS?