

Oklahoma State University

Incident and Emergency Response Plan

Revised April 2017

Certification and Approvals

The Incident and Emergency Response Plan for Oklahoma State University was prepared with the intent of it being compliant with the *Public Health Security and Bioterrorism Preparedness and Response Act of 2002* and 7 CFR Part 331, 9 CFR Part 121, and 42 CFR Part 73. This plan must be reviewed at least annually and revised as necessary.

Signature of Authorized Official

Date

ANNUAL REVIEW VERIFICATION	
VERIFICATION DATE	SIGNATURE
June 2009	
May 2010	
July 2010	
October 2010	
December 2010	
March 2011	
October 2011	
February 2012	
May 2013	
June 2014	
April 2015	
April 2016	
April 2017	

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The *Incident and Emergency Response Plan* has been created as a stand-alone document. If any discrepancies exist between the *Incident and Emergency Response Plan* and the **Oklahoma State University (OSU) Emergency Operations Plan (EOP)**, this plan and the *Lab-Specific Emergency Response Plan(s)* take precedence.

I. PURPOSE

- A. The Incident and Emergency Response Plan is the primary document that shall be used in responses to incidents and emergencies involving select agents and toxins (SATs) at OSU.
1. This plan meets or exceeds those standards of compliance required by:
 - *Biosafety in Microbiology and Biomedical Laboratories (BMBL)*, produced by the United States Department of Health & Human Services (HHS), Centers for Disease Control and Prevention (CDC), and the National Institutes of Health (NIH);
 - NIH Guidelines for Research Involving Recombinant or Synthetic Nucleic Acid Molecules (NIH Guidelines), National Institutes of Health, U.S. Department of Health and Human Services; and
 - 42 CFR Part 73, 42 CFR Part 331 and 9 CFR Part 121.
- B. The purpose of this plan is to provide guidance on:
1. SAT incidents and emergencies occurring at OSU;
 2. the proper methods involved in resolving incidents and emergencies in the safest manner possible while complying with sound biological containment and biosecurity practices; and
 3. procedures to assist in response activities.
- C. Response activities focus on four primary functions:
1. preserving life and minimizing the collateral effects of the incident or emergency;
 2. mitigating and ameliorating the effects of a SAT incident or emergency;
 3. enhancing incident or emergency response and providing assistance to the unified command at the site of an emergency; and
 4. establishing a method of recovery whereby the incident or emergency is contained, the select agent (if present) is accounted for, and the SAT incident or emergency is managed in such a manner as to allow the University to return to normal operations.

II. CONCEPT OF OPERATIONS

- A. The primary objective of a response to any emergency involving any SATs is saving lives.
- B. Task agencies named in this plan have performed or have practiced the duties required to respond to, control, and contain SAT incidents and emergencies.
- C. Response to an incident or emergency involving SATs will require a comprehensive team effort.
- D. The risks of working with SATs are unavoidable, but each individual responsible for overseeing or conducting research activities utilizing SATs will take prudent action to mitigate or reduce the probability of an incident or emergency occurring.
- E. Any response to a SAT incident or emergency requires the application of sound safety and security measures.
- F. The Incident Command System (ICS) is an organizational structure that will be used when responding to SAT emergencies. Personnel from each group or organization involved in the response to a SAT emergency will report to a unified command post and will work together to make decisions on how to respond and mitigate an emergency.

III. TASK ORGANIZATIONS AND RESPONSIBILITIES

Planning for emergency response is the responsibility of all OSU research, safety, medical, fire, and law enforcement personnel. Personnel and/or agencies primarily responsible for planning and coordinating the University's response to a SAT incident or emergency are listed below with a description of specific duties.

- A. The Responsible Official (RO) -- The President of OSU has designated the Vice President for Research as the RO for ensuring that OSU is in compliance with laws, regulations, and guidelines governing SAT research. It is the responsibility of the RO, and his or her management team, to provide guidance to the research staff of the University on the proper methods for control and use of SATs at OSU. The RO must ensure that sufficient resources are available to conduct research involving SATs in a safe environment according to best practices. The RO will oversee notification responses to all state and federal entities. These include, but are not limited to the CDC, United States Department of Agriculture (USDA), National Institutes of Health (NIH), appropriate state and local health agencies, and appropriate funding agencies. Additionally, the RO is responsible for appropriate notification of incidents and emergencies to the University President. The RO has designated the Office of University Research Compliance (URC) within the Division of Research as the primary resource for responses to incidents and emergencies involving SATs.
- B. The Biological Safety Officer (BSO) is an Alternate Responsible Official (ARO) and is assigned to the URC. The BSO will conduct inspections, audits, inventory

reconciliations, training and/or other activities as necessary to ensure compliance with safety, security, and incident/emergency response requirements. The BSO serves as a member of the Incident Command System on emergencies involving SATs and provides information regarding risks to emergency responders. The BSO ensures appropriate notification of the other OSU AROs. The BSO will conduct follow-up investigations of all SAT incidents and emergencies.

- C. Assistant Biological Safety Officer (ABSO) is an ARO and is assigned to the URC. The ABSO assists the BSO in ensuring compliance with safety, security, and incident response requirements. The ABSO serves as a first responder on biological incidents or emergencies involving SATs and ensures appropriate notification of the other AROs. The ABSO will support the Incident Command System.
- D. Biosafety Specialist is an ARO and assigned to the URC. The specialist assists in ensuring compliance with safety, security, and incident response requirements. He/She serves as a first responder on biological incidents or emergencies involving SATs and ensure appropriate notification of the other AROs. The specialist will support the Incident Command System.
- E. Administrative Heads -- Administrative heads of colleges, departments, and other units have primary responsibility for the safety of people, animals, and the environment within their jurisdiction.
- F. Principal Investigators (PIs) and other research staff support the response to SAT incidents and emergencies. University researchers using SATs will comply with safe laboratory standards in the handling and storage of all SATs approved for research at OSU. Researchers will purchase and/or use within their laboratories only those materials specifically approved for use in the handling and storage of SATs. Each researcher using SATs will maintain current and accurate inventory records, with annual review and reconciliation by the BSO. Activities listed below are performed by PIs and are provided here so that incident or emergency responders may understand their duties and responsibilities.
 - 1. PIs and their staff members are responsible for all research activities and associated compliance requirements within their respective laboratories/facilities.
 - 2. PIs are responsible for conducting their research in accordance with protocols approved by the Institutional Biosafety Committee (IBC), and in an appropriate biosafety level laboratory with a current, approved inspection by the IBC.
 - 3. PIs are responsible for the safety of personnel in their respective laboratories/facilities, and ensuring that all personnel have the appropriate training in safety, security, incident and emergency response procedures, inventory management, transfer and notification procedures (in case of loss, theft, or release). This training is in addition to the specific training and approval necessary to conduct experiments utilizing SATs and other biological agents and toxins.

4. PIs are responsible for compliance with biosafety standards for operation at the appropriate biosafety level and for reporting any non-compliance issues to the BSO.
5. PIs engaged in research using SATs will develop and make available to the RO, or his/her designee(s), appropriate standard operating procedures (SOPs) for safety, security, incident response, inventory control, transfer and notification procedures for loss, release, or theft of select agents and toxins. The RO, or his or her designee(s), will make these documents and SOPs available to the Unified Command Staff as necessary to control an emergency or incident involving SATs.
6. PIs shall assist response personnel with developing an action plan for response to incidents and emergencies.
7. When possible, PIs shall report specific information on the situation inside the facility to the incident commander or the unified command post (e.g., what occurred, what material is involved, location of the situation, when the event occurred, missing people, etc.).
8. In the event of a medical emergency inside a SAT laboratory, PIs and laboratory personnel should begin decontamination of the patient(s) and start life saving measures prior to first responder arrival, provided there is no risk to the staff.

G. Oklahoma State University Police Department (OSUPD)

1. Provides guidance on security operations dealing with SATs.
2. Monitors and responds to alarms originating from SAT labs/facilities. Responds to intrusion detection system (IDS) alarms within 15 minutes.
3. Responds to other emergencies in SAT labs/facilities, provides inner and outer zone security and entry control at emergencies involving SATs.
4. Sets up the Unified Command System in coordination with SFD.
5. Evacuates, cordons off, or secures areas as necessary to facilitate recovery and mitigation activities.
6. Sets up cold and hot zones in accordance with the recommendations of the Unified Command team.
7. Investigates all incidents and emergencies if a crime is suspected or terrorist act occurs.
8. Coordinates with other law enforcement agencies as necessary.
9. Reports any suspected bioterrorism attacks to the Federal Bureau of Investigation (FBI).

H. Stillwater Fire Department (SFD)

1. Operates under the unified command in coordination with OSUPD outside the building where the emergency has occurred. The command post will be outside the HOT zone (hazardous area).
2. Coordinates with key personnel to understand the risks posed by the emergency.
3. Maintains the capability for gross decontamination in order to respond to campus incidents and emergencies when decontamination is needed.
4. Carries out decontamination procedures when called on to respond, once the proper decontamination procedure(s) has been determined and the On-Scene Incident Commander designates an area for the decontamination process to begin.
5. Works with the PI, BSO or other personnel to rescue and decontaminate the injured persons once there is reliable information regarding the situation and the risk posed by the emergency.
6. Works with OSU personnel to neutralize the emergency, as warranted and feasible.

I. LifeNet ambulance service

1. Provides an agency official to the Unified Command System when circumstances warrant.
2. Transports injured personnel to Stillwater Medical Center (SMC) or another appropriate facility as determined by emergency personnel.

J. University Health Services (UHS)/Stillwater Medical Center (SMC)

1. Coordinates medical response with on-campus entities.
2. Provides appropriate information, as needed, to SFD and/or LifeNet ambulance service and notifies city-county/state medical authorities as necessary.
3. Provides data as required to state/local agencies.
4. Provides a licensed physician to the Incident Command Post or on-site, as warranted and feasible.
5. Emergency medical responders shall provide on-site emergency medical treatment/first aid only after personnel have been decontaminated unless immediate action is necessary to save an individual's life/limb. Decontaminated personnel will be triaged and evacuated to UHS or SMC based on the severity of their injuries and the availability of bed space within the facility.

K. Emergency Operations Center (EOC)

The Campus EOC is the area where key members of the response and university gather to share information, control emergencies, coordinate resources and determine protective actions. Activation of the Campus EOC is at the discretion of the OSU President or an Emergency Operations Center Group (EOCG) Member. The EOC serves as the central command and control facility responsible for carrying out the principles of emergency preparedness and emergency management, or disaster management and functions at a strategic level during an emergency situation, and ensuring the continuity of operations at OSU. The EOC will be activated during emergencies that involve SATs that require a prolonged response. The EOC will be activated in the event of a prolonged biological emergency and will provide a central location from which the OSU Administration can provide interagency coordination and executive decision making in support of the emergency.

The EOCG:

1. is chaired by the Emergency Operations and Preparedness Manager;
2. consists of various OSU personnel;
3. is responsible for defining the means and methods of an emergency response system that will ensure that the campus is prepared to respond to SAT incidents and emergencies; and
4. provides guidance and recommended action to the OSU President and the Campus Emergency Operations and Preparedness Manager on campus policy related to the incident (i.e. campus closure, legal/liability issues, parental notification, media response, and other similar areas of responsibility).

L. Risk Management

1. Provides guidance to the SAT program to ensure the protection and preservation of human, physical, and financial assets.
2. Assists in emergency mitigation planning.
3. Assists with post incident or emergency management.

M. OSU Information Security

1. Provides guidance to the College/Department IT Manager/Systems Administrator to assist with the protection of SAT information.
2. Will have primary responsibility for any information security incident.

N. Facility Managers (e.g., Facilities Management personnel, building maintenance personnel, etc.)

1. Provide support during emergencies involving SATs, when appropriate.
2. Will have primary responsibility for building systems (e.g., HVAC, plumbing, etc.) and will help guide decisions regarding operation of these systems.

O. Facilities Management (FM)

1. Alarm technicians within FM will have primary responsibility for maintenance and repair of IDS systems protecting spaces in which tier 1 SATs are used and/or stored.
2. Alarm technicians will be dispatched immediately, including after hours and on weekends, for any failure of IDS systems protecting spaces in which tier 1 SATs are being actively used or stored. If FM alarm technicians are not available, FM will contact an alarm contractor for support (see page 16 for additional information).

IV. DIRECTION AND CONTROL

- A. A follow-up investigation of any biological incident or emergency will be conducted by the BSO.

A follow-up document identifying deficiencies, violations of policy, failures in training, recommended corrective actions, and other pertinent information will be written.

1. A copy of the follow-up document will be:
 - a. filed in the PI's file; and
 - b. maintained by the BSO in the records system for the Select Agent Program in the URC.
2. The BSO will provide a copy of the final follow-up report to the RO, the other entity AROs, and the IBC.
3. The IBC shall determine from the follow-up report whether to recommend termination of the research based upon the deficiencies noted. The RO has ultimate responsibility for decisions to terminate research.

- B. Each laboratory's incident and emergency response plan must fully describe the response procedures for addressing the theft, loss, or release of a SAT, inventory discrepancies, security breaches (including information systems), severe weather, and other natural disasters, workplace violence, bomb threats, suspicious packages, and emergencies such as fire, gas leak, explosion, power outage, etc. The response procedures must account for hazards associated with the SAT and note the appropriate

actions to be taken to contain the SAT. Laboratory personnel must be trained annually on the laboratory's incident and emergency response plan.

V. RESPONSE PROCEDURES FOR INCIDENTS AND EMERGENCIES IN SAT LABORATORIES

Laboratory incidents can include biological spills, exposure to a select agent or toxin, and select agent or toxin inventory discrepancies. Laboratory emergencies can include fires, explosions (with and without an accompanying fire), gas leaks, and the theft or loss or release of a select agent or toxin. Laboratory emergencies require the response of emergency personnel in addition to other responders. The type of event, incident or emergency, will dictate which personnel and/or agencies need to be contacted. Details for each type of incident and emergency are included in this section. It is important to note that an incident can turn into an emergency if the situation escalates.

A. Dialing 911

When emergencies occur, it is critical that laboratory personnel react quickly to any situation by securing work areas, closing all doors, reporting the emergency to 911 operations immediately and providing situation information for emergency responders. Calls to 911 from campus telephones are answered by the OSUPD Dispatcher. However, calls to 911 from off-campus telephones and from cell phones are answered by the Stillwater Police Department, which forwards these calls to the OSUPD Dispatcher. If you call 911 from an off-campus telephone or cell phone, communicate that you are calling about an emergency on the OSU campus. OSUPD can be reached directly at 405-744-6523 from an off campus phone.

B. Emergency Severity

To assist emergency responders, laboratory personnel must provide responders with an indication of how serious the event is. The responders need to know what has occurred. Every emergency reported by laboratory personnel must include a description of the event, the laboratory biosafety level, the biological agents or toxins that are involved and one of the following laboratory situation codes:

Code Green

The emergency involves no risk to responders. The laboratory situation is normal.

Code Yellow

The emergency involves a situation inside a laboratory area that involves a health or safety risk to emergency responders. However, the emergency is contained inside the laboratory area and does not present a hazard outside the laboratory containment area. Containment measures are operating normally.

Code Red

The emergency is a health or safety risk to emergency responders and everyone in the building because the material is not contained by the building's systems. Uncontrolled fires are a Code Red emergency in any event.

Following are examples of how emergencies should be reported

Reporting party: *"This is Jane Doe at B52 Boomer Hall. We have a person here with chest pains and we need an ambulance. This is a BSL-2 lab. This is a Code Green emergency."*

Reporting party: *"This is John Doe at 747 Hanger Hall. We have had a small flask of an infectious agent shatter and cut one of our laboratory researchers. We have the bleeding stopped, but the researcher is still in the lab because of the spilled material. The agent is contained in the BSL-3 lab. Everyone else is out of the area. This is a Code Yellow emergency."*

Reporting party: *"This is Orville Wright at 1903 Flyer Hall. We have a fire in a Biological Safety Cabinet (BSC). Everyone has evacuated the room, but the fire is out of control. This is a Code Red emergency."*

C. **R.A.C.E. Model**

When confronted with fire, laboratory personnel should follow the R.A.C.E. model:

1. **Rescue** those in immediate danger, without becoming a victim;
2. **Alarm**, activate the nearest pull station or call 911;
3. **Contain** the fire or incident by closing doors; and
4. **Extinguish** the fire if you are trained to do so and it is a small fire. Otherwise, evacuate the fire area.

D. **Evacuation Routes and Procedures for Laboratory Personnel**

Emergencies that may require evacuation include but are not limited to bomb threats, chemical spills, civil disturbances, earthquakes, explosions, fires, gas leaks/eruptions, severe weather (tornadoes, high winds, lightning strikes, etc.) and other natural disasters, terror-related events, and workplace violence.

Upon notification of an emergency that requires evacuation, laboratory personnel will, **if possible:**

1. Immediately cease laboratory procedures and secure the work area.

2. Decontaminate and remove all containers of SAT materials from biological safety cabinets (BSCs) and place these in autoclaves, incubators, refrigerators, or freezers as quickly as possible, if appropriate.
3. Leave BSCs on if they were operating at the time of the emergency.
4. Turn off all gas burners.
5. Leave laboratory containment ventilation systems on.
6. Decontaminate and remove Personal Protective Equipment (PPE) when exiting the lab following lab specific procedures if time permits. If PPE cannot be removed before exiting the lab, remove PPE as soon as possible.
7. Evacuate the building as quickly as possible following your lab specific evacuation plan and assemble as a group in your designated meeting point outside the building and stay together. The lab specific evacuation plan should have the following information:
 - a. primary and secondary exits; and
 - b. designated meeting spot and alternate spot in case the designated spot is unsafe.
8. If a person cannot evacuate, then that person should seek an Area of Refuge. Such an area would preferably have the following:
 - a. telephone;
 - b. sprinkler system; and
 - c. one-hour fire-rated assembly (i.e., fire-rated door, walls, ceiling).
9. Laboratory personnel evacuated from the building in an emergency who may be contaminated with an infectious agent due to an exposure or release are to:
 - a. prevent others from becoming exposed or contaminated;
 - b. take self-protective measures by removing contaminated clothing if possible and place in garbage bags for autoclaving; and
 - c. wait for emergency decontamination by SFD.

Note: In accordance with The Right to Know, the individual(s) will notify first responders of the potential risk associated with treating a person contaminated with an infectious agent. Personnel shall then shower and don clean clothes/scrubs.

10. Laboratory personnel should NOT REENTER THE BUILDING FOR ANY REASON, unless it is deemed safe for someone to reenter in order to grant the first responders access. If anyone is missing, this must be noted and the unified command post must be informed immediately.
11. Laboratory/equipment may need to be cleaned and then decontaminated following an emergency, as well as an incident.

E. Evacuation and Emergency Procedures for Emergency Responders

1. The Unified Command team secures the surrounding areas, assesses who or what is involved in the emergency, and makes the evacuation decision based in part on input from the lead researcher or OSU's RO, or his or her designee, about: 1) the best action to take (e.g. evacuate or shelter in place); 2) the method of evacuation; and 3) exit route assignments. Still, laboratory/facility personnel may have already evacuated and notified colleagues to also evacuate based on circumstances. All personnel evacuating a laboratory/facility shall move at least 100 feet "upwind" from the building.
2. Where evacuation occurs from a hot zone (see page 5 for additional information) or where the evacuated individuals may have been subject to exposure, decontamination and medical evaluation may be necessary. If so:
 - a. separate persons contaminated or exposed to hazardous materials from other individuals;
 - b. attempt to identify all those who were exposed; and
 - c. conduct gross decontamination, if possible, prior to transport or evacuation.
3. Once evacuated, no one is to enter the facility without direction from the command post.

F. Site Security & Control

An area outside of the hot zone, contaminated area, shall be cordoned off and access restricted to emergency personnel as directed by the Unified Command. The OSUPD will secure the inner and outer perimeter. A command post will be set up outside the building and outside the HOT zone. The unified command coordinates with key personnel to understand the risks posed by the emergency. OSU personnel will escort emergency responders who do not have access to the SAT facilities. SFD, in conjunction with OSU personnel, will then perform tasks related to rescue (i.e., removal from the danger zone) and decontamination. LifeNet will provide medical treatment and transport for injured persons. All parties involved will then work together to stabilize the emergency.

G. Theft or Loss of a SAT

1. Upon discovery of the theft or loss of a SAT (including any animals, arthropods, or plants intentionally or accidentally exposed to or infected with a SAT), it is the responsibility of the PI and his/her research team to immediately notify the OSUPD, the facility security manager, and URC personnel. URC personnel will notify the RO.
2. Appropriate University and non-University personnel will investigate the theft or loss and report findings to the RO, the appropriate PI, and external agencies as required.
3. If it is determined that a SAT(s) was stolen or lost, the RO will immediately notify personnel in the CDC's Division of Select Agents and Toxins according to the requirements of the Select Agent Final Rule, the Animal and Plant Health Inspection Service (APHIS) (if applicable), and appropriate Federal, State, and local law enforcement agencies. APHIS/CDC Form 3 will be submitted to the CDC within seven calendar days of the discovery.
4. When investigating the theft or loss of a SAT, appropriate PPE must be worn. The laboratory's standard operating procedures (SOPs) must be followed. Proper precautions must be taken to secure all remaining SATs.

H. Suspicious Packages and SATs

1. The following characteristics make a package suspicious:
 - a. oily stains, discolorations, crystallization on wrapper;
 - b. excessive tape;
 - c. strange odor;
 - d. incorrect title or addressed to title only;
 - e. rigid or bulky;
 - f. lopsided or uneven; and/or
 - g. protruding wires.
2. All packages/materials deemed to be suspicious must be reported to the individual's supervisor, to the RO and/or the AROs, and to the OSUPD immediately. OSUPD will gather information and contact other appropriate entities to assist in the response.
3. OSUPD will have the package/material removed from the facility in an appropriate manner, as determined by the appropriate first responder(s). OSUPD will conduct an investigation. The package will be properly disposed of if it is appropriate to discard it.

I. Workplace Violence and SATs

1. OSU strives to provide a safe and secure workplace. Per University policy (Workplace Threats and Violence 3-0523), all instances of workplace violence and serious threats that a reasonable person would consider potentially dangerous, either made against them or witnessed by them, must be immediately reported to the employee's supervisor, the Office of Human Resources, or any other administrative unit management official. In addition, the OSUPD must be notified immediately.
2. Issues of workplace violence and threats will be handled according to OSU policy #3-0523.
3. A Threat Assessment Team may be activated.

J. Bomb Threats and SATs

1. Bomb threats are a remote possibility given that the University possesses SATs and uses animals in research.
2. Bomb threats will be handled according to University policies and procedures.
3. All bomb threats will be reported immediately to the OSUPD, which will notify other internal and external first responder units, as deemed appropriate.
4. If the bomb threat is deemed credible, the unified command will direct an evacuation of the building(s) in accordance with evacuation procedures described in this plan.
5. The OSUPD will handle the investigation, in conjunction with other entities if appropriate.

K. Flooding

Management of a flood in SAT facilities presumes that water is not contaminated since all research materials should be secured. If it is known that this is not the case then the BSO must be informed immediately. At the first indication of any flooding within a high containment area, the BSO must be notified immediately. The general procedures listed below should be followed for floods in all laboratories.

1. Secure research materials.
2. Decontaminate work area.
3. Remove all materials or equipment (as applicable) from the floor.
4. Move any equipment likely to get wet (if possible).
5. Properly exit the facility.

No one is to enter the flooded SAT facility without direction from unified command, and without waterproof boots, gloves, and other appropriate PPE. Any noted structural damage must be reported to OSU Risk Management.

L. Structural Damage

Following an earthquake or any other event that may affect the structural integrity of SAT spaces, laboratory personnel should inspect the laboratories for structural damage. In the event that structural damage occurs to one of the buildings that houses a SAT area, the initial steps noted below are to be followed unless individuals feel their safety is threatened (at which point they should immediately seek safety):

1. Secure all research materials.
2. Properly exit the facility.
3. Immediately notify OSUPD and the BSO.

Any structural damage should also be reported to OSU Risk Management and Facilities Management once the situation has been evaluated.

M. Tornados

If the weather is favorable for tornados and a tornado watch has been issued, lab personnel are to let someone know if they will be performing SAT work. In some SAT spaces, it is hard to hear a tornado warning. Should the tornado watch turn into a tornado warning, the notified person should inform the SAT worker that a warning has been issued and that the individual needs to evacuate the lab and seek a weather refuge area.

If time allows, the following precautions should be taken by SAT researchers in the event of a tornado warning:

1. immediately cease laboratory procedures and secure the work area;
2. decontaminate and remove all containers of infectious materials from biosafety cabinets and place these in autoclaves, incubators, refrigerators, or freezers as quickly as possible, if appropriate;
3. leave biosafety cabinets on if they were operating at the time of the emergency;
4. turn off all gas burners;
5. leave laboratory containment ventilation systems on;
6. follow the normal exit procedures for the room; and
7. go to the nearest severe weather refuge area.

N. Loss of Negative Pressure in a SAT Facility

1. Secure all research materials.
2. Properly exit the space, then immediately seal the space by taping the door and vents to prevent air from leaving the space.
Note: Loss of negative pressure in the ABSL-3 animal facility may result in immediate facility evacuation depending on the types of projects in progress.
3. Immediately notify OSUPD and the BSO.
4. Once the negative pressure is restored, the tape should be removed from the door and vents.
5. The RO or an ARO will notify APHIS/CDC immediately if the BSC was in use and was affected when pressure was lost. APHIS/CDC Form 3 will be submitted by the RO/ARO within 7 days to the CDC.
6. The BSO will work with the PI responsible for the space to develop a plan for decontamination of the space if necessary prior to anyone reentering.

O. Intrusion Detection System Alarms

1. OSU SAT facilities in which tier 1 SATs are used or stored employ intrusion detection systems (IDS) that are monitored 24 hours a day by personnel who are qualified to evaluate the alarm and alert OSUPD.
2. OSUPD will respond to alarms originating from tier 1 SAT spaces within 15 minutes. In the event of a disaster (i.e., earthquake, tornado, flood), OSU police officers will respond to such alarms as soon as feasibly possible, unless tier 1 spaces are involved.
3. OSU Police officers will remove all unauthorized individuals from the SAT lab/facility and conduct an investigation to determine who the individual(s) is and why he/she is in the facility.

P. Failure/Malfunction of Intrusion Detection Systems

1. In the event of a power failure, OSUPD will be notified once backup battery power to the IDS alarm panel fails. OSUPD will then notify biosafety personnel using the emergency call tree.
2. Biosafety personnel, or other designated responders, will contact FM Work Control if the IDS alarm panel malfunctions.

3. Upon notification, FM alarm technicians will be dispatched to assess the system and make any needed repairs.
 - a. Alarm technicians will be dispatched immediately (i.e., on weekends, evenings, etc.) for any failure of IDS systems protecting spaces in which tier 1 SATs are being actively used or stored.
 - b. Alarm technicians will respond during normal working hours to the failure of IDS systems protecting inactive SAT spaces where SATs are not stored (i.e., Monday-Friday, 8:00 a.m.-5:00 p.m.).
 - c. If FM alarm technicians are not available, FM will contact an alarm contractor for support.
4. Buildings housing tier 1 SAT spaces impacted by IDS failures will be added to the OSUPD patrol roster for more frequent patrols until the affected IDS systems are returned to their active status.

Q. Medical Emergencies

1. Dial 911 for on-site emergency assistance.
2. If you are unable to use a phone, activate the medical alarms (CVHS facilities only). The medical alarm will send a signal to OSUPD that a medical alarm has been activated in a SAT space and the appropriate call tree will be employed to notify emergency responders. When a medical alarm is activated, red lights will flash but there is no audible alarm.
3. Individuals trained on decontamination procedures (e.g., the PI, other laboratory personnel, BSO, ABSO, etc.) should don the appropriate PPE, decontaminate the individual, move the individual to an area where emergency responders can access the patient (stretchers are available in emergency PPE boxes to assist in moving a patient), and remove the patient's PPE (scissors for cutting off clothing are located in the emergency PPE boxes that are available at each SAT lab/facility).
4. Trained individuals should administer first aid while waiting for emergency responders to arrive. If available, use Safety Data Sheets (SDS) as guidance for appropriate first aid for the agent and situation. It is recommended that personnel working in SAT laboratories receive CPR and First Aid training.
5. Emergency responders will transport the decontaminated individual, and the relevant SDS, to UHS or SMC depending on the patient's needs.

VI. INCIDENTS IN BIOSAFETY LABORATORIES

A. Managing Biological Spills

All SAT spills that occur outside of primary containment (i.e. BSC), must immediately be reported to the BSO. The spill should be cleaned up using an appropriate disinfectant, proper PPE should be worn while addressing the spill, and steps should be taken to protect other personnel and the environment from exposure. If a spill occurs outside of primary containment, the laboratory space should also be decontaminated using an appropriate method. The Biosafety Plan and lab specific plans contain specific procedures for cleaning up a spill and for decontaminating a laboratory. The procedures for reporting a release of a select agent or toxin outlined in this plan will be followed.

B. Personal Exposures

1. Remove all contaminated PPE and/or clothing and place in a biohazard bag.
2. Treat the exposed area of the body.
3. Warn others in the lab.
4. Seek medical attention at UHS or SMC if the exposure occurs after hours.
5. Follow the procedures for reporting a release of a SAT, outlined in this plan.

C. SAT Inventory Discrepancies

1. PIs are responsible for maintaining an up-to-date incident and emergency response plan, to include a full description of the response procedures for inventory discrepancies as well as the reporting of those discrepancies to the URC.
2. If at any point irreconcilable inventory discrepancies are found, it is the responsibility of the principal investigator to 1) immediately notify the URC and OSUPD, 2) to prepare a written explanation of the discrepancies, and 3) to attach the written explanation to the inventory documents.
3. If an inventory discrepancy is found to be the result of theft or loss (an irreconcilable discrepancy), the RO or an ARO will immediately notify personnel with the CDC's Division of Select Agents and Toxins and appropriate Federal, State, and local law enforcement agencies. APHIS/CDC Form 3 will be submitted to the CDC within seven calendar days of the discovery.

D. Release of a SAT

1. Upon discovery of a release of a SAT causing occupational exposure or release of a SAT (including any animals, insects, or plants intentionally or accidentally exposed to or infected with the SAT) outside of the primary barriers of the biocontainment

area, the PI or a member of his/her research team must immediately notify the BSO, and dial 911 to activate the SAT call tree. URC personnel will notify the RO.

2. If appropriate, the lab/facility will be evacuated. The on-site unified command will direct the evacuation, in accordance with procedures described in this plan.
3. If appropriate, medical personnel affiliated with UHS and/or the SMC will be notified.
4. The RO will immediately notify personnel with the CDC's Division of Select Agents and Toxins according to the requirements of the Select Agent Final Rule (42 CFR 73) and appropriate Federal, State, and local agencies. In addition, APHIS/CDC Form 3 will be submitted to the CDC within seven calendar days of the release.
5. Appropriate University and non-University personnel will investigate the release and report findings to the RO, the appropriate PI, and appropriate external agencies as needed.
6. When investigating the release of a SAT, appropriate PPE must be worn. The laboratory's standard operating procedures must be followed. Proper precautions must be taken to contain and secure all remaining SATs.

E. Security Breaches and SATs

1. Access is restricted to OSU's SAT facilities. A restricted key access procedure has been implemented for SAT laboratories. Each registered laboratory/facility where SATs are to be used and/or stored has been re-keyed to remove it from the campus master key access program. All laboratory personnel must be approved for access via the Department of Justice (DOJ) background screening process (i.e., security risk assessment) before a key or key card will be issued (additional Personnel Suitability Assessment clearance required for tier 1 labs).
2. Individuals are required to immediately report the loss or theft of keys or key cards to the BSO and the appropriate individuals who control access for the space. Access rights will be immediately addressed/deactivated.
3. Suspected security breaches, suspicious activity, and unauthorized personnel must be reported immediately to the OSUPD by calling 911. OSU police officers will remove unauthorized personnel from the facility and conduct an investigation to determine who the individual(s) is and why he/she was in the facility.
4. When investigating security breaches, appropriate PPE must be worn. The laboratory's/facility's standard operating procedures must be followed. Proper precautions must be taken to contain and secure SATs.

F. Information System Incident Response and Recovery

1. Information systems containing SAT information must be protected in order to prevent unauthorized access to SAT information by unauthorized individuals. As

such, it is the responsibility of the College/Department IT Manager/Systems Administrator to provide security measures in accordance with OSU's Biosecurity Plan. In the event that the PI does not have an IT Manager/Systems Administrator, the PI will be responsible for the overall security of the information system in accordance with the Biosecurity Plan.

2. Suspected information security breaches must be reported to the RO/AROs immediately within 30 minutes of when the breach is identified. The OSU Information Security Office, working with appropriate stakeholders, will determine the validity of the incident and analyze the information system in order to determine the root cause of the breach.
3. In the event that the information system has been compromised, the IT Manager/Systems /PI will restore the data via backup SAT information. The restored information will be placed on a secure information system in accordance with OSU's Biosecurity Plan.

G. Power Outage

If a power outage affects primary containment devices (i.e. BSCs) in any laboratory, evacuate the laboratory following the steps listed in this plan. In addition:

1. Open the laboratory door as little as possible and as briefly as possible to exit.
2. Proceed to the nearest phone to notify maintenance and the BSO.
3. Do not re-enter the laboratory until the BSO or building maintenance personnel deem it safe to do so.

A power outage will remain an "incident" for the first 90 minutes. Once 90 minutes have passed, emergency procedures may need to be initiated. Employees may need to evacuate the building because the battery operated life safety lighting will only remain powered for 90 minutes. Once power is restored or a BSC is restored to normal function, employees should don protective clothing as usual, prior to entering the facility. Once inside the laboratory, surface decontaminate any areas where contamination may have occurred. Decontaminate entire inner surface of the BSC before resuming work. If SATs were being worked with in the BSC and it alarmed due to power failure or malfunction, APHIS/CDC must be contacted immediately and the APHIS/CDC Form 3 – Report of Theft, Loss, or Release must be submitted within seven days by the RO or ARO.

[Information Redacted]

H. Suspicious Persons or Activities and SATs

1. A suspicious person is any individual who has no valid reason to be in or around the areas where SATs are possessed and/or used.

2. Suspicious activities or behaviors include the following:
 - a. presence in secure spaces without authorization;
 - b. deliberate or routine violation of security or safety procedures;
 - c. threats of harm to people;
 - d. inability to properly account for material;
 - e. alteration of inventory records; and/or
 - f. demonstration of nervous or evasive behavior.
3. All persons or behaviors deemed to be suspicious must be reported to the individual's supervisor, to the RO and/or the AROs, and to the OSUPD immediately.
4. OSUPD will aid in removal of unauthorized individuals. All incidents involving suspicious activities or behaviors will be investigated by the BSO and/or OSUPD.

I. Failure of a Validated Inactivation or Agent Removal Procedure

1. Any failure of a validated inactivation procedure or any failure to remove viable agent from material must be reported immediately to the RO and/or AROs.
2. The BSO will investigate the incident to determine the reason for the failure. If the BSO is unable to determine the cause for the failure, it will be reported to CDC/APHIS.
3. The inactivation or select agent removal failure will be reported to CDC/APHIS immediately if the material has already been moved to another location.

VII. PLAN DEVELOPMENT AND MAINTENANCE

The RO will engage appropriate internal and external stakeholders to review and revise this plan at least annually and after an incident. Specifically, in order to test and evaluate the effectiveness of the University's Incident Response Plan, a tabletop exercise or drill will be conducted at least annually. All drills and/or tabletop exercises will be subjected to after action analysis to identify if any changes to OSU's Incident Response Plan are warranted.

VIII. RECORD RETENTION

All records/documents pertaining to SATs will be maintained for at least three (3) years, as required by 42 CFR 73.17(c) unless the records/documents pertain to the Institutional Biosafety Committee's (IBC) review of research protocols pertaining to SAT use, as these documents must be permanently retained as required by the State of Oklahoma's General Records Disposition Schedules for State Universities and Colleges. Thus, each PI will maintain laboratory/facility specific records/documents accordingly. The Office of University Research Compliance will maintain all records related to biological safety on campus in accordance with pertinent laws, regulations, and statutes.

IX. EMERGENCY MANAGEMENT ROLES, CONTACT AND AUTHORITY

It is the responsibility of the President and CEO of OSU and his/her leadership team to undertake comprehensive management of emergencies in order to protect life, property, and the environment from the effects of hazardous/life-threatening events. The OSU EOP is based on the assumption that emergency functions performed by various University and non-University groups responding to emergencies will generally parallel their normal day-to-day functions. Task organization, task assignments, and responsibilities for emergency management and response are described in detail in the OSU EOP.

Personnel roles and lines of authority and communication for the OSU SAT Program are listed in the SAT Call Tree. To activate the SAT Call Tree, dial 911 from a campus phone or 744-6523 from an off campus phone to reach OSU PD Dispatch directly. 911 calls from off-campus phones and from cell phones go to the Stillwater Police Department, who must forward the call to the OSU Police Dispatcher.

In addition to the contacts listed in the SAT Call Tree, the following individuals may also need to be notified:

[Personal Contact Information Redacted]

When an emergency exceeds the University's capability to respond, or the capability of the SFD or LifeNet ambulance services, assistance from the state government will be requested through the Oklahoma Emergency Operations Center at 405-521-2481 (non-emergency) or 800-800-2481 (bonafide emergency only) by OSU's Emergency Operations and Preparedness Manager.

Authority: Authority to act is inherent in each of the offices and individuals involved in responding to incidents and emergencies. Oklahoma State University is committed to the development, maintenance, and support of a comprehensive plan for the research community that has as its primary purpose the safety of all individuals who deal with, control, research, or come in contact with biological agents, toxins, or hazardous chemical substances. Oklahoma State University is committed to ensuring that all activities of a potentially biologically hazardous nature are conducted safely. All University research faculty, staff and associated students will engage in prudent practices necessary to protect people and the environment from biological hazards through conformance with the biological regulations, policies and guidelines of our University, state and nation.

X. REFERENCES

Biosafety in Microbiological and Biomedical Laboratories (BMBL) CDC/NIH,

42 CFR Part 73, 42 CFR Part 331 and 9 CFR Part 121 "Possession, Use, and Transfer of Select Agents and Toxins, Final Rule"

Public Health Security and Bioterrorism Preparedness and Response Act of 2002

Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001 (USA PATRIOT ACT)

Oklahoma State University Policy 3-0522, Bomb Threats, July 1998.

Oklahoma State University Policy 3-0523, Workplace Threats and Violence, June 1998.

Letter of Promulgation. Oklahoma State University Emergency Operations Plan.

XI. PERSONAL PROTECTIVE AND EMERGENCY EQUIPMENT

Laboratory Specific Inventory - Available Personal Protective & Emergency Equipment

A First Responder PPE box is located in the anteroom for each select agent laboratory/facility and contains the following:

- Tyvek suits with hoods and feet
- N95 respirators
- Gloves (Nitrile and Latex)
- Shoe covers
- Goggles
- Zip lock bag for radio
- Scissors
- Emergency stretcher

Additional PPE may be available in each space for use during an emergency:

[Laboratory-Specific Information Redacted]