

**The University of South Alabama
Emergency Response & Recovery Plan**

Appendix 1: Incident Response Plan

Revised: July 2008

APPENDIX 1

73.12 Emergency Response Plan for Select Agents [SA] Management.

1. Access to laboratories handling Select Agents [SA] at the University of South Alabama is limited to individuals with appropriate security clearance and training. SAs are specifically regulated pathogens [microbes or infectious entities capable of causing diseases] and selected toxins that could theoretically be used in acts of bioterrorism on human, plant or animal populations. The registration, handling, culture, security, transport and disposal of SA or toxins are highly regulated by Law. These microbes or agents are regulated by the Department of Health and Human Services, the U.S. Department of Agriculture, and the Department of Homeland Security.

Restricted access into the BSL-3 containment laboratories where SAs are used is facilitated by the isolation of the facility away from other facilities on the main campus. The Biosafety and Biosecurity Plans delegates responsibility for containment and security to supervisors (Principal Investigators) and personnel approved to work with the SA. It discourages intervention of outside emergency responders within the laboratories. Should an accidental release or occupational exposure occur within the isolated building, the Principal Investigators hold the premise that the lab managers and approved individuals with the required training that operate the facility have the best know-how and decontamination materials to control such situations and confine the SA. This decision is complemented by the existence of antibiotic treatments for exposed individuals that can limit the spread and morbidity of the SA used in the laboratory. **All accidental releases or occupational exposures are immediately reported to CDC via Form 3.**

2. The University of South Alabama registers all required SA's listed by the CDC and USDA kept on our campuses as well as other human and animal pathogens which can cause infectious disease in humans, animals and plants. Laboratories where BSL-3 ranked SAs are kept on university property are in compliance with federal statutes and University biosafety requirements. Likewise, all toxins covered by the new SA/toxin statute(s) would be registered in compliance with these statutes if they were in use. Management criteria set forth by these statutes have been fully instituted. The basis of our planning is that the controlled access, select agent BSL-3 lab is a functional containment facility capable of preventing accidental release to the outside environment, while providing controlled access and substantially limiting potential theft or intentional release of the SA's and toxins by terrorists.

The following flow chart outlines the entity's response procedures for the theft, loss or release of a SA.

**Reporting Procedures for the
Loss, Theft or Environmental Release of SA**

NOTIFY Principal Investigator (PI)

If PI unavailable, contact
Designated Lab Manager (DSL)

The PI or DSL notifies the Responsible
Facility Official (RFO) to report incident

Notify University Police
to report incident @ 511

Lab personnel within the BSL-3 area will remain until released by proper authorities. All experimental protocols will cease and any SA under study placed within biological safety cabinets until directed by the proper authorities to destroy or secure.

No individuals will be allowed to enter the lab unless requested to do so by PI or DSL or law enforcement personnel

The RFO will contact appropriate authorities at the CDC to report the incident

Internal review of lab procedures is required following theft/loss to prevent recurrence of theft/loss. The review must be documented

3. Regarding site security and control, the University has an integrated laboratory emergency plan with facility-wide planning in the event of illegal invasion of facilities, bomb threats, severe weather, earthquakes, power outages, and other natural and man-made disasters and is an important component of safety planning within the university.
4. Emergency planning for SAs includes input from the University Safety Committee, Biosafety Committee, maintenance representatives, and university officials (e.g., University Police) responsible for emergency planning.
5. Emergency planning has provisions for emergency notification of and response by laboratory and animal facility directors, laboratory workers, university safety officials, and other persons requiring notification should an emergency or terrorist act arise.
6. Emergency planning for the safe management of SAs has and will continue to involve advanced coordination with University Police, local police, city fire department and rescue representatives. Shut down procedures designed to prevent release of SAs are well known to all authorized employees. Meetings will be held annually with University Police for review of the incident response plan
7. The use of SAs is restricted to the Laboratory of Molecular Biology [LMB], a facility designed in cooperation with the Centers for Disease Control as a Biosafety Level 3 containment facility. This facility is isolated on the main campus and is subject to inspection by CDC and compliant with all federal regulations. The SA in use at the LMB is registered and monitored annually by the USA Institutional Biosafety Committee.
8. If the situation should demand removal of SA from the LMB, the protocol currently in place involves the use of a decision tree where the first branch is to consider the possibility of safe transfer and storage within the BSL-3 animal vivarium at the MSB. If this facility is unavailable or compromised then the SA would be shipped to the SA temporary repository designated by the CDC for safe holding.
9. The Institutional Biosafety Committee reviews annually all BSL-3 management procedures and conducts on-site visits to determine full compliance with federal statutes and CDC regulations and guidelines. Accidents occurred during personnel handling of SAs or any accidental release of the SA within the LMB facility are continuously monitored by the PI and RFO and appropriate records are kept on file when such instances occur.
10. The DHHS and the USDA will be notified of any accidental release or theft of SA in compliance with federal statutes, including local and state authorities.



Contact Information

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Personnel Roles and Lines of Authority

The Principal Investigators listed above, answerable to the Responsible Facility Official, are responsible for the safety and security of the SA located within the Laboratory of Molecular Biology. All individuals that work with the SA, under the direction of the Principal Investigators, are responsible for following the biosafety and security regulations that are designed to contain the SA. All individuals that work with the SA are aware that PIs are immediately informed in the event of any incident involving the SA. The PIs then coordinate with the RFO/AFO to ensure that the proper authorities are informed and documentation is filed.

Planning and Coordination with Local Emergency Responders

Procedures for the containment and security of the SA are reviewed with the Responsible Facility Official (RFO), Alternate Facility Official (AFO) and University of South Alabama Police Department. The names and contact information of the Principal Investigators and Laboratory Managers have been submitted to the USA Police Department and a priority call list prepared. The University Police shall be notified immediately upon verification by the Principal Investigator of an emergency incident by dialing 511. Response to specific scenarios/drills involving potential emergency situations will be reviewed annually with campus security.

Emergency Medical Treatment and First Aid

All medical emergencies requiring paramedics: dial University Police at 511. University Police will coordinate response by Mobile Fire Department. Minor medical emergencies requiring first aid or assistance: call University Police at 511. If a serious injury or illness occurs, immediately dial 9-911. Give your name describe the nature and severity of the medical problem and the campus location of the victim.

Any injury to a laboratory worker shall be reported immediately to the Principal Investigator or Laboratory Manager. Administration of first aid should be performed outside of the lab if the injured person is ambulatory. In the event of a biological exposure, the exposed individual should seek medical attention by the Occupational Health Physician located in Student Health Services (Health Services Building, Room 1200) or by a private physician.

List of PPE, Emergency Equipment and their Locations

When using a biological safety cabinet, protective clothing, including gloves and a laboratory coat or similar garment should be worn so that hands and arms are completely covered. Eye protection and a surgical mask must be worn at all times when working with SAs. All personal protective equipment is available in the BSL-3 lab in a designated location.

Site security and control

As mentioned above in Appendix 1, item 1, the LMB building is isolated from other buildings on campus to decrease the amount of exposure to casual traffic. In addition, visitor access to the building is limited to a single entrance at the front of the building, which is monitored by the secretary during regular operating hours. All visitors check-in with the secretary upon arrival and sign the log book to document their visit and any escorted access granted to the BSL-3 laboratory. This door is double locked outside of normal working hours to prohibit unauthorized access. All other access points are locked on a permanent basis and only approved individuals are assigned keys. In addition, all entry points into the BSL-3 laboratory area accessible from the front entrance are permanently locked and entry is restricted by a key code pad. Only individuals with appropriate security clearance are given an individual access card and code. This code is changed in the event a employee departs the University. The building is routinely monitored by University Police after hours. Additionally, the use of individual access cards and codes allow for a monthly access report to be printed showing user's name, date, time, and which door access was used. These reports are filed in the LMB secretary's office.

Procedures for Emergency Evacuation.

If an emergency situation arises that requires evacuation of the facility, personnel will exit through the nearest, safe exit and proceed past the picnic table area at the east end of the building. The PI or a designated laboratory manager will perform a roll-call and ensure that all personnel have been evacuated. If circumstances allow, all SAs not secured in locked freezers or incubators will be decontaminated or secured prior to evacuation. However, the priority will be the health and safety of the laboratory personnel. If evacuation must proceed rapidly in the absence of decontamination, the select agent will be left in the biohazard safety cabinet with the cabinet containment air system ON to minimize the likelihood of exposure to or dissemination of the SA.

Decontamination Procedures.

Decontamination of work areas and materials used during an experiment must be done routinely, even before placing contaminated materials in the appropriate disposal container. Use of 10% bleach or 70% ethanol is suitable for select agent decontamination. In addition, the use of organic solvents and non-ionic detergents (present in scintillation fluid) in combination with starvation are also suitable for SA decontamination. Hazardous organisms must be decontaminated by soaking in bleach or ethanol while in the biosafety cabinet, or by placing the contaminated items in an approved biohazard bag and autoclaving the contents. In the case of spills or accidental exposures, the following protocols should be followed:

Spill Management

1. Have all non-essential personnel leave the immediate area in the laboratory to allow clean-up of spill and report the spill to a Principal Investigator or lab manager
2. Allow 30 minutes to allow aerosols to settle before clean-up
3. Wear plastic gown, gloves, mask and shoe protectors before entering spill area
4. Sprinkle RED-Z powder from spill baggie, powder will solidify, add more if necessary
5. Use disposable scraper to transfer gel into biohazard bag

6. Apply 10 % bleach solution to the area, allow 30 minutes for the bleach solution to decontaminate before clean-up with paper towels
7. Dispose all contaminated clean-up material in biohazard bag, including protective clothing and mask. Autoclave all material using the dry setting, then place in biohazard disposal container
8. Confirm that the spill has been reported and all paperwork has been completed

Accidental Exposures

Report all accidental exposures involving SAs to a Principal Investigator and/or Lab Manager immediately. The USA "Report of Accident/Incident" form must be completed by the employee and submitted to the Principal Investigator and then forwarded to the Office of Research Compliance and Assurance. If necessary, the individual potentially contaminated or exposed to such a biological agent should seek medical attention by the Occupational Health Physician located in Student Health Services or by a private physician. Additionally, when a release of select agent occurs, a Form 3 report will be completed and forwarded to CDC.

Hurricane Response Plan

In the event that a hurricane threatens the Mobile area and hurricane evacuation procedures are initiated, the following general procedures will be implemented.

1. All on-going experiments with the Select Agent will be terminated. When appropriate, the Select Agent can be properly returned to a designated storage area. In all other cases, all active select agent cultures will be destroyed by autoclaving or treatment with 10% bleach.
2. Select Agent records and inventories will remain in locked storage cabinets that are also located in the secure BSL3 area.
3. Prior to evacuating the building, a security check on all access doors will be made.

In the event of a Category 1-3 Storm:

The Laboratory of Molecular Biology Building is equipped with a generator back-up system that will supply the building with power for 72 hours. This generator is checked and the fuel supply topped off. During a Category 1-3 storm, Select Agent stocks will remain in secured freezers and/or in secured liquid nitrogen storage containers that are located in the secure BSL3 area.

In the event of a Category 4 or 5 Storm:

In the event of a storm of this severity, representative samples of the Select Agent stocks will be secured in liquid nitrogen storage containers that will be stored in Room 23, an interior room providing additional protection in the event of severe damage to the facility. The remainder of the Select Agent stocks will be kept in secured freezers as above.

In the event that the building suffers catastrophic damage or is without power for an extended period of time (e.g., storm damage to the generator) and the Select Agent stocks in secured freezers lose viability;

said stocks will be inventoried, properly disposed of, and the appropriate authorities notified. The Select Agent stocks in the liquid nitrogen storage containers will also be inventoried and appropriately handled according to their status.

Any breaches in these containers will be reported to the appropriate authorities immediately and the area quarantined.

After the Storm:

Following the storm and when conditions permit, Principal Investigators will assess the condition of the laboratory and report to the RFO on the status of the laboratory and the Select Agent stocks. Appropriate repairs will be initiated as soon as possible.