

Office of Occupational and Environmental Safety

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### **Laboratory Security Guidelines (Preliminary and for Comment)**

Academics and research at LSU and the AgCenter involve the use of various laboratories designed and equipped for their purposes. In order to assure proper security for laboratory workers and research materials/products, labs must be designed and operated to satisfy needs based on the level of risk to the public, faculty and staff, and facilities. Federal regulations are also involved, as biological, radiological and chemical research projects are subject to laws and regulations relating to homeland security and public safety. The National Institutes of Health (NIH), Centers for Disease Control (CDC), Nuclear Regulatory Commission (NRC), Department of Homeland Security (DHS), Animal Plant and Health Inspection Service (APHIS) are groups who have regulations on safety and security in laboratory design and operation. State regulations also apply, such as the State Fire Marshal regulations. Building Coordinators are valuable support contacts for assuring that security of the lab or classroom is adequate and properly monitored.

Note: Research products, equipment, and knowledge are also subject to rules and regulations under the US Department of State, and the US Department of Commerce for dual use/"deemed export" reasons. Principal investigators and faculty must be aware of these restrictions to avoid violations of the rules.

Safeguarding University resources from unauthorized access, misuse or removal is a duty of all faculty and staff. In laboratories, this obligation rests primarily with the Principal Investigator (PI); however, all laboratory personnel have a responsibility to take reasonable precautions against theft or misuse of materials, particularly those that could threaten the public.

At a minimum, the institution expects all laboratory personnel to comply with the following security procedures:

- Question the presence of unfamiliar individuals in laboratories and report all suspicious activity immediately to LSU Police by calling 8-3231 or 911 on a university phone.
- After normal business hours, all laboratories must be locked when not in use

Laboratory building exterior doors are secured after normal business hours. To minimize the likelihood of unauthorized access, all after-hours building users should:

- Avoid providing building access to unfamiliar individuals
- Secure doors behind them
- Immediately report any building security problem to LSU Police by calling 8-3231 or 911 on a university phone.

Research or other activities involving the use of lab space, materials or equipment without the knowledge and approval of the responsible Principal Investigator is strictly prohibited. Violation of this prohibition may result in disciplinary action up to and including termination.

### **Biological Research**

All biological research at LSU and the AgCenter is registered through the Inter-Institutional Biological and Recombinant DNA Safety Committee (IBRDSC). This committee evaluates the relative risks and assures that

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research is carried out in the safest manner possible. Security levels are administered in accordance with the Biosafety in Microbiological and Biomedical Laboratories (BMBL) which is published by CDC/NIH and updated periodically. Biological laboratories are rated at Biological Safety Levels (BSL) 1 through 4. Animal labs are similarly rated at Animal Biosafety Level (ABSL) 1 through 4. BSL4 and ABSL4 labs involve work with dangerous and exotic agents that pose a high individual risk of aerosol-transmitted laboratory infections and life-threatening disease and are the highest risk levels. LSU and the AgCenter do not have any level 4 labs on campus, and work with level 4 biological agents is prohibited. The BMBL does not detail security measures for operation of laboratories, leaving this to be determined by the laboratory. However, some information on facility design relating to security is provided, such as having locks on doors.

The Manager, Biological Safety, performs safety and security assessments of labs where regulations require, and where the biological safety level (BSL) is 2 or more. BSL 1 labs may not require an inspection as part of the approval process. In those cases the principal investigator (PI) or the faculty oversight person must assure that all necessary safety and security processes are in place during the research.

Research involving experiments that produce, use or test proprietary products or processes will require security measures that may not be required for similar research in other settings. Such security measures will be developed in coordination with Public Safety, Facility Services and vendors as necessary. The PI should make a request for special security measures through his/her department head or dean.

Security in biological research involving select agents must meet requirements published by the agency with which the lab is registered, i.e. CDC or APHIS. Such security measures must be approved by the Responsible Official (RO), the person designated by the institution to oversee the research.

### **Chemical Research**

Security of chemicals and research products and processes may be dictated by safety considerations, federal regulations, state fire marshal requirements, or proprietary concerns.

The US Department of Homeland Security (DHS) requires that facilities which have quantities of “chemicals of concern” (commonly called [Appendix A Chemicals](#)) in excess of specified thresholds must enter the data electronically to DHS in what is called a Top Screen. This process must be followed once the threshold level is reached, or is expected to be reached. DHS determines the hazard level from the Top Screen information. The facility then must develop a security plan, including threat and risk assessments, as prescribed by DHS for the threat level that is assigned. The Occupational and Environmental Safety Section (OES) coordinates this activity. Chemical users on campus must provide information to OES, as requested, to assure continued compliance. Use of the campus-wide inventory reporting and management system, Chemtracker, is required for all laboratories on campus which use chemicals.

Where chemical labs are not required to develop security plans for DHS, adequate security precautions must be in place to prevent theft, malicious or mischievous actions, or accidental damage to the chemicals.

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<b>Work Involving</b>	<b>Lab 24-7 Recorded Access</b>	<b>Material Secure Storage in lab</b>	<b>Photo ID</b>	<b>Visitors ID &amp;Escorted</b>	<b>Isolated Computer secure net.</b>	<b>Material Registration with CDC, APHIS, DOE, DHS, NIH or other agency</b>	<b>Background checks</b>	<b>Restricted Persons/ Non-prolif. allowed</b>	<b>Screen Packages</b>	<b>Emerg. Plan</b>
Select Agents	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No/Yes	Yes	Yes
Biolog. Agents or Toxins capable of causing serious or fatal illness to humans or animals other than select agents	Yes	Yes	Yes	Yes	No	No (Agent registration may be required, and IBRDSC project approval must be obtained)	No	Yes/Yes	Yes	Yes
Other Biolog. Agents or Toxins	Locked when users absent	No	No	No	No	No (Howevr, IBRDS approval must be obtained)	No	Yes/Yes	Yes	Yes
Listed chemical (FBI, ATF, DOD etc.)	Yes	Yes	Yes	Yes	No	No	No	Yes/Yes	Yes	Yes
Other Hazard. Chemicals	Locked when users absent	No	No	No	No	No	No	Yes/Yes	Yes	Yes
Listed Radiologicals (FBI, NRC, DOE, etc.)	Yes	Yes	Yes	Yes	No	No	No	Yes/Yes	Yes	Yes
Other Radiologicals	Locked when users absent	No	No	No	No	No	No	Yes/Yes	Yes	Yes
TAL work	Yes	No	Yes	Yes	Yes	No	Yes	No/No	Yes	Yes