

Laboratory Security for Hazardous Substances



Overview

Laboratories at Weill Cornell Medicine (WCM) need to take specific actions in order to provide security against theft of hazardous substances and ensure compliance with federal regulations. Environmental Health and Safety (EHS) reminds each department to conduct periodic assessment of substances in its laboratories and security measures in place to protect them.

For some substances, security can be as simple as ensuring that a laboratory door is locked whenever the laboratory is left unattended. However, a laboratory that stores or uses Highly Hazardous Substances (HHSs), DEA controlled substances, infectious agents, or radioisotopes is required to meet a higher security standard.

Applicability

Faculty, staff, students, and visitors working in laboratories where hazardous substances are present at the Medical College.

Responsibilities

Principal Investigators are responsible for identifying all hazardous substances in their laboratories, maintaining an inventory of these substances, and developing and maintaining appropriate security measures for them, including [High Hazard Operating Procedures for Highly Hazardous Substances](#), and ensuring that all laboratory staff are trained in, and in compliance with, security procedures.

Laboratory Personnel maintain awareness of hazardous materials in the laboratory, complete required training for handling of hazardous substances, and follow established security procedures. Laboratory personnel are also expected to ensure that their Principal Investigator is aware of any new hazardous substances being stored or used in the laboratory.

Environmental Health and Safety (EHS) provides assistance to laboratory personnel to develop procedures to ensure the security of all hazardous materials in the laboratory.

Procedure

Follow these guidelines to minimize opportunities for intentional removal of any hazardous substances from your laboratory:

- 1. Recognize that laboratory security** is related to, but different from, laboratory safety. Laboratory security is prevention of intrusion into the laboratory and theft of equipment or materials from the laboratory.
- 2. Develop a site-specific security policy.**
 - Make an assessment of your laboratory area for hazardous materials and particular security issues.
 - Develop and implement laboratory security procedures for your laboratory group.
 - Train laboratory group members on security procedures and assign responsibilities.
- 3. Control access** to areas where hazardous materials are used and stored.
 - Limit laboratory access to only those individuals who need to be in the laboratory.
 - Restrict off-hours access to individuals authorized by the Principal Investigator.
 - Lock freezers, refrigerators, storage cabinets, and other containers where stocks of biological agents, hazardous chemicals, or radioactive materials are stored when they are not in direct view of workers (for example, when located in unattended storage areas).
 - Do not leave hazardous materials unattended or unsecured at any time.
 - Close and lock laboratory doors when no one is present.
- 4. Be aware** of who is in the laboratory.
 - Know who is in the laboratory area at any given time.
 - Use a logbook for staff to sign in and out each day or carded access devices.
 - Ensure all laboratory personnel wear their college issued identification badges.
 - Approach anyone you do not recognize in laboratory areas and ask if you can help direct them.



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5. **Be alert** to these important areas of concern:

- Open labs.
- Unrestricted access to toxic materials.
- Unlocked support rooms.
- Toxic gas security.
- Biological materials not secured.
- Access to controlled substances.
- Changes in chemical inventory.
- Storeroom security.
- Chemical waste collection areas.
- Unusual activities.

6. **Secure your Highly Hazardous Substances.**

- Develop and follow a High Hazard Operating Procedure for each Highly Hazardous Substance and ensure that laboratory personnel are trained in, and in compliance with, these procedures.
- Use a log to sign highly hazardous substances in and out of secure storage.
- Take a periodic inventory of all highly hazardous chemicals, biological agents/toxins, and radioisotopes. **This could be as simple as frequently looking at your chemical containers to be sure that none are missing.**
- Track the use and disposal of hazardous materials. Report any missing inventory to EHS.
- Know what materials are being ordered and brought into the laboratory area.
- Visually screen packages before bringing them to the laboratory. Packages containing potentially infectious substances must be opened in a biological safety cabinet or other appropriate containment device. Packages containing radioactive material must be opened following guidelines in Section 22 of the [Radiation Safety Manual](#).
- Know what materials are being removed from the laboratory area.
- Requirements for security of DEA controlled substances are found in the EHS [Security of DEA Controlled Substances](#) Update.

7. **Incorporate Laboratory Security measures** into your emergency plan.

- Review the laboratory's Health and Safety Door Sign contact information on your laboratory door as needed and inform EHS if the sign needs to be updated.
- Control of access to laboratory areas can make an emergency response more challenging. This must be considered when emergency plans are developed.
- Have a protocol for reporting incidents. Laboratory Safety Coordinators or Principal Investigators, in cooperation with facility safety and security officials, should have policies and procedures in place for the reporting and investigation of incidents or possible incidents, such as undocumented visitors, missing chemicals, or unusual or threatening phone calls.

8. **Agents of concern:** classes of particularly hazardous chemicals.

- Laboratory researchers should be aware of the highly hazardous materials they have.
- For lists of biological diseases and agents go to the CDC website at <https://emergency.cdc.gov/agent/agentlist-category.asp>.
- For a list of highly hazardous chemical wastes, review the [EHS Acutely-Toxic Chemical List](#).

References

EHS Update for [High Hazard Operating Procedures](#)

Radiation Safety Training Manual, [EHS Program Manual 9.1](#)

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