

LABORATORY & RADIATION SAFETY

Cornell University Department of Environmental Health & Safety

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NEWS

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SECURITY OF HAZARDOUS LABORATORY MATERIALS

Introduction

Laboratories need to take specific actions in order to provide security against theft of highly hazardous materials, and to ensure compliance with new regulations. EH&S urges each unit (college, department, research group) to review and develop procedures to ensure the security of all hazardous materials in their area of responsibility.

Many laboratories already implement various means of security, including locking up controlled substances, syringes and needles, and radioactive materials. EH&S asks you to review and assess the hazardous materials in your laboratory and consider security issues. The intent is to minimize the risk of theft, especially targeting the five-minute window when the lab is left unattended. **One easy way to increase security is to make sure that your laboratory door is locked whenever the lab is left unattended, even for a few minutes.** You may wish to implement some of the following suggestions.

Security Guidelines

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

1. Recognize that laboratory security is related to but different from laboratory safety. Security is preventing intrusion into the laboratory and the theft of equipment or materials from the lab.
2. Develop a site-specific security policy.
 - Develop and implement lab security procedures for your lab group.
 - Train lab group members on security procedures and assign responsibilities.
3. Control access to areas where hazardous chemicals are used and stored.
 - Limit laboratory access to only those authorized individuals who need to be in the lab.
 - 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. Know who is in the laboratory area.

- Know who is in the lab area at any given time.
- Consider using a logbook for staff to sign in and out each day or using carded access devices.
- Consider having all lab staff wear identification tags.
- Approach any people you don't recognize who appear to be wandering in laboratory areas and ask if you can help direct them.

5. Secure your highly hazardous materials.

- Consider using a log to sign hazardous materials in and out of secure storage.
- Take a periodic inventory of all highly hazardous chemicals, biological agents/toxins, radioactive materials, and controlled substances. **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 University Police (5-1111).
- Know what materials are being ordered and being brought into the laboratory area.
- Visually screen packages before bringing them to the lab. Packages containing potentially infectious materials should be opened in a biological safety cabinet or other appropriate containment device.
- Know what materials are being removed from the laboratory area.

6. Have an emergency plan.

- Control of access to laboratory areas can make an emergency response more difficult. This must be considered when emergency plans are developed.
- Have a protocol for reporting incidents. Laboratory directors, 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.
- Review and update if necessary the emergency contact information on your HASP sign, located on or near your laboratory door.

7. Chemicals 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 chemical agents go to the CDC website at <http://www.bt.cdc.gov/Agent/Agentlist.asp>

Summary: Look out for these important areas of concern:

- Open labs
- Unrestricted access to toxic chemicals
- 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

Additional information:

- Call EH&S for assistance (5-8200) and/or visit the EH&S web page for additional information (<http://www.ehs.cornell.edu>)
- Review laboratory products catalogs for information about various locks, lock boxes, and other security devices.

REMOVE RADIATION LABELS FROM USED CONTAINERS

The unexpected discovery of containers marked with warnings that they contain radioactive material has seriously disrupted landfills and recycling centers due to concerns about worker safety. To avoid this, please remove or deface all symbols and wording about radiation hazards from clean, empty containers that you put into ordinary trash containers.

Prior to discarding the packaging from a radioactive material shipment, remove or completely deface all radioactive material labels, including any radiation symbols or wording indicating the presence of radioactive material, any shipping papers, information or address labels identifying the isotope or activity, statements of Limited Quantity, or White-I or Yellow-II DOT labels.

Radiation labels, including tape and items listed above, that are not contaminated may be discarded into the ordinary trash once they have been defaced. Defacing methods include: folding the label on itself and wrapping it in ordinary non-labeled tape; spray painting over it with black paint; or coloring over it with a black permanent marker.

A shipping label usually accompanies the Styrofoam packaging. Use this label to return the Styrofoam to the shipper for recycling. Securely tape the cover to the bottom and affix the shipping label to the top. Do not return the cardboard box.

CHEMICAL SAFETY TRAINING

The next ***new employee*** laboratory worker OSHA Laboratory Standard training program, "Chemical Safety for Laboratory Workers", will be held in 118 Humphreys Service Bldg on Wed., April 3, 9 – 12 noon.

Please contact Agnes Morris by e-mail at am28@cornell.edu or by phone at 255-5600 to register, or register at <http://www.ehs.cornell.edu>.



Radiation Safety Eagle Awards



We are pleased to recognize the following laboratories for receiving radiation safety awards:

November

T. Fox, Molec. Biology & Genetics, Biotech. Bldg.

J. Lis, Molec. Biology & Genetics, Biotech. Bldg.

* **J. Roberts**, Molec. Biology & Genetics, Biotech. Bldg.

D. Wilson, Molec. Biology & Genetics, Biotech. Bldg.

A. Bell, Animal Science, Morrison Hall

Y. Boisclair, Animal Science, Morrison Hall

J. Casey, Vet. Microbiology & Immunology, VMC

J. Marsh, Vet. Microbiology & Immunology, VMC

K. Schat, Vet. Microbiology & Immunology, VMC

December

R. Dieckmann, Materials Science & Engr., Bard Hall

* **G. Aguirre**, Vet. Clinical Sciences, Baker Annex

D. Gonsalves, Plant Pathology, Geneva

W. Koeller, Plant Pathology, Geneva

J. Doyle, Plant Biology, Mann Library

G. Sharp, Vet. Molecular Medicine, VMC

Biochemistry Class (S. Jones), Wing Hall

January

A. Bretscher, Molec. Biology & Genetics, Biotech. Bldg.

W. Brown, Molec. Biology & Genetics, Biotech. Bldg.

G. Hess, Molec. Biology & Genetics, Biotech. Bldg.

E. Dubovi, Pop. Med. & Diag. Sci., Vet. Diagnostic Lab

J. Fortune, Vet. Biomedical Sciences, VRT

* **M. Roberson**, Vet. Biomedical Sciences, VRT

* Winner of Meal Deal from Pizza Hut



RADIATION SAFETY TRAINING

Individuals must receive radiation safety training **prior** to starting work with radioactive materials. This training is required by law. The course is given in two separate presentations; both sessions must be attended. There is a short exam, which can be taken either at the end of the second day, or later at our office during normal business hours. *Prior registration for this course is necessary, as seating is assigned on a first come first served basis.*

The next Radiation Safety training programs will be held on **March 25 & 27 from 9:00 to 12 noon**; and the next on **April 22 & 24 from 1:00 – 4:00 p.m.** To register please use the online form available on our EH&S Web site, or call the EH&S main desk, at 5-8200. For the online form go to <http://www.ehs.cornell.edu>, select "Training", then select the course under "Class Times & Registration". Please fill in all fields before you submit your registration.

Chemical Waste Training: Everyone who generates hazardous waste must be advised that strict federal regulations apply to this activity and must be shown how to manage waste properly. If you or your staff would like to attend Chemical Waste training provided by EH&S, call 5-5600 (<http://www.ehs.cornell.edu/lrs/chemical.waste.disposal.htm>).