



TEMPLE UNIVERSITY
A Commonwealth University

Environmental Health and Radiation Safety

YOU HAVE A RIGHT TO KNOW

Federal and Pennsylvania regulations require that employees who work routinely with chemicals are informed of potential hazards associated with exposure to chemicals in the workplace. The Environmental Health and Radiation Safety (EHRS) Department at Temple University has extended this requirement to include all hazardous materials. Several steps have been taken to enhance the availability of information.

Material Safety Data Sheets: The law requires that a Material Safety Data Sheet (MSDS), containing relevant health and environmental information, be prepared for each product containing hazardous chemicals. Consistent with this requirement, MSDSs are available in several formats. MSDSs can be obtained in hard copy from the EHRS Library, located in the basement of the Pharmacy/Allied Health Building at 3307 North Broad Street, Room B49. MSDSs may also be accessed via the internet at www.temple.edu/ehs.

Signs and Labels: National and international organizations have developed signs and labels for various hazardous materials. A sign or a label at the entrance of a laboratory or on a package indicates the presence of a hazardous material. Visitors can enter a laboratory only with the permission of the laboratory custodian, the individual who is responsible for the safety of that laboratory.

EHRS Handbook: Policies and guides related to environmental protection, occupational health and safety are included in the EHRS Handbook. An electronic version of the EHRS Handbook is available on-line at www.temple.edu/ehs.

EHRS Communiqué: Information related to environmental protection, radioactive materials and radiation, and occupational health and safety, as well as other useful materials, are published in the EHRS Communiqué. This newsletter appears approximately quarterly, and is distributed to all members of the faculty, as well as many other members of the Temple community.

Training: EHRS offers a number of training courses free of charge for Temple employees, including Hazard Communication (Right-To-Know), Chemical Hygiene, Biosafety (Bloodborne Pathogens), and Radiation Safety.

Reporting Complaints: If you believe that unsafe or unhealthy conditions exist at your workplace, you are encouraged to contact EHRS immediately, either verbally or in writing. Additionally, if you should so choose, you may contact EHRS anonymously.

For further information, contact EHRS at 707-2520 or go to our website at www.temple.edu/ehs

EHRS SERVICES

Radiation Safety: Assures that acquisition, use and disposal of radioactive materials, and the operation of radiation-producing equipment, are done safely and in compliance with appropriate regulations. Activities include (1) review and approval of proposed uses of radioactive materials and ionizing radiation in research and patient care; (2) periodic inspection and evaluation of facilities where radioactive materials are stored or used; (3) operation of a radiation exposure monitoring program; and (4) assistance to the investigators to assure that the exposure to ionizing radiation is kept as low as reasonably achievable.

Chemical Hygiene: Focuses on safe laboratory operations. Reliance is placed on regulations of the Occupational Safety and Health Administration (OSHA) and appropriate Pennsylvania agencies, and on recommendations of consensus organizations. Services include inspection of laboratories and assessment of fume hoods.

Biosafety: Focuses on managing biosafety activities. In addition to conducting biosafety inspections and assisting investigators in meeting legal and other requirements, services include answering inquiries regarding bloodborne and airborne pathogens, enforcement of CDC and OSHA laboratory requirements, and management of the Select Biological Agent Registration program.

Environmental Monitoring: Assesses air and water quality on the Temple campuses. EHRS responds to requests for environmental monitoring in areas such as: indoor air assessment, odor assessment, water monitoring, and workplace analysis.

Emergency Response Program: Focuses on the prevention of accidents. Policies have been developed to assure a reduction in the probability of accidents at Temple, including those resulting in fire or spills of chemical, radiological or biological agents. An emergency response plan has been developed (described in detail in Policy No. 1.9 of the EHRS Handbook). Temple's emergency response plan involves a coordinated effort between EHRS staff, Campus Safety Services staff, Facilities Management, and the City of Philadelphia Office of Emergency Management.

Risk Reduction: Identifies causes of accidents and attempts to reduce their occurrence and associated costs. Included in this program are accident investigation and recordkeeping requirements of OSHA.

Waste Management: Assures and disposal of radioactive, biomedical, chemical, hazardous, and unregulated wastes, which are generated from research and teaching activities at Temple. Waste collection and disposal is done in accordance with federal and Pennsylvania regulations, in the most cost-effective manner.

Training: Organizes legally-mandated courses and seminars and maintains training records in accordance with federal and state regulations. Some of the courses offered are Radiation Safety, Hazard Communication (Right-to-Know), Chemical Hygiene, Biosafety (Bloodborne Pathogens and Airborne Pathogens), and Respiratory Protection.

Information: Produces and disseminates relevant safety information, including the EHRS Handbook (policies and guides on environmental protection and occupational safety) and EHRS Communiqué (departmental newsletter), and maintains the Material Safety Data Sheet database, library and website.

Policy Development: Drafts and revises policies and guidelines, in conjunction with safety-related committees. Committees include: Radiation Safety, HSC Safety, Infection Control, Chemical Hygiene, Institutional Biosafety.

Fire Safety: Emphasizes fire prevention. Although no longer part of EHRS, the Fire Marshal's Office (under Facilities Management) works with EHRS to address Emergency Response, Risk Reduction, and Occupational Safety. Services include conducting periodic inspections for compliance with fire safety codes; reviewing plans for renovations and new construction; scheduling and conducting fire drills; conducting occupational safety training, and establishing building evacuation plans

What is a Hazardous Material? The legal definition of hazardous material, hazardous chemicals and similar descriptions is complex. At Temple University, a decision has been made to include all chemicals, radioactive materials, and biologically-active materials in the coverage and dissemination of information. Every hazardous material (chemical, radioactive, or biological), regardless of its toxicity, can be managed safely if appropriate actions are taken to contain it and to protect the worker. Therefore, precautionary measures for one activity may be insufficient or unduly restrictive if applied to other activities.

EHRS investigates all reported exposures rapidly and reports its findings to the interested individuals.

What is Hazardous Waste? The legal definition for this is also complicated, however a general rule of thumb is this; any hazardous material that is no longer wanted may be a hazardous waste. Chemical and radiological wastes must be disposed of via EHRS. A licensed Infectious and Biomedical waste hauler must remove infectious and chemotherapeutic wastes.

Shipping of Hazardous Materials:

No hazardous materials may be shipped from Temple except by persons who have been certified by EHRS as having been trained and shown the necessary competency to perform this function safely and correctly. Violations of this policy will expose the organization and perhaps the individual to fines and legal action.

Safety Inspections: Temple's safety program relies upon an individual (custodian) responsible for a laboratory, an office or an area. Inspections focus on safe laboratory operation in accordance with federal and state regulations and address issues such as storage of materials, fume hood operation, use of appropriate personal protective equipment, recordkeeping, signage, etc.

Radiation: Unannounced inspections are performed quarterly for each laboratory where radioactive material is used. Violations must be responded to in writing. Repeat violations will result in a violation letter. Serious violations may be brought to the attention of the Radiation Safety Committee, which may choose to implement punitive measures for non-compliance.

Chemical/Biological: It is at the discretion of the EHRS inspector to assess the situation, determine when and how corrective action should be taken, and whether operations can continue. If the operations are halted, they cannot resume until the area is reinspected.

Corridor Storage: Temple University policy prohibits storage of materials in common corridors. Storage in limited access corridors is discouraged but may be permitted, provided certain criteria are met.

Prohibited Actions: Smoking, eating, drinking, applying cosmetics, or manipulating contact lenses are prohibited in all laboratories or in any other location where hazardous materials are present.

Pregnant Women: There are legal limits on the exposure to ionizing radiation to women who declare their pregnancy in writing with EHRS.

Space Heaters: If during winter months, the indoor temperature falls below an acceptable limit, Facilities Management will provide space heaters. No other space heaters may be used on any of Temple's campuses.