

Regulatory Background:

This plan outlines the minimum standards for hazardous chemical use in laboratories at Dartmouth College. The Occupational Health and Safety Administration (OSHA) Laboratory Standard (29 CFR 1910.1450) requires the development and implementation of a “Chemical Hygiene Plan”. Specifically this must be a formal, written and employee-accessible program that is "capable of protecting employees from health hazards associated with hazardous chemicals used in the laboratory". The Dartmouth College Chemical Hygiene Plan applies to laboratory work areas while the Dartmouth College Hazard Communication Program applies to non-laboratory chemical use on campus.

Scope:

This plan applies to all laboratories and laboratory personnel at Dartmouth College that use, store or handle hazardous chemicals. All laboratory personnel who work with or around hazardous chemicals must have access to and be familiar with this plan.

Responsibilities:

- Principal Investigator/Course Professor is responsible for the implementation and oversight of this policy in his/her laboratory or course. This includes providing students and staff with specific information and training beyond this plan on the unique hazards of their lab work and documenting this activity. The Principal Investigator/Course Professor is responsible for the day-to-day health and safety management of their laboratories and ensuring compliance with EHS waste disposal requirements.
- All laboratory personnel who use, store and handle hazardous chemicals are required to abide by the minimum requirements set forth in the Dartmouth Chemical Hygiene Plan and any requirements specific to their school or department. All laboratory personnel must follow the waste disposal requirements set forth by EHS.
- EHS is responsible for ensuring the effectiveness and evaluation of the Dartmouth College Chemical Hygiene Plan. EHS provides support and technical assistance in the safe use, storage and disposal of hazardous chemicals.
- The Dartmouth College Laboratory Safety Advisory Committee (LSAC) is made up of faculty representatives from the different schools and departments and is responsible for general oversight of the Colleges chemical safety program. The committee serves as a peer review mechanism for faculty who wish to use high hazard chemicals or procedures.

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Minors and volunteers working in laboratories:

Enabling undergraduate students (and others) to work in our research laboratories is an important part of the Dartmouth experience. Additional insurance and legal limits responsibilities apply when welcoming inexperienced personnel into your lab.

- Children 14 years of age and under are prohibited from entering (including working) in hazardous materials use labs unless special arrangements are made well in advance.
- Children ages 15-17 may be allowed to enter or work in hazardous materials labs provided they are under constant supervision of a responsible lab member. This lab member is accountable for the activities in the lab and may be a faculty member/principal investigator, lab manager or senior lab staff. The responsible lab member must ensure that all visitors/workers have the appropriate training, protective equipment and are informed of potential hazards in the space.
- Contact Human Resources for children 15-17 who are compensated for any work in a laboratory.
- The safety of all laboratory workers (undergraduates, visitors or others) is ultimately the responsibility of the Principal Investigator (PI).
- The PI (or designee) must inform undergraduates, visitors/volunteers or high school students of the hazards of their work and provide appropriate training and personal protective equipment **before** work begins. This training should be specific to the chemicals used (review MSDS/SDS etc.) and the processes employed (heat, pressure, glassware handling etc.).
- Document all training with the date, location, trainee signature and outline of material covered. Keep these records in the laboratory for audit or review.
- All work with hazardous materials or processes must be adequately supervised. Students and others must never work alone or without detailed procedures and instructions.
- In addition to training and supervision provided by the principal investigator, all new researchers should complete appropriate EHS training programs in basic laboratory safety and waste management.
- Work with ionizing radiation or biological hazards must comply with Radiation Safety Committee and Institutional Biosafety Committee requirements and limitations.

Registration of hazardous chemical work with EHS

All work with hazardous chemicals needs to be registered with EHS. PI's, faculty, instructors and supervisors are responsible for notifying EHS of planned work involving hazardous materials. EHS has developed a registration process available through Bioraft at: <https://dartmouth.bioraft.com>. More information on Bioraft is available on the site, if you don't have a lab set up in Bioraft simply contact EHS to get started.

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