

General Laboratory Safety Procedures

Know the hazardous properties of the materials you are working with (e.g. chemical, biological, radioactive): refer to the written laboratory protocols and review the [Safety Data Sheets](#) (SDS) and other resources for chemicals and other hazardous materials (see [Chemical Safety](#), [Biological Safety](#), and [Radiation Safety](#)).

Consider the toxicity of materials, the health and safety hazards of each procedure, the knowledge and experience of laboratory personnel and the safety equipment that is available. Perform a risk assessment in accordance with the principles described in [Planning a Safe Experiment](#) and prepare safety protocols for experiments with significant hazards. Contact the Laboratory Safety Office for guidance in writing a safety protocol.

Know the hazards and tolerances associated with equipment and processes (e.g. high or very low temperature, high or low pressure, high voltage equipment, potential oxygen displacement, cutting or crushing machinery).

Know the location of safety equipment and emergency and exit procedures.

Always wear appropriate clothing (e.g. pants, shirts, shoes) and personal protective equipment (PPE) such as safety glasses or goggles, lab coats and gloves in the laboratory. Open sandals, clogs, crocs, and similar footwear are prohibited; shorts and skirts are not recommended.

Remove PPE before leaving the laboratory.

No laboratory work using ANY hazardous material, equipment, or process may be undertaken when working alone in the laboratory. All work with hazardous materials or operations must be approved by the Principal Investigator or lab manager and must be conducted using the "buddy" system.

Use a properly operating fume hood when working with volatile or particulate chemicals or similar hazardous materials.

Food and beverages are prohibited in FSU laboratories. Additional information can be found here: [Food and Beverages in the Lab](#).

Do not eat, smoke or apply cosmetics in the laboratory.

Hazardous materials or equipment may not be transferred to residences or businesses without authorization of the Principal Investigator the Department Chair, and EH&S. Hazardous materials or equipment may not be used in off-campus demonstrations without the authorization of the Department Chair or Departmental Safety Committee. Contact EH&S before transferring hazardous equipment to Surplus Property. Contact EH&S for assistance in hazardous materials transfers to authorized locations.

Keep work areas clean and uncluttered at all times.

Do not leave reactions unattended. Experiments which may be safely left running while unattended must have the approval of the Principal Investigator. Contact EH&S for more information.

Only trained and authorized individuals are allowed to enter laboratory areas, all others must be escorted by personnel familiar with the hazards present.

Persons under 18 years of age are prohibited from entering certain high-hazard/high-risk areas (e.g. laboratories with hazardous chemicals, infectious organisms, or rooms with hydraulic equipment, lasers or radioactive material). Exceptions to this policy require prior written approval from the Department Chairperson. Contact EH&S for guidance.

EH&S discourages the use of cell phones and other electronic devices in laboratories. Principal Investigators must assess the hazards of the use of cell phones in laboratories and limit the use of these devices accordingly, as described in the EH&S guidance [Cell phones in Labs](#).

Pets are not allowed in campus buildings, in accordance with FSU policy (see [Pet Animals on Campus](#) for more information and exceptions).

Additional Information and Resources

- Safety in Academic Chemistry Labs (ISBN: 0841232598)
- [Biosafety in Microbiological and Biomedical Laboratories](#) (ISBN: 017-040-00547-4)
- [Prudent Practices in the Laboratory 2011](#) (ISBN 978-0-309-13865-9)