

EH&S Laboratory Safety Training - Resources 2024

In an emergency:

- On-Campus: Contact [Public Safety](#) (faster response than 911)
 - Call/Text **(585) 275-3333**, or
 - Dial **13** from a campus phone, or
 - Pick up any [blue light](#) phone
 - ❖ Know the campus, direct an ambulance or Medical Emergency Response Team ([MERT](#)) directly to you.
 - ❖ Will also contact and direct additional resources in case of spill or fire, if needed.
- Off-Sites: Call **911**.

Submit an [Incident Report Form](#) online within 24 hours of any injury, exposure, or other incident.

Injuries or exposures – seek medical attention:

- All students and all non-hospital based employees should contact University Health Service ([UHS](#)) on River Campus **(585-275-2662)**, ask for Occupational Health (585-275-4955).
 - Human blood and bodily fluid exposures need to be seen on the day of the incident
 - An on-call medical professional is also available 24/7
- Clinical lab and Strong Memorial Hospital-based employees should contact [SMH Employee Health](#) **(585-275-9300)** or use the SMH blood exposure [hotline](#) **(585-275-1164)**
- Strong Memorial Hospital Emergency Department is available to all staff and students in the event of a severe injury or exposure, or after-hours.

Submit an [Incident Report Form](#) online within 24 hours of any injury, exposure, or other incident.

Module/Lesson:

Introduction.....	1
General Laboratory Safety.....	2
Emergency Action Plans and Laboratory Security.....	2
PPE.....	2
Chemical Hazards and Exposure.....	2
Sharps.....	3
Electrical Safety.....	3
Equipment Hazards.....	3
Environment Hazards.....	3
Gases.....	3
Bloodborne Pathogens.....	3
Waste.....	4
Biohazards and Biosafety.....	4
Animals.....	4

Introduction:

- [Environmental Health & Safety: Policies and Programs](#)
- [National Fire Protection Agency](#)
- [National Institute for Occupational Safety and Health](#)
- [National Institute of Standards and Technology](#)
- [Occupational Health and Safety Administration](#)

EH&S Laboratory Safety Training - Resources 2024

General Laboratory Safety:

- [Chematix Intro to Chematix and List of Resources\(opens in a new tab\)](#)
- [Chematix Tips and Tricks](#)
- Chematix help email: Chematix_Support@safety.rochester.edu
- [Emergency Eyewash and Shower Equipment Standards](#)
- [Environmental Health and Safety Standard Operating Procedures](#)
- Glove Selection Guide
 - Manufacturer glove selection guides, examples:
 - [Ansell Glove Selection Guide/Database](#)
 - [Ansell Chemical Glove Resistance Guide](#)
 - [Ansell Glove Selection Guide for chemicals commonly used in healthcare facilities](#)
 - [Ansell A Guide To Medical Glove Selection - Choosing The Right Glove For The Right Situation](#)
- [University of Rochester Biological Safety Cabinets](#)
- [University of Rochester Chemical Hygiene Program](#)
- [University of Rochester Laboratory Decommissioning Program](#)
- [University of Rochester Personal Protective Equipment Program](#)
- [University of Rochester Respiratory Protection Program](#)

Emergency Action Plans and Laboratory Security:

- [Chemical Facility Antiterrorism Standard - CFATS](#)
- [Chematix](#)
- [Emergency Evacuation Planning Guide for People with Disabilities](#) (NFPA)
- [Federal Select Agent Program](#)
- [University of Rochester Department of Public Safety](#)
- [University of Rochester Emergency Procedures for Laboratory Biohazards](#)
- [University of Rochester Emergency Management](#)
- [University of Rochester Fire Prevention plan](#) (see link list on right of page)
- [University of Rochester Fire Safety - Building Features](#)
- [University of Rochester's Fire 'fight' or 'flight' buildings](#) – when to use a fire extinguisher
- [University of Rochester - Transporting Hazardous Samples](#)
- Video from the Fire Safety Research Institute – [See the dramatic difference a door can make](#)
- [Videos from the Laboratory Safety Institute](#)
- [Videos from the Chemical Safety Board](#)

PPE:

- [Glove Selection Guide](#)
- [How to remove Personal Protective Equipment](#)
- [How to remove gloves](#) (video)
- [University of Rochester Personal Protective Equipment Program](#)
- [University of Rochester Respiratory Protection Program](#)

Chemical Hazards and Exposure:

- [Chematix](#)
- [Formaldehyde Spill Plan](#)
- Where to purchase secondary chemical labels and other labels:
 - [Fisher Scientific](#)
 - [VWR](#)

EH&S Laboratory Safety Training - Resources 2024

- [OSHA's Formaldehyde Standard](#)
- [OSHA Guide to the Global Harmonization System](#)
- [SDS online library - Velocity EHS \(previously MSDS online\)](#)
- [University of Rochester Chemical Hygiene Program](#)
- [University of Rochester Employee Incident Report Form](#)
- [University of Rochester Formaldehyde Program](#)
- [University of Rochester Perchloric Acid Policy](#)
- [University of Rochester Standard Operating Procedures](#)

Sharps:

- [OSHA Needle Sticks and Sharps Injuries](#)
- Sharps Disposal at home – See Waste
- [Sharps Safety](#) (CDC)
- SMH Approved Sharps Devices – [Appendix 2](#) of Bloodborne Pathogen Exposure Control Plan

Electrical Safety:

- [University of Rochester Electrical Safety Program](#)

Equipment Hazards:

- Centrifuges – proper use (videos).
 - [Jove](#)
 - [Centrifugation Hazards](#)
- [Laser Safety for Research and Teaching Laboratories](#)
- [Standard Operating Procedure for Effective Use of Autoclaves](#)
- [Ultraviolet Light Safety Guidelines](#)

Environment Hazards:

- [Asbestos Management](#)
- [University of Rochester EH&S Occupational Safety Unit](#)
- [University of Rochester Ergonomics Program](#)

Gases:

- [Air Gas](#)
- [Compressed Gas Association](#), Cylinder safety [OSHA review - slides 1-35](#)
- [University of Rochester Compressed Gas Life Safety Sensors and Alarms](#)
- [University of Rochester Compressed Gas Guidelines](#)

Bloodborne Pathogens:

- [Hepatitis ABCs](#) (CDC)
- [Hepatitis B Vaccine Frequently Asked Questions](#) (CDC)
- [Hepatitis B Vaccine Information Statement](#) (CDC)
- [UR Hepatitis B Vaccination Declination Form](#) (secure)
- [HIV Basics](#) (CDC)
- [OSHA Bloodborne Pathogens Standard](#)
- [OSHA FactSheet on the BBP Standard](#)
- [OSHA Bloodborne Pathogen and Needlestick Prevention](#)
- University of Rochester's [Institutional Biosafety Committee](#)

EH&S Laboratory Safety Training - Resources 2024

- [University of Rochester's Bloodborne Pathogen Exposure Control Plan](#) - Please note that because UR is a hospital, the Exposure Control Plan is focused on healthcare employees. [SMH Approved Sharp Devices](#)

Waste:

- [Biosafety Level Quick Guide](#) (CDC)
- [Chematrix Instructions, General](#)
- [Chematrix Instructions, Waste Disposal](#)
- [Code of Federal Regulations](#) for the Protection of the Environment (P list and U list chemicals)
- [EPA Hazardous Waste Listing](#) (User-Friendly)
- [NY DEC Regulated Medical Waste information page](#)
- Sharps Disposal at home – do not bring your home sharps for lab disposal
 - New York State Department of Health Safe Sharps Collection [Program](#), disposal guidance [pamphlet](#)
 - Strong Memorial Hospital - [guidance](#), drop-off [location](#)
- [University of Rochester Department of Environmental Compliance](#)
- [University of Rochester Guidance for Hazardous Materials and Waste disposal](#)
- [University of Rochester Research & Clinical Laboratory Waste Disposal Document](#) (secure)

Approved University vendors for biohazard waste and sharps containers:

- [Fisher Scientific](#)
- [VWR](#)

Biohazards and Biosafety:

- CDC/NIH's [Biosafety in Microbiological and Biomedical Laboratories](#)
- Public Health Agency of Canada one-page: [Biosafety in the Laboratory](#) (requires setting up free account)
- Public Health Agency of Canada one-page: [Minimize Aerosol Hazards](#) (requires setting up free account)
- [University of Rochester Institutional Biosafety Committee](#) (IBC)

Animals:

- Allergens - [Occupational Health and Safety in the Care and Use of Research Animals](#) (NRC)
- Allergens - [Preventing Asthma in Animal Handlers](#) (NIOSH Alert 97-116)
- Anesthetic gases - American College of Veterinary Anesthesia and Analgesia Commentary and recommendations on [Control of Waste Anesthetic Gases in the Workplace](#), 2013
- Anesthetic gases - [Waste Anesthetic Gases—Occupational Hazards in Hospitals](#) (NIOSH)
- [Anesthetic Gases - Guidelines for Workplace Exposures](#) (OSHA)
- Anesthetic gases - [Occupational Health](#), Katz JD and Holzman RS IN: Barash PG et al. Clinical Anesthesia, 7th edition, Lippincott Williams & Wilkins, 2013. (Table of Contents - click Section 1, Chapter 3.)
- Chemicals - Thomann WR. [Chemical safety in animal care, use, and research](#). ILAR J. 2003; 44(1): 13-9.
- [Guide for the Care and Use of Laboratory Animals](#) (NRC)
- Nonhuman primates - [B Virus \(herpes B, monkey B virus, herpesvirus simiae, and herpesvirus B](#) (CDC)
- Nonhuman primates - [National B Virus Resource Center](#) (Georgia State University)

EH&S Laboratory Safety Training - Resources 2024

- Nonhuman primates - Cohen JI et al; B Virus Working Group. [Recommendations for prevention of and therapy for exposure to B virus \(cercopithecine herpesvirus 1\)](#) Clin Infect Dis. 2002 Nov 15;35(10):1191-203
- Nonhuman primates - Ostrowski SR et al. [B-virus from pet macaque monkeys: an emerging threat in the United States?](#) Emerg Infect Dis. 1998 Jan-Mar;4(1):117-21
- [Occupational Health and Safety in the Care and Use of Nonhuman Primates](#) (NRC)
- [Occupational Health and Safety in the Care and Use of Research Animals](#) (NRC)
- [Rat-bite fever and Streptobacillus moniliformis](#). Elliott SP. Clin Microbiol Rev. 2007 Jan;20(1):13-22.
- University of Rochester - University Committee on Animal Resources - [Seven Tips for Staff & Students New to the Animal Resources](#)
- University of Rochester Animal Resources [FAQs, Animal Resource Office \(585\) 275-2651](#)
- [University of Rochester Guidelines for Preventing Animal Allergies in Laboratory and Vivarium Personnel](#)