

EHS Checklist for Restarting Research Activities

To support laboratories, EHS has developed a checklist to help researchers safely and efficiently ramp-up research activities and compliments the research continuity plans that they have developed. The checklist is meant to be implemented at the lab/research group level. Contact EHS (734) 647-1143 or your EHS Rep to discuss the checklist or if you have any concerns.

General Laboratory Safety:

- Conduct a walkthrough and survey the lab space for any unsafe condition. If you discover a hazardous condition that poses a threat to you or to others, call DPSS immediately at (734) 763-1131 or 911
- Ensure the lab has correct PPE and adequate quantities of disinfectant, reagents, and consumables available and be prepared for delays in availability
 - Recognize the order placement may be slower as the volumes of requests increase
- Remove postings related to the ramp down
- Check for water damage (ceiling tiles, floor, equipment) and any leaks from freezers, refrigerators and pipes
- Ensure proper function of fume hoods, glove boxes, biological safety cabinets (BSC), local exhaust ventilation, and other protective engineering controls
 - Do not use laboratory equipment that is not certified or is in alarm or not working properly
 - Contact Facilities Service Center (734) 647-2059 for service of fume hoods
 - Contact EHS (734) 647-1143 for service on BSCs or to certify out of date equipment
- Flush eyewash for 3 minutes or until the water runs clear
- Ensure there is access to eyewashes, showers, electrical panels, and fire extinguishers
- Maintain appropriate egress within all lab areas
- Ensure all emergency equipment is functioning properly
- Ensure gas cylinders are secure and the valves are closed, cap cylinders not in use
- Check compressed gas lines tubing and connections for leaks
- Check the integrity of hoses, lines, and cords on equipment
- Ensure dewars and cryogen containers are still filled
- Ensure all glassware left on bench tops are secure and have no visible cracks or breakage
- Review user manuals and start up procedures to ensure lab equipment is properly reactivated
- Ensure all unplugged electrical devices (hot plates, vacuum pumps, stir plates, ovens) are functioning properly
- Ensure ovens are empty prior to use
- Check incubators, refill water tray if needed
- Check for mold in incubators, refrigerators, freezers, and other equipment and decontaminate
- Implement daily surface disinfection / housekeeping protocols ([click here](#) for information on the *Control and Prevention of COVID -19 in U-M Laboratory Facilities*)
- Implement cleaning and storage protocols for safety glasses
- Review/Update any internal SOPs, Chemical Hygiene Plan, Biosafety Manual, Exposure Control Plan, Radiation Safety Manual
- Contact the Core Facilities to ensure they are available to support lab needs
- When lab work is completed, ensure all equipment is turned off prior to leaving

Chemical Safety:

- Remediate any chemical leaks, spills, or unsafe storage of chemicals
- Put away any chemicals left out on benchtops or fume hoods
- Check for expired chemicals, particularly peroxidizable or self-reactive substances
 - Test for peroxide content, if applicable

Hazardous Waste:

- Contact EHS HazMat (734) 763-4568 to request pickup for any surplus chemicals, expired chemicals, sharps or hazardous waste past 60 days of the accumulation start date
- Ensure all waste is labeled and manifested prior to requesting a pick up
- Manage all biological waste appropriately
- Arrange a waste pickup if your lab has accumulated a large amount of radioactive waste, especially if waste containers are full

Biological Safety:

- Turn on BSCs and disinfect surfaces before conducting lab work
- Start with clean vacuum flasks. If flasks have been left with culture media waste, they should be decontaminated and emptied prior to start up
- Check that all infectious material and toxins put away for storage are secure

Radiation Safety: *Complete before starting any work with radioisotopes*

- Conduct a contamination survey to catch up on monthly surveys
- Verify Liquid Scintillation Counters are working properly
- Check survey meters for proper function and current certification
- For those who wear dosimeters, make sure the dosimeter is current for the wear period

Laser Safety: *Complete before starting any work with lasers*

- Verify all “Laser in Use” lights illuminate as intended and “Warning” or “Danger” signs are in place at all entrances
- Make sure appropriate eyewear is in place and available to all who enter
- Check for any water on floor (flooding) before turning on any power to lasers
- Verify inventory of all lasers before they are fired up
- Ensure any new personnel are trained

Research Machine Shops: *Prior to starting work, staff should check for the following items*

- Power button on machines must be OFF position prior to energizing at disconnect
- Check that cords are not compromised before plugging back in
- Check tooling prior to use
- Review cleaning of touchpoints documentation prior to use of shared equipment

Animal Safety: *Contact ULAM staff and your assigned Veterinarian prior to scheduling any animal work*

- Ensure anesthetics and other agents for animal administration are not expired
- Ensure anesthetic gas filtering cartridges, snorkel exhaust, fume hoods or other approved scavenging systems are available and working properly before use
- Ensure personnel are enrolled in the Occupational Health and Safety Program (i.e. completed the Medical Surveillance Questionnaire)
- Report injuries, illnesses, and allergy symptoms when working with animals