

Research Resumption Checklist



This checklist is intended to help facilitate the phased resumption of research within campus research laboratories following the research stand down. It is intended as a tool to aid in the safe return to research activities. Some items may not apply to every lab.

Please contact your Department Safety Manager, Departmental Chemical Hygiene Officer (both found in the [Princeton University Chemical Hygiene Plan](#)), or EHS directly at ehs@princeton.edu or 609-258-5294 with questions about how to safely resume research operations in your laboratory.

Laboratory Resumption Checklist

Preparing:

Item	Complete	N/A	Notes
Identify priority activities required to get the laboratory back up and functioning.			
Identify lab staff that can return to the labs to participate in ramp up activities. Special attention should be paid to ensuring lab leadership (lab managers/technicians) are among the first to return to the lab to help prepare the lab for resumption of research activities.			
All researchers and support staff have completed <i>Safe Practices for Resumption of Research</i> training, required for all returning personnel.			
Ensure a supply of soap and paper towels for hand washing and other disinfectants such as bleach and ethanol is available for cleaning shared equipment and work areas.			
Ensure appropriate PPE is available in sufficient quantities to those returning to the lab. (See EHS guidance on Ordering Personal Protective Equipment and Supplies).			
Establish social distancing protocols to be used in each of the spaces assigned to your laboratory. As			

needed, consider scheduling personnel into shifts to facilitate access to the lab while ensuring proper social distancing. See " Guidelines for Safe Research during Covid-19 Pandemic " [Add link to EHS website] for guidance in these areas.			
Consider the potential limitations of other departments that support laboratory research (e.g., EHS, LAR, Facilities, etc.) and how delays in the services offered by these departments could impact lab operations.			
Consider potential limitations of Core Facilities and how delays in the services offered by these centralized units could impact your own lab operations.			
Determine the protocols that have been established in other areas on which your operations may depend; e.g., shared equipment/facilities, core facilities, collocated research areas, etc.			

Communications:

Item	Complete	N/A	Notes
Ensure all members of the laboratory are aware of the expectation that all work capable of being performed remotely <u>MUST</u> be performed outside of University facilities.			
Ensure lab members are entered and up to date in EHS SHIELD – Safety, Health, Inspection and Equipment Logistics Database (https://shield.princeton.edu). Contact EHS (ehs@princeton.edu) for assistance with SHIELD.			
Ensure the contact list is saved where it can be remotely accessed by everyone in the lab (e.g., EHS-SHIELD, Slack). Include email addresses and home and cell phone numbers.			

Ensure phone tree or email group is up to date to facilitate emergency communication amongst lab researchers and staff. With staff working shift schedules, ensure that messages can be communicated effectively to all lab members,			
Ensure that emergency contacts listed on Emergency Information Posters are up to date and posted on outside of lab doors and update the electronic version in SHIELD.			
If scheduling systems will be used to manage access to laboratory equipment, ensure all users can access and are trained in using the scheduling systems.			
Ensure any specialized contact lists posted on temperature sensitive equipment (freezers, fridges) and rooms such cold rooms are updated.			
Ensure that lab members who are dedicated or essential for the operation of specialized equipment or lab techniques make documentation available to other lab members in case of absence.			

Initial Laboratory Re-Entry Walkthrough:

Item	Complete	N/A	Notes
<u>Survey the laboratory for unsafe conditions</u>			
- Signs of leakage from reagent containers, waste containers, etc.			
- Water damage or leaks (e.g., wet, discolored ceiling tiles, stained cabinets, standing water on the floor or in cabinets)			
- Check cold rooms for evidence of mold growth			
- Make note of unusual conditions needing the attention of EHS or Facilities			

Ensure laboratory safety equipment (Safety Showers, Eyewashes, Fire Extinguishers) and Electrical Panel Boxes/Shutoffs are unobstructed.			
Survey chemical and waste storage for expired or outdated chemicals, and signs of reaction, crystal formation, container degradation.			
Check fume hoods to ensure that they are operating normally and are not showing any alarm. (Hoods may need to be woken from hibernation by raising the sash a few inches before assess hood status)			

Research Related Items:

Item	Complete	N/A	Notes
Develop a list of supplies required to restore lab functions. Supplies should be prioritized to limit the burden on supporting departments (stockroom, EHS, LAR, etc.). Prepare for the possibility of supply chain disruptions and limited availability of essential items.			
Identify materials requiring specialized handling (e.g., DEA Controlled Substances, radioactive materials). Ensure all necessary items/staff in place to receive such an order properly.			
<u>Controlled Substances</u>			
Confirm the inventory of Controlled Substances, document in logbook, and ensure they match with pre-shutdown values			
<u>Submit disposal request for expired controlled substances,</u>			
Consider additional measures to restrict access to Controlled Substances during resumption of lab activities with many groups in addition to lab staff potentially entering areas where substances are stored.			

<u>Radioactive Materials</u>			
Ensure all radioactive materials/ sources are properly secured in locked housing (refrigerator, freezer, cabinet, or lockbox).			
Perform a wipe test within one week of starting lab activities. Include stock vial storage areas and radioactive waste storage areas. Surveying stock vial storage areas is especially critical for H-3, as H-3 can leach from the storage container.			
Conduct inventory of cold storage units to ensure that samples have been appropriately preserved during the shutdown period.			
Recover glassware and other essential items from shared areas such as autoclave rooms, washrooms, and microscopy rooms.			
<u>Laboratory Sinks and Eye-washes</u>			
Briefly (30s-1min) run water in all laboratory sinks to help clear sediment out of lines and re-wet the traps.			
Activate sink mounted eyewash stations (Run for 1 min or until water runs clear)			
Check gas cylinder levels on tanks that were left on to maintain critical functions.			
Check the function of all appliances, computers, microscopes, hotplates, sterilizer ovens, water baths, and other equipment that were disconnected from energy sources for extended periods. Ensure proper procedures are followed for bringing such equipment back online. <u>Review operating manuals and SOPs for safe startup procedures.</u>			
<u>Biosafety cabinets</u> : decontaminate the inside work area prior to first use.			
Confirm fume hoods, BSC and other equipment are operating and have current certification (if applicable)			

and alarms are not activated.			
Check oil level on vacuum pumps that were left on during shut-down or prior to restarting.			
Prior to using or connecting equipment, test house vacuum and compressed air to ensure that they are operational and lines are free of condensation.			
Laboratories that use water polishers (such as MilliQ systems): <ul style="list-style-type: none"> • Follow manufacturer's recommendations for flushing the system • Consider emptying and refilling systems that have holding reservoirs or filled carboys. 			

Waste Management:

Item	Complete	N/A	Notes
CHEMICAL WASTE: Ensure all hazardous chemical waste is properly contained, labeled, and segregated in Satellite Accumulation Areas (SAAs). For materials that were not submitted before shutdown, submit a Waste Pickup Request have the waste removed.			
BIOLOGICAL WASTE: Collect all solid biological waste that was not picked up before the shutdown in appropriate containers and place the sealed regulated medical waste container out for collection by Facilities – Building Services.			
RADIOACTIVE WASTE: Collect, label, and secure all radioactive waste that was not collected before the shutdown in appropriate container and contact EHS for collection.			
Request waste containers and other supplies as needed			