**OVERVIEW:** This checklist is intended to aid laboratory and research groups in planning to ramp-up operations. This checklist works through the following phases of the Laboratory and Research Ramp-up process to minimize potential disruptions and to promote the safety for everyone returning to work. Please [contact EHS](https://ehs.psu.edu/contact-us) with any questions.

* [Planning – Assessment of Activities that must be Conducted On-Campus](#_PLANNING:)
* [Prepare – Evaluation of In-Person Activities and Prepare Strategies to Promote Worker Safety](#_PREPARE)
* [Initial set-up and re-configuration of work areas](http://ORANGE#_)
* [Approved Personnel Return to Work](#_)

**INSTRUCTIONS**: Laboratory and Research groups returning to work on campus must:

* Use this Laboratory and Research Ramp-up Checklist as a planning tool to prepare for returning to work.
* Provide your unit’s [Facility Coordinator](https://www.opp.psu.edu/facilities-coordinators) with the research spaces (buildings/rooms) planning to re-occupy. Facility Coordinators will complete the online Return to Work Space Registration form.
* Submit Pandemic-related Supply orders with General Stores via [Penn State eBuy](https://www.absecom.psu.edu/ebuy/public_pages/EBUY.cfm).
* Re-assess your [Laboratory and Research Safety Self-Inspection](https://ehs.psu.edu/laboratory-safety/forms) to confirm the safety status of the laboratory space as part of the restart of research operations.

|  |  |  |
| --- | --- | --- |
| **Principal Investigator** | **Penn State Email**  | **Phone** |
|  |  |  |
| **Campus** | **Building(s) & Rooms** |
|  |  |

# PLANNING

Familiarize yourself with current COVID-19 [Working on Campus procedures](https://ehs.psu.edu/sites/ehs/files/employee_hs_guidance_final.pdf) to promote a safe laboratory and research environment for your returning personnel as well as those continuing to telecommute to promote physical distancing.

| ITEM  | Complete  | N/A  | Notes  |
| --- | --- | --- | --- |
| Review and become familiar with the following COVID-19 return to work procedures and resources:* + - [EHS COVID-19 Website](https://ehs.psu.edu/covid19) for current procedures and listing of available services
		- [Employee Guidelines for Working on Campus](https://ehs.psu.edu/sites/ehs/files/employee_hs_guidance_final.pdf)
		- [COVID-19 Supervisor Instructions](https://ehs.psu.edu/sites/ehs/files/covid19-supervisorinstructions.pdf) for assessing and reporting suspected COVID-19 cases
		- [Cloth Mask](https://ehs.psu.edu/sites/ehs/files/covid19-clothmasks.pdf) guidance for universal masking
		- [Cleaning Guidelines](https://ehs.psu.edu/sites/ehs/files/cleaningguidance-laboratory.pdf) for Laboratory and Research Facilities
 |  |  |  |
| Prepare list of permissible Laboratory and Research Activitiesbased on [OSVPR’s guidance](https://www.research.psu.edu/COVID_return_research).* + - What must be done onsite or in-person?
		- What can be done via telecommute?
 |  |  |  |
| **Research Ramp Down Preparedness** |
| Anticipate that you may need to quickly ramp research back down if local conditions change. * + - Review current Research Ramp Down checklist.
		- Develop a ramp-down plan.
		- Consider delaying more complicated to ramp down operations for first few weeks to assess potential for COVID-19 resurgence.
 |  |  |  |
| **Identify the following for the Research Activities that must be conducted onsite** |
| **Places / Space Considerations*** + - Where do these activities occur?
		- Is this a singular location or does the work require multiple locations and work stations?
 |  |  |  |
| **People*** + - Did you identify approved personnel who are required to conduct in-person activities?
		- What is the minimum number of people required to support in-person operations at any one time?
 |  |  |  |
| **Equipment and Operational*** + - What are the critical in-person operations?
		- What equipment is required? Are these single user or shared?
		- What critical supplies are needed to support these operations?
		- Are there vendors and supply chain issues that need to be addressed?
		- What [COVID-19 supplies](https://ehs.psu.edu/sites/ehs/files/ehs-pandemic-supplies.pdf) are needed?
 |  |  |  |
| **Return to Work Registration Process** |
| **Space Re-Occupancy Registration:** Contact your [Facility Coordinator](https://www.opp.psu.edu/facilities-coordinators) to complete the online Space Re-Occupancy form once approved by the Unit Executive (e.g., Dean, Vice President, Vice Chancellor) as outline in the Return to Workplace authorization process.* + - Buildings may have been closed with limited or no custodial services as well as in an energy set back mode.
		- ***Facility ramp-up period may take up to 2-weeks for full re-activation. Full workforce cannot return until facility is officially re-opened by OPP or campus Maintenance.***
 |  |  |  |

# PREPARE

Evaluate the intended in-person activities and prepare strategies to promote personnel safety.

| ITEM  | Complete  | N/A  | Notes  |
| --- | --- | --- | --- |
| **Places / Space Considerations** |
| **Offices*** + - Telecommuting should be continued for personnel not requiring direct access to in-person activities.
		- Continue to avoid performing non-lab activities (e.g., computer work, data analysis, paperwork, or email) in the lab, especially if there are ongoing lab activities.
		- Identify strategy to reconfigure shared offices or stagger shifts to align with physical distancing principles.
 |  |  |  |
| **Laboratory and Other Work Areas*** + - Identify strategy to reconfigure work areas to align with physical distancing principles:
			* 1. Maintain minimum 6 feet of physical distancing
				2. Avoid using both sides of shared benches (e.g., minimize face-to-face)
		- A combination of space reconfiguration and/or staggering shifts may be required to maintain physical distancing.
 |  |  |  |
| **Common Areas and Break Rooms*** + - Identify strategy to reconfigure break rooms to align with physical distancing principles.
		- Encourage people to find alternative areas for breaks.
 |  |  |  |
| **Meeting Rooms*** + - Meetings must be done virtually whenever possible.
		- As per OSVPR, “all other research activities should be conducted remotely, including all seminars, group meetings, and one-on-one meetings.”
 |  |  |  |
| **People Considerations** |
| **Staffing Assignments*** + - Identify personnel needed to help set-up space prior to larger workforce return.
		- Identify workforce with in-person operational expectations, but confirm activities acceptable to continue to telecommute. Personnel can split time between in-person and telecommuting.
		- Identify personnel who can continue to primarily telecommute**.**
 |  |  |  |
| **Physical Distancing:** * + - How many people should work in an area per shift and maintain 6 feet social distancing?
		- Determine need to stagger shifts.
		- Determine need to stagger break periods.
 |  |  |  |
| **Working Alone**: Consider the following criteria for working alone when assessing personnel levels:* + - What work can safely be conducted alone?
		- What work supports having a virtual buddy?
		- What must be postponed due to a high risk of injury or other incidents?
 |  |  |  |
| **Contact Lists*** + - Review or create contact list for all lab personnel, PIs, department contacts, and safety officers. Include campus police and campus maintenance as appropriate.
		- Ensure the contact list is saved where it can be remotely accessed by everyone in the lab. Include home and cell phone numbers.
 |  |  |  |
| **Equipment and Operational Considerations** |
| Prepare for supply chain disruptions and limited availability of materials. Suppliers may still be under stay-at-home orders or manufacturing may not have ramped up to meet critical order supplies.* + - Recognize that order placement may be slower as the volume of requests increases.
		- Plan for limited sales of high demand items.
		- Plan for limited PPE availability (N95s, face shields, and gloves).
		- Plan for some reagents and consumables having limited availability.
 |  |  |  |
| **Equipment** * + - Discourage sharing of tools and equipment as much as possible.
		- Stagger shifts if possible for high use shared equipment.
		- Establish disinfection protocols between uses.
 |  |  |  |
| **Vehicles*** + - Require only one person per vehicle as much as possible.
 |  |  |  |
| **Vendors / Supply Chain*** + - Confirm vendors and supply chain availability needed to initiate work activities.
		- Confirm loading dock operations are available before ordering materials.
 |  |  |  |
| **Pandemic Supplies**: Determine quantities of [pandemic supplies](https://ehs.psu.edu/sites/ehs/files/ehs-pandemic-supplies.pdf) needed by personnel and prepare order with [Penn State General Stores via EBuy](https://www.absecom.psu.edu/ebuy/public_pages/EBUY.cfm).* + - Cloth Masks: 2 per person.
		- Disinfectants: Work units need to provide disinfectants for shared laboratory spaces and equipment.
		- Hand sanitizer: Provide hand sanitizer if personnel are working in areas without access to sinks for regular hand washing.
 |  |  |  |
| **Core Facility Access**: Review any shared facilities, such as microscopy areas, analytical laboratories, etc., for any use restrictions.* + - Delays due to start-up procedures.
		- May have restricted schedules to accommodate physical distancing.
		- A schedule or electronic calendar sign-up may help coordinate use of shared facilities.
		- Procedure for disinfecting between users.
 |  |  |  |
| **Protocol Reviews and Safety Considerations** |
| **Work Unit Disinfection Plan**: OPP or campus maintenance is cleaning public and common areas. Units need to develop a laboratory cleaning protocol and schedule to disinfect high touch surfaces and shared equipment. See [lab disinfection guidance document.](https://ehs.psu.edu/sites/ehs/files/cleaningguidance-laboratory.pdf) |  |  |  |
| **Unit Specific Plan**: Review the Unit Specific Plan for your research operations and confirm it is up-to-date for planned research activities. |  |  |  |
| **High Hazard Operations** * Consider delaying highly hazardous research if possible, until normal personnel levels can ensure people do not work alone.
* Review current high hazard operational procedures in the Unit Specific Plan and confirm they are current for anticipated research focused upon Research Ramp-up. Update SOPs as necessary.
 |  |  |  |
| **IBC Protocols**: Review current biosafety protocols and confirm no changes to anticipated research upon research ramp-up.  |  |  |  |
| **UIC Protocols**: Review current radiation and laser safety protocols and confirm no changes to anticipated research upon research ramp-up.  |  |  |  |
| **Emergency Plans**: Ensure appropriate emergency response plans and contact information are in place. |  |  |  |

# Initial set-up and Reconfiguration of spaces

This phase is used as a buffer period to prepare spaces before the larger workforce returns to campus.

| ITEM  | Complete  | N/A  | Notes  |
| --- | --- | --- | --- |
| **People** |
| **Personnel Assignments*** + - Confirm only Approved Personnel are supporting set-up of the work space.
 |  |  |  |
| **Pandemic Supplies**: Obtain and distribute preliminary stocks of supplies for personnel returning to campus.* + - Cloth Masks: 2 per person.
		- Disinfectants: Work units need to provide disinfectants for shared laboratory spaces and equipment.
		- Hand sanitizer: Provide hand sanitizer if work activities are located in areas without access to sinks for regular hand washing.
 |  |  |  |
| **Entering the Laboratory or Research Space for the First Time** |
| **Local Alarms:** Do not enter a laboratory if an alarm is sounding. Contact EHS at 814-865-6391 or Maintenance at your campus to report the alarm. |  |  |  |
| **Mental Hazard Assessment**: Before you walk in, do a mental hazard assessment for potential:* + - Hidden or invisible hazards of your lab.
		- Location of compressed gases, vapor-producing, or high hazard chemicals.
		- Location of hazardous waste storage areas.
		- Think through how you would detect any problems and how to react before you enter the room.
 |  |  |  |
| **Survey for Unsafe Conditions** * + - Walk through all of your areas.
		- Complete a visual inspection looking for any evidence of problems: broken chemical containers, old waste, leaks, failed equipment, spills, etc.
 |  |  |  |
| **Hazardous Condition Response**: If you discover a hazardous condition that poses a threat to you or others, such as a hazardous material release:* + - isolate the hazard,
		- notify occupants in the area,
		- evacuate the laboratory and close the door,
		- exit the building if required, and
		- notify EHS at 814-865-6391 to report the situation.
 |  |  |  |
| **Reactive and Peroxide-forming Chemical Check**: Assess reactive and peroxide forming chemicals that may have become unstable during the shutdown. * Look for chemical containers that are bulging, indented, cracked, have crystals formed around the cap, or are otherwise compromised.
* Contact EHS immediately if unstable reactive or peroxide forming chemicals are found.
 |  |  |  |
| **Signage*** Remove the [Laboratory Suspension Sign](https://ehs.psu.edu/sites/ehs/files/lab_suspension_sign.pdf) on entrances to the laboratory.
* Check that the [Laboratory Information Door Sign](https://ehs.psu.edu/sites/ehs/files/laboratory_information_door_sign.docx) has up-to-date contact information.
 |  |  |  |
| **“Spring Cleaning”: Safety Checks and Disposal of Excess Materials in Preparation for Return to Work** |
| **Laboratory and Research Safety Self-Inspection**: Review the last [Laboratory and Research Safety Self-Inspection](https://ehs.psu.edu/laboratory-safety/forms) Form completed for your laboratory to assess any past safety concerns prior to the return to the work area. |  |  |  |
| **Eyewash stations** * Flush for 3-5 minutes to remove sediment and stagnant water and document on weekly inspection sheet.
* Report problems to your facility coordinator, department safety officer, or campus Maintenance department.
 |  |  |  |
| **Pour water down dry traps and floor drains** to mitigate sewer gas smells that are often confused with natural gas leaks. |  |  |  |
| **Check equipment** that may have been affected by a power disruption. * Keep refrigerator and freezer doors closed until temperature levels return to normal.
* Check for leaks that may have occurred if the temperature was compromised.
* Review equipment manuals for safe startup instructions.
 |  |  |  |
| **Check Utilities** are in operation, including plumbed DI water, house natural gas, electrical outlets, ventilation, and compressed air or vacuum lines. |  |  |  |
| **Check Dewars and cryogen containers** for sample storage and liquid nitrogen levels. |  |  |  |
| **Check chemical fume hoods and biosafety cabinets** are operating as normal and inspected within the past year prior to resuming use.* If your fume hood is overdue for inspection, contact your department Safety officer.
* If your biosafety cabinet is overdue for inspection, [contact the inspecting company](https://ehs.psu.edu/sites/ehs/files/biological_safety_cabinets.docx).
 |  |  |  |
| **Review hazardous material inventory** to ensure no loss of material (chemicals, radioactive, toxins, controlled substances). Report any suspected losses immediately to University Police and EHS. |  |  |  |
| **Review gas system start-up procedures** for any compressed gas cylinders, gas generation station, and/or gas distribution systems. |  |  |  |
| [**Request chemical waste pickups**](https://ehs.psu.edu/waste-disposal) for expired or other unwanted chemicals. |  |  |  |
| [**Request regulated medical waste pickups**](https://ehs.psu.edu/infectious-waste-pick-form) for biological waste. |  |  |  |
| **Risk Management**: If any damage has occurred as a result of the closure, contact Risk Management within 24 hours of discovering the loss. |  |  |  |
| **Work Space Planning and Reconfiguration** |
| **De-Clutter and Discard Unwanted Material** where possible to facilitate the ease of cleaning and disinfection of the research spaces. |  |  |  |
| **Offices:** Implement previously identified strategy to reconfigure shared offices or stagger shifts to align with physical distancing principles. |  |  |  |
| **Laboratory and Other Work areas:*** + - Implement previously identified strategy to reconfigure work areas to align with physical distancing principles.
		- Avoid using both sides of shared benches (e.g., minimize face-to-face).
		- Re-locate workstations and shared equipment as appropriate.
 |  |  |  |
| **Common Areas, Break Rooms, and Meeting Rooms*** + - Implement previously identified strategy to reconfigure spaces to align with physical distancing principles.
		- Remove excess chairs and reconfigure seating as appropriate.
 |  |  |  |

# APPROVED PERSONNEL RETURN TO WORK

Once the previous phase work activities from the Work Unit have been completed AND the building services have been restored by the OPP or Campus Maintenance, Approved Personnel may return to work.

| ITEM  | Complete  | N/A  | Notes  |
| --- | --- | --- | --- |
| **People** |
| **Personnel Assignments:** Confirm only Approved Personnelare returning to work at this time. |  |  |  |
| **Normal PPE Supplies:** Assess stock of PPE needed for research operations prior to COVID-19 and order supplies to that may have been donated during the shutdown. |  |  |  |
| **Pandemic-related Supplies**: Obtain and distribute supplies to personnel returning to campus.* + - Cloth Masks: 2 per person.
		- Disinfectants: Work units need to provide disinfectants for shared laboratory spaces and equipment.
		- Hand sanitizer: Provide hand sanitizer if work activities are located in areas without access to sinks for regular hand washing.
 |  |  |  |
| **Supervisor Training** – Hold virtual meetings with supervisors coming on duty with focus on the following:* + - Mandating physical distancing protocols.
		- Enforce the use of masks as per university protocol.
		- Clean common areas that are shared.
 |  |  |  |
| **Employee Training –** Hold virtual meetings with returning personnel to review the Work Unit’s COVID-19 plan implementation.* + - Ensure personnel have completed Laboratory and Research Safety or other required Annual Safety Refresher Trainings.
		- Re-train personnel on research-specific operations and methodologies that may have regressed during time away.
 |  |  |  |
| **Work Unit COVID-19 Plan Implementation** |
| **COVID-19 Resources**: Review the following COVID-19 return to work procedures and resources with personnel:* + - [EHS COVID-19 Website](https://ehs.psu.edu/covid19) for current procedures and listing of available services
		- [Employee Guidelines for Working on Campus](https://ehs.psu.edu/sites/ehs/files/employee_hs_guidance_final.pdf)
		- [COVID-19 Supervisor Instructions](https://ehs.psu.edu/sites/ehs/files/covid19-supervisorinstructions.pdf) for assessing and reporting suspected COVID-19 cases
		- [Cloth Mask](https://ehs.psu.edu/sites/ehs/files/covid19-clothmasks.pdf) guidance for universal masking
		- [Cleaning Guidelines](https://ehs.psu.edu/sites/ehs/files/cleaningguidance-laboratory.pdf) for Laboratory and Research Facilities
 |  |  |  |
| **Cloth Mask and PPE:** Distribute and review the cloth mask expectations with personnel as well as other PPE requirements as part of normal operations. |  |  |  |
| **Physical Distancing:** Review the plan to maintain physical distancing with personnel. Stagger shifts and break periods. Review space re-configuring plans and expectations for offices, work areas, break rooms, and meeting areas. |  |  |  |
| **Avoid Working Alone**: Review the working alone criteria and expectations with personnel. |  |  |  |
| **Work Unit Disinfection Plan**: Review the laboratory cleaning protocol and schedule to disinfect high touch surfaces and shared equipment with personnel.  |  |  |  |