

Research Continuity Guidance for Laboratories and Research Facilities

OVERVIEW: The guidance below is provided to aid Deans, Department Chairs, Safety Officers, and Principal Investigators (PIs) in considering the additional steps that should be taken to protect laboratory personnel and the valuable research being conducted at Penn State during a temporary campus shutdown.

Upon reviewing this document, PIs should:

- Notify OSVPR of <u>essential personnel list</u>.
- Laboratories closing for the interim should complete the <u>Laboratory Ramp-Down</u> Checklist.
- Post the Laboratory Suspension Sign on entrances to the laboratory.

ASSUMPTIONS: The following are assumptions researchers can use for planning, based on a scenario with widespread COVID-19 community transmission:

- The primary focus in all planning must be personnel safety.
- Plans should include ensuring continued animal care and humane treatment of research animals. Please follow-up with the Animal Resource Program staff on specific plans.
- A significant percentage of your laboratory personnel may be out sick or be unable to come to work (resulting from imposed isolations due to recent travel history, family and personal health matters, closures of schools and daycare centers, etc.).
- Exposure to a confirmed or suspected case of COVID-19, either at Penn State or elsewhere, may result in the self-isolation of **ALL** members of the laboratory group.
- Orders for critical supplies may be delayed.
- Core facilities and other resources may not be available.
- Facility and equipment repairs, calibrations, and certifications may be delayed.
- Disinfection treatment of your workspace or heavily touched surfaces may be necessary in the event of a local illness.
- Collaborators at other institutions (domestic or foreign) may be similarly impacted and unable to participate in the project.
- Essential research infrastructure, such as power and telecommunications, will be maintained.
- The University will communicate any disruptions to laboratory access.

STEPS TO ENSURE CONTINUITY OF CRITICAL FUNCTONS: The following are steps researchers can take now to ensure continuity of critical functions:

• Complete the Laboratory Ramp-Down Checklist to help your lab determine what applies to your specific research needs.

Last updated: 12/18/2020

EHS-0046atd

Research Continuity Guidance for Laboratories and Research Facilities

- Identify procedures and processes that require regular personnel attention (e.g. cell culture maintenance, animal studies).
- Assess and prioritize critical laboratory activities.
- Identify projects that should not be started at this time.
- Identify any research experiments that can be curtailed, suspended, or delayed.
- Identify all personnel able to safely perform essential activities.
- Prepare to limit access to shops or core facilities if warranted by reductions in staff.
- Maintain an updated list of everyone who works in the research facility. Include home and cell phone numbers and ensure access to the information even while away from the lab. Create a phone tree or email group to facilitate emergency communication amongst lab researchers and staff.
- Cross-train research staff to fill in for others who may be out sick or unable to come to work. Consider documenting either via video or written documentation critical step-by-step instructions.
- Coordinate with colleagues who have similar research activities to identify ways to ensure coverage of critical activities or sharing of personnel.
- Maintain frequent communication with collaborators with whom you have dependencies for materials, components of the research, or data.
- Maintain a sufficient inventory of critical lab and safety supplies that may be impacted by global shipping delays.
- Plan for delays or loss of vendor support over an extended period of time for materials such as compressed gas or dry ice deliveries, etc.
- Arrange for removal of chemical or biological waste prior to reductions in personnel.
- Preserve critical/irreplaceable samples such as cell lines or mouse lines.
- Consider installing remote control monitoring devices for critical equipment (e.g., -80 °C freezers, liquid nitrogen storage Dewar's, incubators). Have a clear plan of who is responsible for responding to these alarms and how they should be addressed.
- Ensure you have adequate supply of cryogenic liquids needed to maintain samples (e.g. cell lines) or cool equipment (e.g. magnets). If your lab anticipates needing someone to come in to do this work, they should be added to the essential personnel list linked above.
- Secure all research materials, controlled substances, and Personal Protective Equipment from loss, misdirection, or misuse.
- If your lab works with research animals, follow guidance provided by the <u>Animal Resource Program and IACUC</u>, plan accordingly, and ensure that you have made provisions for their care. Please consult with veterinary staff to coordinate animal care needs.
- Shipping of hazardous materials from research labs may be delayed during this time.
 Contact hazmatship@psu.edu before planning any shipments to ensure availability of EHS staff for shipment processing.

Research Continuity Guidance for Laboratories and Research Facilities

- Communicate significant planned absences and/or lab closures to your PI/Lab Manager/designee, Safety Officer, and Department Administrators. Maintain a system to know the whereabouts of all members.
- Confirm that all lab members have registered for <u>PSUAlert</u>, the tool the University uses for widespread notification of emergencies or widespread disruptions.
- Review contingency plans and emergency procedures with all personnel.

MEASURES TO REDUCE RISK OF SPREAD OF COVID-19: Simple measures can help lower your risk of getting sick. We all have a responsibility to prevent the spread of flu, cold, and other illnesses. Dense social and public spaces can present an increased risk of contracting and spreading illnesses, and prevention is centered on good hygiene:

DON'T SHARE YOUR GERMS:

- o If you are sick, do not come to work. Stay home, rest, and contact your healthcare provider should symptoms worsen.
- Do not share glasses, eating utensils, water bottles, cigarettes/vapes/JUULs, lipstick/makeup, etc.
- o Disinfect common laboratory areas and high touched surfaces (e.g. doorknobs, sink handles, freezer doors, fume hood sashes, telephones).

MAINTAIN SOCIAL DISTANCING:

- o Maintain social distancing, but do not work alone in the laboratory.
- Physical distancing means staying out of crowded places, avoiding group gatherings, and maintaining distance (approximately 6 feet or 2 meters) from others when possible.
- o Consider alternating work schedules to meet the demands of the laboratory while limiting close contact with others.
- o Identify work that can be done from home or remotely, such as data analysis.
- o Avoid in-person meetings. Use remote work technologies (e.g., Zoom, Skype).

MAINTAIN GOOD PERSONAL HYGIENE

- o Wash your hands often with soap and water (20 seconds of scrubbing) or use alcohol-based hand cleaners (cover all surfaces and rub until dry). Hand sanitizer is not a substitute for hand washing in the laboratory.
- o Cough/sneeze into a tissue. Dispose of used tissues immediately into a trashcan and then wash your hands. If you don't have a tissue, cough/sneeze into the crook of your elbow, not your hands.
- o Avoid touching your eyes, nose, and mouth, which accelerates the spread of infections. Wear eye safety protection when working in the lab.

Research Continuity Guidance for Laboratories and Research Facilities

OTHER SAFETY CONSIDERATIONS:

- Ensure that individuals performing essential tasks have been adequately trained, have access to all PPE and essential safety equipment, and understand whom to contact with technical or safety questions.
- Ensure that high-risk materials (radioactive, biohazards, chemicals) are secured.
- <u>Do not perform high-risk procedures alone!</u> When working alone is necessary, exercise maximum caution.
- Notify colleagues of your schedule when working alone for an extended period of time.
- If you are setting up to work from home, make sure your work area is set up as ergonomically as possible. Guidance is available on the EHS website.