

Restarting Research at Sacramento State

Ramp-Up Checklists for Laboratory-Based Research and Field-Based Research

This guidance document has been developed to assist in the process of resuming research activities related to laboratory-based research, field study research, liberal arts research and clinical research. The goal is to phase in research activities to maintain our facilities and essential research assets, while also protecting the health and safety of our personnel.

Please refer to the campus [Coronavirus \(COVID-19\) FAQ pages](#) for updates and the latest information on the University's campus operations during the pandemic.

Note that this checklist is meant to be a general guide. Not all items apply to every research activity. If you have questions, please contact the relevant safety office:

- Environmental Health and Safety:
<https://www.csus.edu/campus-safety/environmental-health-safety/>
- Campus Emergency Preparation:
<https://www.csus.edu/campus-safety/environmental-health-safety/emergency-management.html>
- Coronavirus Information for Students:
<https://www.csus.edu/student-affairs/emergency-student-information/>
- COVID-19 Resource Guide:
<https://www.csus.edu/student-affairs/crisis-assistance-resource-education-support/internal/documents/covid-19-resource-sheet.pdf>
- Health and Counseling Updates – General COVID-19 Related Questions:
<https://www.csus.edu/student-affairs/emergency-student-information/health-counseling-updates.html>
- Student Health and Counseling Services:
<https://www.csus.edu/student-life/health-counseling/>

LABORATORY-BASED RESTART RESEARCH CHECKLIST

INFECTION CONTROL IN UNIVERSITY BUILDINGS		
ITEM	YES	N/A
Procure supplies for infection control which include disinfectant wipes/ethanol spray (minimum 70% alcohol) hand soap and/or hand sanitizer, and masks/facial coverings in accordance with institutional guidance.		
Establish social distancing policy and procedures for the following areas as they pertain to your research: <ul style="list-style-type: none"> · Shared office spaces · Break areas/food preparation areas · Research laboratories · Shared facilities such as microscopy areas and other core facilities/instrumentation rooms · Field locations · Clinical spaces 		
Establish disinfection procedures for the following areas as they pertain to your research: <ul style="list-style-type: none"> · Shared office spaces · Break areas/food preparation areas · Research laboratories (this may be impacted by your IBC registration) · Shared facilities such as microscopy areas and other core facilities · Field locations · Clinical spaces 		
Establish staggered schedules (AM vs PM, every other day, every other desk/bench, etc.).		
PHYSICAL INSPECTION AND ADMINISTRATION OF RESEARCH SPACES		
ITEM	YES	N/A
Housekeeping <ul style="list-style-type: none"> · Ensure all tables, desks and benchtops have been wiped down. · Ensure all sinks, if located within space, have soap and paper towels. 		
Laboratory Technicians and Students <ul style="list-style-type: none"> · Check with Department Chair if technicians are required to train students on the safe use of equipment. · Ensure working conditions are appropriate for technician. · Ensure that students are aware of safety plans. 		



<p>General Safety</p> <ul style="list-style-type: none"> • Ensure all illumination in lab is functioning properly. • Check for any obstructions that could be a trip or falling object hazard. • Check infrastructure such as shelving, whose condition may have deteriorated during the downtime. • Check for water leaks from ceiling, sinks, or other sources (e.g., circulating water baths, aspirators, etc.) are not leaking. • Survey spaces for any signs of unauthorized entry. 		
<p>Administrative Items</p> <ul style="list-style-type: none"> • Ensure emergency contacts for the research spaces are up-to-date and have not changed during the shutdown. • Ensure all active research staff are up-to-date with application trainings required by EH&S. • Review any applicable standard operating procedures related to research. • Ensure biosafety, chemical safety, animal use, and/or human subject protocols are up to date, reflecting any changes related to restarting procedures, and have received approval. 		
<p>Logistics Planning During Pandemic-Related Disruptions in Supply Chain</p> <ul style="list-style-type: none"> • 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 (including respirators, face masks, face shields, disposable gowns, and gloves). • Plan for some reagents and consumables to have limited availability. 		
LABORATORY-SPECIFIC RESTART CHECKLIST		
ITEM	YES	N/A
<p>Laboratory Specific Housekeeping</p> <ul style="list-style-type: none"> • Flush eyewash sinks and DI water systems. • Ensure the correct PPE such as protective garments/coats, eyewear, gloves, hearing protection, and respiratory protection are available as needed for your research. • Ensure benches are clean and replace bench liners. • Ensure door signage for the laboratory is still in place. • Check for any chemical or biological leaks, spills or releases. 		
<p>Laboratory Equipment</p> <ul style="list-style-type: none"> • Ensure that steps are taken to safely relocate equipment, materials, and supplies to normal lab operation locations if moved prior to ramp-down. • Ensure any sensitive electrical equipment that was shut off and/or unplugged is functioning properly. • Return any elevated equipment, supplies, electrical wires, or chemicals that were off the floor to protect against flooding from broken pipes. 		



<ul style="list-style-type: none">• If necessary, restore any backed up secure data and turn on non-essential/non- critical computers and equipment.• Return any secured laptop computers or other easy to remove electronic devices.		
Fume Hoods and Biosafety Cabinets <ul style="list-style-type: none">• Confirm blowers for all fume hoods and biosafety cabinets are working for at least 5 minutes.• Ensure fume hood and biosafety cabinets have up to date certifications and alarms are working properly.		
Chemical Safety <ul style="list-style-type: none">• Ensure all Safety Data Sheets are up to date in either paper or electronic form if new chemical orders are arriving.• Ensure chemicals are segregated properly, stored in proper cabinets (flammable cabinets for flammables, etc.) and have not expired during shutdown. Request a waste pickup for peroxide forming compounds (i.e., diethyl ether, tetrahydrofuran, and cyclohexene) or other chemicals that may have become unstable or expired during ramp down.		
Controlled Substances <ul style="list-style-type: none">• Ensure controlled substances are secured, inventory is correct, and if substances have expired, they have been marked as such.		
Waste Management <ul style="list-style-type: none">• Satellite Accumulation Areas have been inspected for appropriate safety including labels, secondary containment, integrity of containers and no full containers are present.• Biological waste containers are not over filled or leaking.• Autoclave if necessary is working and accessible.• Proper cleaning and waste management strategies are made for the workspace.		

FIELD-BASED RESTART RESEARCH CHECKLIST

Field researchers have a responsibility both to their research teams, and to the locations in which they are conducting their work. Therefore, on-site work should not proceed 1) domestically where a state of emergency due to COVID-19 community spread has been declared or 2) domestically where local authorities have restricted activity, as through the emplacement of travel restrictions, stay-at-home orders, or other restrictions, 3) internationally in countries that have been designated by the CDC as having Level 2 Travel Notice (“Ongoing Community Transmission”) or higher (<https://www.cdc.gov/coronavirus/2019-ncov/travelers/index.html>) or where local authorities have issued public health orders restricting activity.

FIELD SPECIFIC RESTART CHECKLIST		
ITEM	YES	N/A
<p>Prior to Departure</p> <ul style="list-style-type: none"> • Ensure all relevant trainings and permissions (e.g., IACUC, first aid, trapping permits, consent from landowners, Institutional Review Board, etc.) must be in place before initiating any travel to field sites. • Ensure appropriate safety equipment is provided to the field crew including but not limited to face coverings, hand sanitizer containing no less than 70% alcohol and disinfecting wipes for disinfection of shared gear. • Before departure, ensure each person going into the field performs a self-assessment of their health, and not depart for the field if they show COVID-19 symptoms. • Before departure, the PI should put in place a written contingency plan in case someone becomes symptomatic for COVID-19, including: <ul style="list-style-type: none"> -The nearest clinic to the field site that can run COVID-19 tests; -A plan on how to isolate the field crew with food and water, if they become symptomatic; and -A back-up plan to "evacuate" field crew if they test positive or become debilitated and are unable to care for themselves. • Ensure a first-aid kit containing Tylenol or the like to control fevers is included in the safety gear. 		
<p>Vehicle Transportation</p> <ul style="list-style-type: none"> • Verify with EH&S the max # of people permitted to ride in a vehicle at one time during COVID-19 • Ensure/recommend all researchers traveling to a field research site must wear face coverings while riding in a vehicle if social distancing is not possible. 		
<p>Lodging During Field Research</p> <ul style="list-style-type: none"> • Ensure every effort is made to provide individual living arrangements for field researchers. 		



<ul style="list-style-type: none">• Social distancing (>6 feet) must always be enforced during field research, including active research, sleeping arrangements/lodging, cooking arrangements, and other activities.		
<p>Conducting Field Research</p> <ul style="list-style-type: none">• Ensure each field crew member performs a self-assessment of their health each day and reports any potential symptoms of COVID-19.• Ensure special separation of >6 feet is maintained at all times.• The PI is responsible for enforcing crew members wearing the appropriate face coverings (e.g. cloth mask vs. N95) dictated by the research being performed.• Ensure shared gear (e.g. binoculars, GPS units) is disinfected before handing over to someone else.		

References:

University of Montana, [University of Montana COVID-19 Guidelines for Off-campus Field Research](#), UC San Diego, [Field Research: Field Research: Additional Guidance During COVID-19 Pandemic](#).