Principal Investigator: Date Approved:

This document aims to provide guidance for self-cleaning by researchers in laboratory spaces. This cleaning SOP is designed to disinfect high-touch surfaces, minimize the spread of COVID-19, and empower you to disinfect your entire laboratory space safely. Research laboratories contain sensitive materials and equipment, which is why following proper procedure is essential. Custodial services are providing more frequent cleaning of lobbies, bathrooms, elevators, handrails, and other common areas and touchpoints throughout the day. If you have any questions or concerns, contact ehslaboratory@ucr.edu.

Cleaning/Disinfection SOP for Research Laboratories During Coronavirus Pandemic

Scope

Disinfect all areas in which a person has been present, including **all touched surfaces** in clean areas, and any lab surfaces with which they had direct contact (lab benches, chairs, chemical cabinets, door knobs, fume hoods, etc.). It is **not necessary to disinfect floors unless visible or suspected contamination is present. Use professional judgement** concerning disinfecting sensitive equipment.

Cleaning / Disinfection Frequency

Disinfection frequency depends on the amount of activity in the lab and shared areas. Surface disinfection should be done before and following the use of lab bench areas, equipment controls, and keyboards. At the very least, deeper disinfection of lab areas should occur daily, before closing for the day. Disinfection of highly touched surfaces such as chairs, desktops, computer keyboards, computer displays, remotes, light switches, elevator buttons, handrails, doorknobs, doors, door push plates, card readers, refrigerator/freezer handles and their doors; equipment panels/switches, benchtops; biosafety cabinet and fume hood sashes and their working surfaces; commonly used hand tools and small objects (pipettors); and shared PPE (e.g., laser goggles). Be careful when disinfecting sensitive equipment to prevent damage or disruption of the equipment. Consult with equipment manufacturers on viable options if you have questions.

Select a Disinfectant

Check for compatibility: When selecting and before applying a disinfectant, determine any materials or equipment located in the lab that potentially could be incompatible (e.g., bleach). Some disinfectants may require a secondary wipe-down with water or ethanol to remove residue. Read and follow disinfectant label guidelines. Do not mix incompatible disinfectants (e.g. bleach and ammonia) as it can produce toxic gases.

Bleach	Freshly prepare solution of 10% (1:10 dilution) household bleach.
EPA Certified disinfectants	Select a disinfectant that is EPA-certified (https://www.epa.gov/pesticide-registration/list-n-disinfectants-use-against-sars-cov-2-covid-19) Examples: quaternary ammonium (Lysol, RX 44, etc.), hydrogen peroxide [Spore Klenz, etc.] or iodophore-based [Wescodyne, etc.] solution suitable for routine surface disinfection. You may also use wipe-based disinfectants such as Clorox wipes [quaternary ammonium] or Cavicide.
70% alcohol	Prepare a solution of 70% alcohol (ethanol or isopropanol)

Spread Prevention: Face Covering & Personal Protective Equipment

Face Covering	Personal Protective Equipment		
 Face Covering	 Lab Coat	 Gloves	 Eye Protection
Face Covering (Homemade, Bandana, Neck Gaiters) Request a Face Covering: https://tinyurl.com/ug65je4	Traditional lab coat	Nitrile gloves	ANSI Z87.1-compliant safety glasses, or safety goggles if a splash hazard is present.

Cleaning /Disinfection Procedures

Prepare Lab

Dispose of all benchtop absorbent pad, cardboard, or other porous materials. Ensure that all sharps are stored or disposed of appropriately. Discard all contents of benchtop waste containers into an appropriate waste stream. Minimize clutter and other unnecessary items on countertops and desks/tables.

Wear PPE

Wear lab coat, disposable gloves, and eye protection, at minimum. If you do not have a lab coat, follow the steps on getting your PPE.

Clean and Disinfect

Clean surfaces by removing any visible contaminants. If the surface is **visibly contaminated or wet with possible contaminants**, place absorbent material (e.g. paper towels) directly over the contamination. Wipe to remove contamination and dispose of the absorbent material as indicated under **Disposal (below).**

Apply disinfectant by spraying or applying the solution to a paper towel and then wiping it onto the surface. Allow appropriate contact time.

a. The surface must remain wet for the contact time indicated for the disinfectant used. If the surface dries, reapply the solution.

Bleach	5 minutes*
70% ethanol or IPA	5 minutes* Note: As 70% alcohol is very volatile and dries quickly, it is best used as a secondary cleaner following a 5 minutes application of 10% bleach.
Disinfectant Kits	Request a Disinfectant Kit from Facilities Services: https://facilities.ucr.edu/fs-campus-return-support-information

*For general coronavirus pandemic disinfection. Longer contact times may be necessary for labs working with other infectious microorganisms. Follow approved IBC disinfection protocol for other microorganisms.

After appropriate contact time, wipe surfaces to dry and/or remove residual disinfectant.

Disposal

Dispose of cleaning materials in lab trash containers and any hazardous waste in accordance to the Hazardous Waste Disposal Guidelines.

Remove your PPE without contaminating yourself:

Remove PPE	Gloves	Using a gloved hand, grasp the cuff area of the other gloved hand at the wrist and peel off the first glove, inverting it inside out. Hold removed glove in gloved hand. Slide fingers of ungloved hand under remaining glove at the wrist and peel off the second glove over the first glove. Discard in the designated waste container. Wash your hands in a laboratory sink with soap and water.
	Lab Coat	Unsnap/unbutton your lab coat; taking care of the outside of the coat or sleeves don't contact your body. Pull coat away from your neck and shoulders, touching the inside of gown or coat only. Hang lab coats on separate hooks spaced far enough apart to prevent cross contamination with other people's lab coats. If you do not have a lab coat, follow the steps on getting your PPE link above.
	Eye Protection	Remove safety glasses, wipe with disinfectant, and then wash with soap and water to remove any chemical residue, if necessary.

First Aid & Emergencies

Fire

Call 911 from a campus phone (or (951) 827-5222 from a cell phone) for assistance with all fires, even if extinguished. If you are trained and feel comfortable to do so, extinguish the fire with a dry chemical fire extinguisher (classes ABC or D) located in or near your laboratory; CO2 type extinguishers are **not** acceptable. **DO NOT** attempt to use water to put out a fire of this type. Evacuate the lab and proceed to the designated Emergency Assembly Area.

Skin or Eye Contact

Remove contaminated clothing and accessories; flush affected area with water for a minimum of **15 minutes** in the safety shower or eyewash. If symptoms persist, get medical attention.

Acknowledgement

Title: Cleaning/Disinfection SOP in Research Labs during COVID-19 Pandemic

By my signature I acknowledge the contents, requirements, and responsibilities outlined in this Standard Operating Procedure (SOP):

Name	Identification*	Signature	Date

***Identification:** Enter your Student ID, Employee ID, UCR NetID, or UCR Email.*