

Laboratory Disinfection Protocol

The following information is provided to disinfect laboratories and their equipment. The cleaning and disinfection of research areas is the responsibility of research personnel. This is in addition to standard social distancing and safety requirements mandated by the University, such as maintaining a 6-foot distance from others and wearing masks in any shared space.

Steps to follow to clean and disinfect:

1. Wash your hands with soap and hot water for at least 20 seconds
2. Wear disposable gloves. Remove the gloves carefully and discard after each use
 - » If a liquid disinfectant is being used, safety glasses or goggles must be worn
3. Wipe the various surfaces, using a clean wipe and/or folding over the wipes for each new surface area. (see "what to disinfect" below)
 - » Heavily soiled surfaces should be cleaned using detergent or soap and water before disinfection
 - » Dispose of wipes in trash
4. Wash your hands with soap and hot water for at least 20 seconds

What to disinfect:

- Frequently touched surfaces should be disinfected at the beginning and end of each shift. Items used more frequently, or by more people, should be disinfected every 2 hours
- This includes, but is not limited to:
 - » Benchtops
 - » Desks, tables, and chairs. Note that cloth-covered chairs are extremely difficult to disinfect and should not be in labs
 - » Freezer, refrigerator, cold room, and incubator doors
 - » Equipment handles, controls, and touchpads
 - » Cabinet and drawer handles
 - » Door handles/knobs and light switches
 - » Sink faucets
 - » Phones
 - » Shared equipment, instruments, and tools
 - » Shared electronics, including computer mouse, keyboard, and displays
 - » Small tools such as pipettes, pens, etc.
 - » Waste container lids if not step-activated
 - » Fume hoods and biosafety cabinets
- Shared equipment should be disinfected per standard protocols
- Disinfect reusable PPE, such as glasses/goggles or face shields, immediately after use
- Some equipment may be harmed by spraying disinfectants. Use wipes, or soak a clean soft cloth in the appropriate disinfectant, to wipe this type of equipment

**If in doubt, contact the manufacturer for proper disinfecting techniques*

Some considerations for labs:

- De-clutter. Remove items that do not need to be in the lab to reduce the number of items that need to be disinfected and to make it easier to disinfect benchtops and shared surfaces
- Cover items that cannot be moved and won't be used
- Consider removable shielding such as clear plastic wrap or a plastic bag that can be removed and discarded between users for items that would be difficult to disinfect
- Keep a log of disinfection date/time and personnel initials
- Keep an area with clean items and those to be disinfected, such as small tools and pens
- Minimize personal belongings in the research space. Only take what is essential

Using disinfectants:

- For disinfection, diluted household bleach solutions, alcohol solutions with at least 70% alcohol, or [EPA-registered disinfectants for COVID-19](#) should be used
- Follow manufacturer's instructions for proper concentration, application, and ventilation. Spraying and immediately wiping is not typically sufficient
 - » Note the contact time necessary for disinfection; some require 5-10 minutes of contact time
 - » For fast-evaporating disinfectants (such as 70% alcohol) it may be necessary to use more than one wipe to keep the surface wet for the required contact time
- Check to ensure the product is not past its expiration date
- Ensure the disinfectant is compatible with the surface before using
- ***Never mix disinfectants*** – a dangerous chemical reaction may occur
- All chemicals, including diluted disinfectant solutions, must be in appropriate containers which are labeled with the name of the chemical and date prepared/date expired as required
- Diluted household bleach solutions can be used if appropriate for the surface
 - » Please note that diluted bleach solutions expire after 7 days
 - » Prepare a bleach solution by mixing:
 - 5 tablespoons (1/3 cup) bleach per gallon of water, or
 - 4 teaspoons bleach per quart of water
- [CDC recommendations for cleaning and disinfecting](#)

**Be cautious. Be caring. Be Creighton.
We're in this together.**