



Fact Sheet: Preparing Lab Equipment for Service, Transfer, or Disposal

Introduction

Laboratory equipment is commonly taken out of service for repairs, transfer to a different lab, closure of the laboratory, storage, or disposal. Regardless of the reason, if a piece of equipment is removed from service, it **must be** cleaned and decontaminated to protect workers servicing the equipment, others that may come in contact with the equipment, and the environment.

Ensuring that equipment is cleaned and decontaminated is the responsibility of the Principal Investigator or the designated lab supervisor. If these individuals are no longer at the university, it becomes the responsibility of the departed Principal Investigator's department.

Equipment will not be accepted for disposal/recycle/reuse unless it has been properly cleaned and decontaminated.

If the laboratory is closing, follow the University's policy for [Lab Close-outs and Moving](#)

To dispose of hazardous chemical waste, follow the [Hazardous Waste Disposal Procedures](#)

Follow [ReUse Program Instructions](#) if lab equipment will be sent to the University ReUse

Program. Sources of Contamination

- Biohazardous agents including viruses, bacteria, fungi or prions*
- Recombinant or synthetic nucleic acids
- Biologically derived toxins
- Blood, serum, cells or tissues from humans or animals
- Clinical specimens
- Radioactive materials

*Note: Prions are extremely resistant to conventional inactivation procedures including irradiation, boiling, dry heat, and many chemicals (formalin, betapropiolactone, alcohols). Please see the Biosafety website for information on Prion Disinfection Options.

Examples of Equipment for Decontamination:

- Freezers
- Refrigerators
- Incubators
- Biological safety cabinets
- Water baths



- Centrifuges
- PCR machines
- Walk-in temperature controlled rooms

Procedures for Biological Decontamination

These procedures are to be followed regardless of the reason that a piece of equipment is taken out of service - either temporarily or permanently.

- Assess the type of contamination that may be present. This may require interviewing several individuals including those in other labs sharing a piece of equipment.
Note: Contact Radiation Protection for radioisotope decontamination assistance, 626-6002.
- Wearing appropriate personal protective equipment during decontamination.
- Remove all contents.
- If biological material is to be disposed of as waste, see the [Biological and Infectious Waste](#) page.
- Pre-clean all surfaces with warm soapy water if the surfaces are heavily soiled with organic material such as blood, body fluids, etc.
- Sanitize with an effective disinfectant against biological material. For equipment that is decontaminated with 10% bleach and returned to service, rinse surfaces after 30 minutes contact time as bleach is corrosive.
- For biological safety cabinet (BSC) decontamination, wipe down the following interior surfaces (except the interior ceiling of the BSC) with an appropriate disinfectant:
 - 1) primary work surface and underlying catch basin,
 - 2) side walls,
 - 3) back wall, and
 - 4) interior surface of the window.
- For decontamination of catch basin below the work surface, remove front intake grille, lift out work surface tray, and wipe off interior with paper towel soaked with disinfectant. When bleach is used, a second wiping with 70% ethanol is needed to remove the residual chlorine, which may eventually corrode stainless steel surfaces.
- When taking a biosafety cabinet out of service, a [biosafety cabinet certifier](#) must be contacted for gaseous decontamination.
- Special consideration must be taken when selecting a chemical disinfectant to clean a walk-in temperature-controlled room as these areas do not have the number of room air exchanges as lab space.



Equipment and Items Needing Repair:

- Contact the service company to determine if they require written verification of decontamination before they will service equipment.
- Certification that an item has been properly decontaminated is the responsibility of the lab.
- Consult the equipment manual for cleaning/decontamination procedures, policies, and chemical compatibility. If necessary, contact the equipment manufacturer for additional guidance.
- If it is not possible to decontaminate the equipment, it must be properly packaged to prevent exposure and labeled to inform non-laboratory staff of the potential hazards present.

When a service person (University or outside contractor) needs to work on equipment in the laboratory:

- Prepare a working area which is clean and free of hazards.
- Clear enough space for easy access around the equipment.
- Remove any hazardous items stored near, on, or under the equipment.
- Inform the individual of potential hazards in the laboratory.
- Provide personal protective equipment if necessary.