Micro–Isolator Technique

Division of Laboratory Animal Resources
Initial Preparation

- Turn on work station hood fan and light
  - Allow to run for several minutes (about 4–5 at least)
  - Make sure that the sash is at the correct working height

**SASH TOO HIGH**

**DO NOT** disable the alarm

**Correct Height**
Laminar Airflow Work Stations

- Sash Too High
- Correct Height
Disinfectants

- **MB–10**
  - Chlorine dioxide High level disinfectant
  - Tuberculocidal
  - Bactericidal
  - Virucidal (MHV, Sendai, PVM, LCMV, etc.)
  - Fungicidal

Alternate disinfectants such as Clidox® (not currently used in DLAR)

- High level disinfectant
  - Tuberculocidal
  - Bactericidal
  - Virucidal (MHV, Sendai, PVM, LCMV, etc.)
  - Fungicidal
- Contact time is important
Protective Clothing

- Laboratory Coat
- Disposable Gown
- Sleeves
- Gloves
Protective Clothing

- Make sure that your gloves overlap the sleeves
- Take care not to expose any skin
Disinfection

- Spray the work surface of the hood with disinfectant
- Wipe any debris from the work surface
Disinfection

- Spray and wipe down the internal sides of the hood
- Do **NOT** spray the HEPA filter area of hood
Disinfection

- Fill forceps tray with disinfectant from the spray bottle
- Spray sleeves, gloves, and forceps tray
- Rub hands together to distribute disinfectant
Additional Requirements

- The floor of the hood should be sprayed periodically to prevent contamination between filter tops.
- Dip fingers and forceps (if used) in MB10 solution between different boxes of mice.
- It is important, especially when handling mice and equipment that may present a possible contamination that hands, work surfaces, caging, cage card holders, and instruments used for handling the mice, be kept continually wet with disinfectant, to help prevent the spread of possible contaminants such as fur mites.
Preparing to Change Dirty Boxes

- Place all necessary items in the hood (i.e. clean boxes, water bottle baskets, food container)
- Spray the outsides and bottoms of all items in hood with disinfectant
Preparing to Open/Change Boxes

- Place the micro-isolator in the hood, spray the outside of the box with disinfectant® (this includes the clean box if you are changing dirty boxes)
- Avoid spraying the cage card
Handling the Micro-Isolator

- Remove filter top by tilting it to the left or right
- Place filter top on floor of hood right side up
An acceptable alternative is to rest the lid against the back of the box or placed on its’ side.
Disinfection

- Touching the outside of the micro-isolator contaminates your gloves
- Dip gloves in forceps tray filled with disinfectant until completely wet. This should be done after handling each cage.
- Rub hands together
- If using forceps, remember to submerge them in disinfectant when not in use
Handling the Micro-Isolator

- Turn water bottle upside down
- Turn wire bar lid sideways across the cage
Perform procedures, weaning, or transfer animals from dirty cage to clean cage.

When weaning animals, be sure to place several food pellets (8–10) on the floor of the cage.
Handling the Micro-Isolator

- Replace the wire bar lid
- Turn water bottle so that sipper tube is pointed downward
Handling the Micro-Isolator

- Replace filter top
Clean work surface of hood with disinfectant and paper towels then wipe with clear water

Throw away used gloves and sleeves
Handling IVC caging

- All Micro-Isolator caging and IVC caging regardless of style or manufacturer should be worked with under Laminar flow workbenches or Bio-Safety cabinets.
- This includes All Static Micro-Isolators and All ICV caging including the large and small Tecniplast cages, the Red and Green lines and the Allentown IVC’s (individually ventilated caging). This cage handling procedure also applies to all of the IVC Rat caging as well.
Questions or to request training for proper Micro-Isolator techniques, please contact DLAR supervisors, DLAR veterinarians, or DLAR Training Team.

- Stephen Tudor 323–6224 Supervisor
- Raghda Abukhaled 323–6010 Supervisor
- Carolyn Bratcher 323–6224 Supervisor
- Kim Tomashko 323–2816 Supervisor
- Dr. Jeanie Kincer 323–5469 Veterinarian
- Dr. Jeff Smiley 323–0289 Veterinarian
- *Dr. Cheryl Haughton 257–3548 Veterinarian
- *Gary Pattison 257–0013 DLAR Trainer
- *Ken Hays 323–5697 DLAR Trainer

* DLAR Training Team