



OFFICE OF LABORATORY ANIMAL CARE

Working Instructions

WIN Number:	102	Rodent Microisolator Cage Change	Revision #:	0
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PROCEDURE

All work instructions must be demonstrated by the trainer and performed by the trainee.

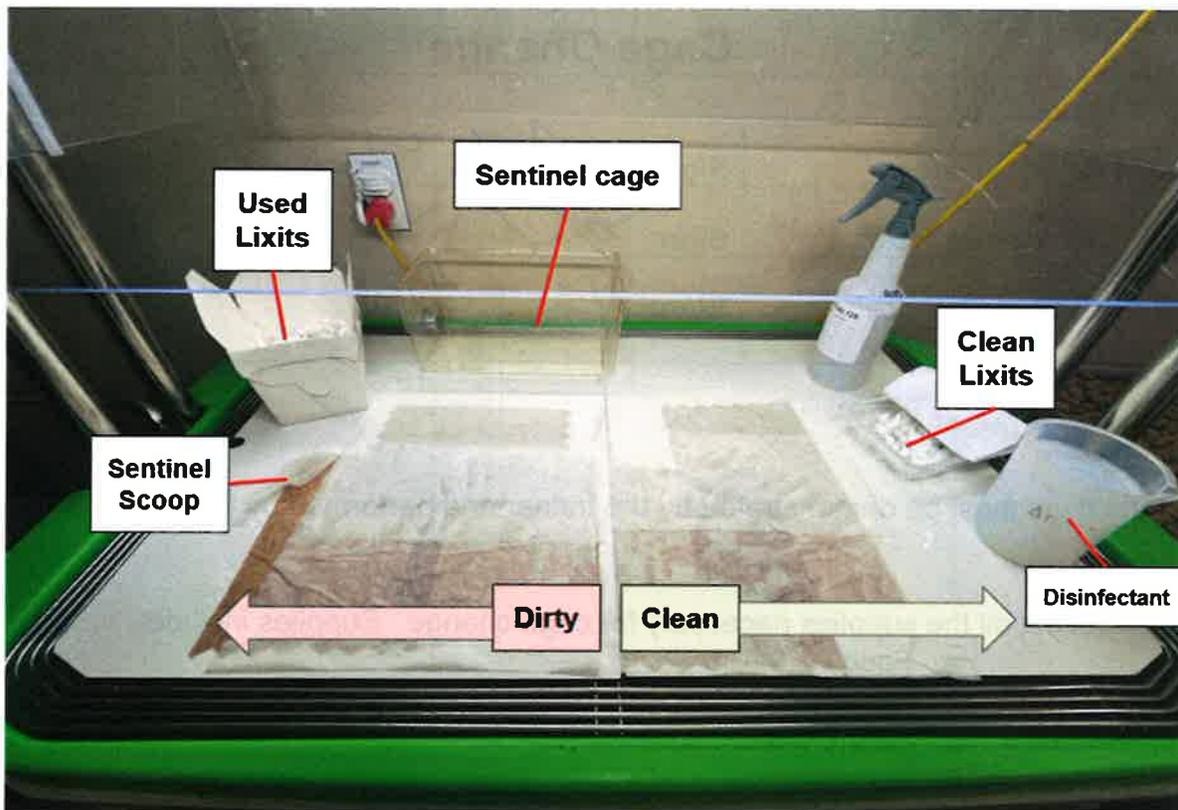
Setup:

1. Collect all the supplies necessary for cage change. Supplies include:
 - a. Food
 - b. Hydropacs and lixits or water bottles
 - c. Clean rodent cages
 - d. Feeders or wire bars
 - e. Lids
 - f. Absorbent towel or similar approved material
 - g. Appropriately diluted disinfectant
 - h. Spray bottle or cup for disinfecting hands
 - i. Step stool, if applicable
 - j. Knee pads (optional)
 - k. Sentinel bedding collection scoop

2. Turn on the biosafety cabinet (BSC) or cage change station. The sash (if applicable) must remain locked and pulled down to the appropriate level when in use.

3. Spray the inside of the BSC or cage changing station with the appropriate dilution of disinfectant and wipe the sprayed surface with a paper towel.

4. Spray the inside of the change station again, and **DO NOT** wipe.
5. Place an absorbent towel on the surface of the change station.
 - a. Always keep the work surface saturated with the appropriate dilution of disinfectant during cage change.
6. Separate the work surface into a “Clean” and “Dirty” side that will be maintained throughout the cage changing process.
 - a. Keep vent grills/vents free and clear of supplies for the cage change station to function properly.



7. Position the cage change supplies around the cage changing station so that they correspond with the “Clean” and “Dirty” side of the work surface.
8. Place an empty, clean cage underneath the clean cages that are placed on the floor.



Cage Change:

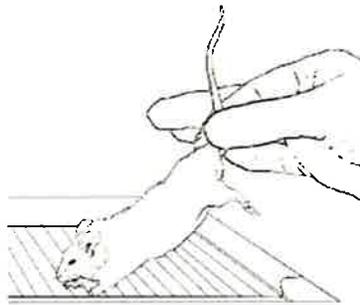
1. Spray or dip your gloved hands with approved disinfectant, then remove the cage to be changed from the rack.
 - a. You may place an absorbent towel or other landmark on the cage slot so that the cage will be returned to the original location on the rack.
2. Wipe the cage slot with a saturated towel containing approved disinfectant.
3. Place the cage inside the cage change station onto the saturated work surface on the “Dirty” side of the cabinet.
 - a. Only open one (1) cage containing animals at a time to avoid cross contamination.
4. Place a clean cage onto the “clean” side of the saturated work surface inside the cage change station.
5. Place a clean feeder or wire bar on the clean cage.
6. Place a new lixit and hydropac pouch on the feeder
 - a. Check for water leaks around the hydropac and lixit. If water is observed leaking, replace the hydropac pouch.
 - b. Check that water comes out of the lixit by pressing a gloved finger against the valve and looking for water actively dripping from the valve opening. If no water is observed,

check that the hydropac pouch and valve are inserted correctly. Replace the hydropac pouch and/or valve if water does not come out of the valve.



7. Place a clean refilled bottle into the cage
 - a. Check that the bottle top is securely affixed to the water bottle
 - b. Check that the bottle has no cracks or other damage
 - c. After placing the clean refilled bottle in the clean cage, check that there is no immediate/constant leak from the bottle into the clean cage. Replace the bottle if any damage is noticed or if leaking is observed.
8. Refill feeder with approved feed.
9. Remove the cage card holder from the lid on the dirty cage. Place the dirty lid outside of the work surface on the designated cart or flatbed. Then, take a clean lid and reattach the cage card holder to the lid.
10. Place the lid on its side between the clean and dirty cages or place it upside down on the surface of the cage change station.
 - a. Ensure that the interior surface of the lid does not come in contact with the cabinet surface.
 - b. Care should be taken that the wire bars, feeders, or enrichment devices do not come in contact with anything other than the interior of the cage.
11. Disinfect gloved hands by spraying or by dipping gloved hands with disinfectant prior to touching the inside of the cage and/or animals.
12. With wet disinfected gloved hands or wet disinfected forceps (mice only), transfer the animals from the dirty cage to the clean cage.
 - a. Transfer mice and smaller rats by grasping the animal by the base of their tail and lifting them from one cage to the other.

- b. Transfer larger rats and other rodent species by gently grasping around the body, while supporting the body weight with the other hand, as the animal is moved to the new cage.
- c. If pinkies are present, use wet gloves and scoop pinkies with the entire nest from the dirty cage and place them into a clean cage.

**Mouse Handling****Rat Handling**

13. Observe each animal during cage change and assess for health concerns. Report any health concerns that are found.
14. Transfer a portion of the used nesting material to the new cage to transfer scent.
15. Comb fingers, forceps, or approved sentinel scoop through the dirty bedding to confirm that all animals have been transferred to the clean cage.

**Transfer portion of the used nest****Confirm cage is empty by combing through the bedding**

16. Place the lid with the corresponding cage card onto the clean cage containing the animals.

17. Scoop a portion of feces laden bedding from the dirty cage and deposit it into the designated sentinel cage containing a Contact Media Filter.
 - a. Collect a sample for each ½ rack (mice).
 - b. Spray or dip the scoop in disinfectant prior to starting a new sentinel cage group.

18. Place the dirty cage outside of the cage change station in the designated dirty supply area. Then, remove the saturated towel from the cage slot and return the newly changed cage on the rack in its original location.

19. At the end of changing cages for each sentinel group, place a lid on the sentinel cage, then shake and rotate the cage vigorously for fifteen to twenty (15-20) seconds to expose the Contact Media Filter to the dust in the soiled bedding.
 - a. Remove the lid from the sentinel cage, then remove the Contact Media Filter with dry, gloved hands.
 - b. Discard the used sentinel bedding from the sentinel cage, then return the Contact Media Filter to the empty cage.
 - c. Place the lid back onto the cage and return the sentinel cage to its original location on the rack.
 - d. Change gloves between each sentinel group.

Clean Up:

1. Double check that all dirty cages do not have any live or dead animals before moving them to the cage wash area.
2. Clean the cage change station by discarding all debris. Then, spray the surface of the cage change station with approved disinfectant and wipe with a clean absorbent towel.
3. Spray or dip the sentinel scoop in approved disinfectant.
4. Check underneath the change station vents and remove debris (if present).
5. Cover all dirty cages with a lid. Then take all the dirty cages and cage accessories to the dirty cage wash area.
6. Label your cages with your name prior to leaving the cage wash.

REFERENCE DOCUMENTS

REVISION HISTORY			
REVISION NUMBER	AUTHOR(S)	EFFECTIVE DATE	REVISION(S)