

IACUC Guidelines for Quarantine Procedures for Rodents in the ARC Facilities at UWM

Last Review: 4/2022

Revision History:

The intent of this guideline is to describe the UWM quarantine program for rodents coming from non-approved vendors.

1. Definition

Non-approved vendors are all rodent suppliers other than Charles River Laboratories (excluding National Cancer Institute), Envigo, Taconic, and the production division of Jackson Labs. Rodents from non-commercial sources pose the highest single risk of introducing infectious agents into the ARC colonies. These rodents should be subjected to quarantine and health monitoring programs. Note that some shipping modalities risk exposure in transit.

2. Objective of the Quarantine Procedures

To prevent the introduction of pathogens into established colonies.

3. Acquisition of Animals

Investigators procuring animals from non-approved vendors must:

1. Provide the ARC with the following information:
 - a. A recent (less than 3 months) health report (including serology panels, parasitology and necropsy reports) of the originating colony
 - b. A summary of health issues for the last 12 months, for the whole originating facility
 - c. A description of the husbandry practices (sterile or non-sterile micro-isolation, use of change station, etc.)
 - d. A description of the health monitoring program
2. Complete a shipment form for receiving animals prior to ordering the rodents.
3. Coordinate shipment with the source and the ARC once the Veterinarian and/or Animal Care Manager have approved the shipment.

4. Quarantine Access

Only essential, trained, personnel have access to quarantine (i.e., the Veterinarian, Animal Care Manager, ARC animal care staff, research staff).

Rodents that are imported for acute use (i.e. short -term experiments or tissue collection) will not be evaluated for health status. The PI will be allowed to use those animals in the quarantine facility. Animals may be removed from the quarantine room prior to the end of the quarantine period if they are taken to the investigator lab and immediately used for terminal procedures. The investigator must have an approved SOP in place for the disinfection/decontamination of their lab before any non-quarantined animal can be transported to the lab. If animals are taken to another institution and returned they must go back into the quarantine room. These animals are not intended to ever become part of the ARC colonies.

Animals should not be transferred out of quarantine before the end of the designated quarantine period unless the transfer was approved by the Veterinarian.

5. Breeding Mice in Quarantine

Limited breeding is allowed during quarantine only if it has been approved by the Veterinarian and the IACUC.

If space is limited due to large animal numbers in quarantine, breeding may need to be limited to the most essential lines and experimental needs.

6. Personal Protective Equipment (PPE)

1. Don shoe covers when stepping into the quarantine room.
2. If handling the rodents, don disposable gloves, mask, bonnet and a disposable gown.
3. Follow all quarantine room SOPs. Handle open cages under the animal change station.
4. Remove all PPE before exiting quarantine.
5. Wash hands after each visit.

7. Husbandry

Whenever feasible, handle cages from the different shipments on different days.

Precise standard operating procedures for cage changes, etc. will be posted in the room. The cage change schedule will be on the work chart.

All items removed from the room will be disinfected. Cages and accessory equipment will be bleached prior to leaving the room or bagged, sprayed with C-Dox and autoclaved.

8. Animal Arrival

Upon arrival, decontaminate the outside of the shipping container with a C-Dox and wait 15 minutes before bringing the container into the animal room.

Remove the rodents from the shipping container under the animal change station in quarantine room.

Place the rodents into micro-isolators under the laminar flow hood. Refer to the animal shipping form for receiving animals for the specific housing needs of each group of rodents.

Routine medications may be prescribed as health status reports warrant. (i.e. fenbendazole diets fed to rodents to eliminate pinworms, ivermectin to eliminate internal and external parasites.)

9. Health Monitoring

Sentinel animals may be extra mice from the source colony or outbred mice from a commercial source approved by the veterinarian and/or lab manager.

The sentinels will be set up according to the health monitoring program protocol.

At the end of the prescribed quarantine period, typically six weeks, the sentinel animals from each cage are submitted to a diagnostic testing lab. PCR testing may also be used to allow for more rapid test results that may allow the animals to be released from quarantine sooner.

10. Outcome and Follow-up

Ensure a veterinarian interprets the diagnostic test results.

Proceed with one of the following options depending upon the results for each group of quarantine animals.

If the results are negative:

- The animals can be transferred to the animal facilities.

If the results are positive:

- Hold the animals in quarantine for an extended period and re-test either by setting up more sentinels or testing all the individual animals. If the second set of tests are still positive treat the animals if possible, euthanize or consider re-derivation of mouse lines.