



Animal Resource Center – Rodent Quarantine Policy

The purpose of this policy is to guide investigators who intend to bring rodents to Marquette University from other institutions or from non-approved vendors, and also for investigators that request quarantine procedures for sentinel animals.

Marquette's approved vendors consist of the following commercial rodent suppliers: Charles River, Harlan, and Jackson Labs' Production Division.

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 to prevent the introduction of pathogens and the spread of parasites.

Investigators procuring animals from non-approved vendors must provide the ARC with the following:

- A recent (less than 3 months) health report (including serology panels and parasitology reports) of the originating colony.
- A summary of health issues for the last 12 months, for the whole originating facility.
- A description of the husbandry practices (sterile or non-sterile micro-isolation, use of change station, etc.)
- A description of the health monitoring program.
- Filled "incoming animal form" (copies at the ARC) prior to ordering the rodents.
- Include one extra animal for serology and parasite testing in the originating colony or provide a sentinel animal.
- Coordinate shipment with the source and the ARC once the veterinarian and Facility manager have approved the shipment.

Only essential personnel have access to the quarantine room (i.e., the Veterinarian, ARC Facility Manager and ARC Animal Care Staff)

If research personnel require access to the quarantine room, they should contact the ARC Manager or the Veterinarian for permission and instructions for entering the room.

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.

Animals should not be transferred out of quarantine before the end of the designated quarantine period unless the transfer was approved by the ARC Facility Manager and/or Veterinarian.

When breeding mice in Quarantine:

- Limited breeding is allowed during quarantine only if approved by the Veterinarian and/or the ARC Facility Manager.
- 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.

Quarantine Room entering procedures:

- Wear shoe covers when stepping into the quarantine room.
- If handling the rodents, use rubber gloves, mask, bonnet and a disposable gown.
- Until a laminar flow hood for changing is purchased, open cages on the stainless steel counter and do not remove from inside the room (Disinfect cart with Clidox before and after use). Otherwise all open cages should be handled in the laminar flow hood changing station.
- Remove all Personnel Protective Equipment before exiting quarantine area.
- Wash hands after each visit.

Husbandry procedures:

- Whenever feasible, change 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 must be disinfected. Cages and accessory equipment will be bleached prior leaving the room or bagged, disinfected and autoclaved.

Animal Arrival procedures:

- Upon arrival, decontaminate the outside of the shipping container with a disinfectant.
- Remove the rodents from the shipping container inside the quarantine room.
- Place the rodents into cages with micro-isolators. Refer to the incoming animal form for 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.)

Quarantine period and test:

- During the quarantine period, animals will be tested using the basic serological panel and parasitology. Investigators must provide one sentinel animal for up to 25 quarantined animals, and one additional sentinel animal for every additional 25 animals in quarantine. If a sentinel animal is used for testing, the sentinel will be tested after 6 weeks in quarantine.

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 sentinels or testing all the individual animals. If the second set of tests are still positive treat the animals if possible, euthanize or consider rederivation of mouse lines. Subsequent sentinel animals are required for all re-tests.