
1. PURPOSE

The intent of this Standard Operating Procedure (SOP) is to describe the quarantine program for rodents coming from non-commercial or non-approved sources in order to prevent the introduction of rodent pathogens into established colonies.

2. RESPONSIBILITY

Veterinarian, veterinary care staff, principal investigator (PI) and their research staff.

3. DEFINITION

Non-approved sources are all rodent suppliers other than Charles River Laboratories (excluding National Cancer Institute), Envigo, Taconic, and the production division of Jackson Labs.

4. PROCEDURES

- 4.1. The requested rodent strain must appear in the Facility Animal Care Committee approved Animal Use Protocol.
- 4.2. The PI requesting the animals must submit an Import Request form.
- 4.3. The sending institution provides the veterinarian (or designate) with the following information:
 - 4.3.1. A recent (<4 months) health report of the colony summarizing health monitoring results for the previous 18 months.
 - 4.3.2. A description of the husbandry practices
 - 4.3.3. A description of the health monitoring program
- 4.4. Veterinarian's (or designate's) responsibilities:
 - 4.4.1. Evaluate the information provided by the source institution.
 - 4.4.2. If necessary, consult with the PI to determine whether the mice will be received for quarantine.
 - 4.4.3. Notify the PI of the decision on quarantine housing for each import request.
 - 4.4.4. Notify the veterinary care staff of any special screening procedures for groups of animals, e.g., special instructions if mice are immunodeficient.
 - 4.4.5. Determine whether tests are necessary and indicate which tests are required. Rederivation may be requested if imported mice are likely to be positive for pathogens excluded in the requested housing facility. Rederivation may be accomplished by c-section, cross-fostering, embryo transfer or artificial insemination. The requirements for each import are determined according to the health status of the sending facility and the housing conditions of the destination facility.
- 4.5. Quarantine access:
 - 4.5.1. Only essential personnel have access to quarantine, i.e., veterinarian, veterinary care staff, facility manager.
 - 4.5.2. If research personnel require access to the quarantine room, contact veterinary care staff.
 - 4.5.3. Do not transfer rodents out of quarantine before the end of the designated quarantine period unless the transfer was approved by a veterinarian or their designate.
- 4.6. Breeding Mice in Quarantine:
 - 4.6.1. Limited breeding during quarantine is allowed.
 - 4.6.2. If barrier colony animals must be bred to a quarantined group, allow the barrier mice into the quarantine facility. Do not allow those mice to return to the barrier colony until the quarantine period is complete.

- 4.7. Husbandry:
 - 4.7.1. Operate quarantine facilities under Biocontainment Level 2, Bioexclusion Level 3 practices.
- 4.8. Observation and Special Care:
 - 4.8.1. Observe animals at least once daily.
 - 4.8.2. Report animals with clinical signs to the veterinary care staff.
 - 4.8.3. If deaths occur, store the carcasses in the designated refrigerator and inform veterinary care staff.
 - 4.8.4. For unexplained morbidity/mortality perform gross necropsy and collect tissues for histopathology of necessary.
- 4.9. Infectious Disease PCR Testing:
 - 4.9.1. Samples are obtained independently for each shipment being quarantined.
 - 4.9.2. If more than one distinct strain is included in one shipment, each strain is tested independently.
 - 4.9.3. Samples from up to 10 cages may be pooled into a single sample, provided all 10 cages are from the same shipment or distinct strain.
 - 4.9.4. After a minimum acclimation period of 72 hours, collect samples as per testing laboratory instructions and submit for testing as indicated by the veterinarian.
 - 4.9.4.1. Collect one fresh fecal pellet with no bedding material per animal. Up to 10 fecal pellets can be submitted in the same vial/tube as one single sample.
 - 4.9.4.2. Collect fur/skin swab by thoroughly swabbing each animal on the head between ears, back/rump, inguinal area and perianal area. One swab can be used to sample more than one mouse, e.g., all the mice in one cage. Clip the swab head and place in the vial/tube.
 - 4.9.4.3. Collect swabs of the oral cavity from up to 10 animals. Cut off the swab tip from the shaft and place into the collection vial/tube.
 - 4.9.4.4. Separate vials/tubes must be submitted for fur/skin swabs, oral swabs and fecal pellets.
- 4.10. Outcome and follow up:
 - 4.10.1. Ensure a veterinarian (or designate) interprets the results.
 - 4.10.2. Proceed with one of the following options depending upon the results for each group of quarantine animals and the instructions from a veterinarian (or designate):
 - 4.10.2.5. Transfer the animals to an animal facility with the corresponding health status (refer to the excluded pathogens lists).
 - 4.10.2.1. Begin a rederivation process.
 - 4.10.2.2. Hold the animals in quarantine for an extended period, if space is available.
 - 4.10.2.3. Euthanize the animals.

SOP REVISION HISTORY

DATE	NEW VERSION
2017.03.31	4.3.5. Determine whether or not tests are necessary and indicate which tests are required. This is determined according to the health status of the sending facility and the requirements of the destination facility. Rederivation may be requested if imported mice are likely to be positive for pathogens excluded in the requested housing facility. Rederivation may be accomplished by c-section, cross-fostering, embryo transfer or artificial insemination. The requirements for each import are determined according to the health status of the sending facility and the housing conditions of the destination facility.
2017.03.31	4.8.1.4. After a minimum acclimation period of 72 hours, collect the following samples: Feces: collect fresh fecal pellets with no bedding material. Up to 10 fecal pellets from multiple animals can be pooled together into one sample. Collect one fresh fecal pellet with no bedding material per animal. Up to 10 fecal pellets can be submitted in the same vial/tube as one single sample. Fur/Skin swab from at least two sites (head between ears, back/rump, inguinal area, perianal area). Pool up to 10 swabs per single sample. One swab can be used for multiple animals. Collect fur/skin swab by thoroughly swabbing each animal on the head between ears, back/rump, inguinal area and perianal area. One swab can be used to sample more than one mouse, e.g., all the mice in one cage. Clip the swab head and place in the vial/tube. Oral swab: Pool up to 10 swabs per single sample. One swab can be used for multiple animals. Collect swabs of the oral cavity from up to 10 animals. Cut off the swab tip from the shaft and place into the collection vial/tube. Separate vials/tubes must be submitted for fur/skin swabs, oral swabs and fecal pellets.
2017.03.31	Mouse Health Information form updated

2023.03.22	The intent of this Standard Operating Procedure (SOP) is to describe the quarantine program for mice rodents coming from non-commercial or non-approved sources (see definition in section 3) in order to prevent the introduction of rodent pathogens into established colonies.
2023.03.22	Animal care staff, import coordinator, Veterinarian , veterinary care staff, principal investigator (PI) and their research staff.
2023.03.22	Non-approved sources are all rodent suppliers other than Charles River Laboratories (excluding National Cancer Institute), Harlan Envigo , Taconic, and the production division of Jackson Labs.
2023.03.22	4.1. The requested rodent strain must appear in the Facility Animal Care Committee approved Animal Use Protocol.
2023.03.22	4.3.1. A recent (< 3 4 months) health report of the colony summarizing health monitoring results for the previous 18 months. 4.3.2. A Mouse Health Information form containing: 4.3.2.1. A summary of health issues for the last 12 months, for the whole facility 4.3.2.2. A description of the husbandry practices (sterile or non-sterile, micro-isolation, use of change station, etc.) 4.3.2.3. A description of the health monitoring program
2023.03.22	4.4.3. Notify the PI and import coordinator of the decision on quarantine housing for each quarantine import request. 4.4.4. Notify the import coordinator veterinary care staff of any special screening procedures for groups of animals, e.g., special instructions if mice are immunodeficient.
2023.03.22	4.5.1. Only essential personnel have access to quarantine, i.e., the import coordinator, veterinarian, veterinary care staff, facility manager, animal care staff or veterinary care staff.
2023.03.22	4.5.2. If research personnel require access to the quarantine room, contact the import coordinator for permission and instructions on entering the room. A quarantine room orientation must be scheduled veterinary care staff.
2023.03.22	4.5.3. Do not transfer mice rodents out of quarantine before the end of the designated quarantine period unless the transfer was approved by a veterinarian or their designate.
2023.03.22	4.6.1. Breeding in quarantine is encouraged since pups can be good indicators of potential health problems and are valuable for testing.
2023.03.22	4.6.3. If space is limited, the import coordinator notifies researchers that they may need to limit breeding to the most essential lines and needs. The facility manager is also notified of any space requirements.
2023.03.22	4.6.1. Allow Limited breeding is allowed during quarantine only if it has been approved by a veterinarian and/or the import coordinator.
2023.03.22	4.8.3. If deaths occur, store the carcasses in the designated refrigerator and inform veterinary care staff and import coordinator.
2023.03.22	4.9.1.3. After a minimum acclimation period of 72 hours, collect the following samples as per testing laboratory instructions and submit for testing as indicated by the veterinarian:
2023.03.22	4.9.1.4. Submit samples to Charles River for the Mouse PCR Rodent Infectious Agent (PRIA) panel as requested by veterinarian (or designate): http://www.criver.com/products-services/basic-research/health-monitoring-diagnostic-services/pria.
2023.03.22	4.10.1. Once the samples have been collected as in section 4.9.1, consider treating the quarantined animals preventatively for external and internal parasites in the following manner: 4.10.1.1. Treat 50% of the animals with ivermectin 0.008 mg/mL in the drinking water (i.e., mix 1 volume of ivermectin sheep drench 0.08% with 99 volumes of water). 4.10.1.2. If after 3 days no adverse reaction has been seen with the first half under treatment, place the second half of the animals on ivermectin medicated water as described above. 4.10.1.3. Maintain treatment for 7 days. 4.10.1.4. Discontinue treatment for the next 7 days. 4.10.1.5. If parasitology test results are positive, 5 to 7 treatment cycles may be necessary as determined by the veterinarian or designate.
2023.03.22	4.10.2.3. Hold the animals in quarantine for an extended period, if space is available in consultation with the facility supervisor.