



Husbandry Statement

Overview

The Office of Animal Resources (OAR) in the Harvard University Faculty of Arts and Sciences manages 3 AAALAC-accredited barrier rodent facilities, the Biological Research Infrastructure (BRI), the Science & Engineering Complex (SEC), and Northwest Laboratories (NWL). BRI and NWL are used for breeding and experiments, while SEC is used only for experimental manipulations. As of May 2026, rodents in SEC and BRI are being transitioned to individually-ventilated Innovive caging, while rodents at NWL are housed in individually ventilated Allentown caging.

Colony health surveillance has been performed quarterly in all animal rooms since the opening of each facility. In April of 2026, surveillance will change to triennially. Surveillance sample testing is performed primarily by Charles River. The most recent results of the colony health surveillance program for the BRI are available at: <http://oar-public.fas.harvard.edu/animal-health-reports>. Animals do not move from SEC or NWL to BRI without further health testing.

Animal housing, handling, and infection control measures

- Rodents are housed on solid-bottomed cages, bedded with contact bedding (typically wood chip or corncob, transitioning to Alpha-Dri for all Innovive caging), and all rodents are provided with enrichment (nesting material at a minimum, most also have plastic huts or tubes) as part of normal husbandry.
- The default is social housing for all compatible animals.
- In the facility, disinfecting and sterilizing compounds such as chlorine dioxide, quaternary ammonium compounds, hydrogen peroxide, and peracetic acid are used according to manufacturers' guidelines.
- Animals are housed in positively pressured individually ventilated caging that receives HEPA-filtered air.
- In NWL, bedding is autoclaved prior to use. In the BRI and SEC, irradiated Innovive caging is used.
- Standard rodent diet is irradiated. Special diets must be purchased through OAR and sterilized prior to arrival.
- Reverse osmosis deionized water is chlorinated at 3 ppm and provided via automatic watering or water bottle.
- Cages are changed using microisolation technique in HEPA-filtered, laminar-flow work stations by dedicated staff.
- Dedicated clothing is worn by OAR staff and personal protective equipment consisting of a disposable gown, mask, and gloves is worn by OAR staff and researchers when handling animals.
- Animals from the general population cannot exit and re-enter the main breeding area of the BRI facility without quarantine and testing. There is dedicated in/out space in BRI, separate from housing and breeding areas, for animals that must move between the facility and investigators' laboratories. SEC and NWL are operated as in/out facilities.

Animal entry and movement

Approved suppliers

Animals of known microbiological quality obtained from suppliers approved by OAR are allowed to enter directly into the barrier rooms. These approved suppliers include Charles River, the Jackson Laboratory, and Taconic; others may be added following veterinary review.

Other animal origins

To obtain animals from non-approved suppliers, an import request form must be submitted to and approved by OAR. This will initiate veterinary review of health and husbandry information from the facility of origin. All rodent shipments are coordinated by OAR. If approved for import directly into the facility, the animals will undergo quarantine in a dedicated suite and health monitoring by PCR. Additional testing may be requested before animals can be received. Animals are transferred to long-term housing rooms only after PCR results confirm the absence of excluded agents. Animals from non-approved suppliers may also be quarantined off-site and tested via PCR as above. Depending on results, animals may then be allowed to enter the facility without further quarantine or may need to be treated or rederived before entry.

Transfer within OAR-managed facilities

Transfer of animals between housing areas may not occur without prior permission from OAR facility supervisors and may be performed by OAR animal care staff or investigative staff.



HARVARD UNIVERSITY
FACULTY OF ARTS AND SCIENCES
OFFICE OF ANIMAL RESOURCES
16 DIVINITY AVENUE
CAMBRIDGE, MA 02138

Animal exports

To export animals, an export request form must be submitted to and approved by OAR. All live rodent shipments are coordinated by OAR following approval by the recipient facility.

Health monitoring program

Routine colony health surveillance

Routine colony health surveillance has changed from quarterly to triannually as of April 2026 in all OAR-managed rodent facilities. Agent test frequency varies according to prevalence and potential risk; please see the Health Report for details of agents monitored and frequency of monitoring. Additional focused health monitoring can be conducted on an as-needed basis. Monitoring may be performed using PCR, sentinel monitoring, or any other relevant diagnostic test on colony or sentinel animals. Colony animals are not submitted for health surveillance without the investigator's permission.

From March of 2015 to May of 2026, all animal health monitoring was performed by PCR of rack plenums and occasionally testing feces, fur swabs, and oral swabs of randomly selected colony animals. After May 2026, health monitoring is conducted using sentinel-free soiled bedding testing. Bedding is pooled from up to 70 cages (a rack or rack side), a filter is exposed, and the filter is then tested using PCR.

Use of biological material of animal origin

Biological materials and cell lines of rodent origin or passaged in rodents must be tested via PCR and certified free of rodent infectious agents prior to use in animals.

If an excluded agent is detected

In the event of detection of an excluded agent in the facility, an appropriate course of action would be determined by the veterinary staff, and may include a combination of tolerance of the agent, isolation, retesting, treatment, euthanasia, and/or rederivation.

Agents present in these facilities

Animals colonized by or originating from facilities with evidence of the presence of *Helicobacter* species, mouse norovirus (MNV), *Rodentibacter pneumotropicus* or *R. heylii*, or colonization by typical rodent commensal or opportunistic bacterial pathogens are not excluded. The exception is animals destined for, or originating from, the Genetic Modification Facility (GMF), which is free of the above agents, including typically monitored opportunists and commensals.

Current outbreak status (April 2026)

Several rooms in the facility sporadically test positive for *Spironucleus muris* by environmental PCR on rack plenum dust.

Several rooms have a history of intermittent positivity for MuCPV.