



**Laurentian University**  
**Université Laurentienne**

## **Monitoring - Rodent Sentinel Program**

When diseases are introduced into a concentrated housing area, they can quickly spread causing morbidity and having disastrous effects on research programs. <http://www.lal.org.uk/pdf/files/gvsolas.pdf>

Exclusion of disease has proven time and again to be the most efficient method of ensuring a healthy animal. Once a disease has been established, it can be difficult to eradicate. Treatments are often costly and are not always effective. They may present as significant of a research variable as does the disease.

Every six months, a minimum of one rat per room or two mice per rack will be introduced into an animal room—rooms where rodents are housed for at least 6 months. The rodents will be housed in open cages where rodents will be handled as other mice. At each cage change, dirty bedding collected from a mixture of dirty bedding from cages in that room will be added to the clean sentinel cage. After three months, samples will be collected from the animals in the sentinel cages. Blood will be collected for serologic testing and the animals examined for evidence of disease and internal and external parasites.

Rats will be tested twice yearly for viruses which may include Sendai, PVM (Pneumonia virus of mice), RCV/SDA (rat coronavirus/ sialdacrodentitis virus), KRV (Kilham rat virus), H-1 (Toolan's virus), REO-3 (Reovirus type 3), MPUL (*Mycoplasma pulmonis*) and once for GD-7 (Mouse poliovirus), LCMV (Lymphocytic choriomeningitis virus), MAD (Mouse adenovirus FL/K87). Mice will be tested twice yearly for viruses which may include Sendai, PVM (Pneumonia virus of mice), MHV (Mouse hepatitis virus), MVM (Minute virus of mice), GD-7, (Mouse polio virus), REO-3 (Reovirus type 3), MPUL (*Mycoplasma pulmonis*) and EDIM (Enzootic diarrhea in infant mice) and yearly LCMV (Lymphocytic choriomeningitis virus), MAD (Mouse adenovirus FL/K87), ECTRO (Ectromelia virus), K (Mouse pneumonitis virus), and POLY (Polyoma virus).

Rats and mice are housed to prevent the introduction of disease to the colony of mice. Rodents coming into the facility will be housed according to their health status.

All mice coming in from commercial suppliers with known health status will be housed in our quarantine area. This area is a segregated area where mice that have a clean health record are housed. Special precautions are taken to restrict

access to this area and to minimize exposure to "dirty" mice or mice of unknown status housed outside the corridor.

Although the University encourages the purchase of rodents from commercial sources with a clean health status, we understand that occasionally it is necessary to bring animals in that may be infected with a virus, bacteria and/or endo/ectoparasite. We have designated a room for isolation of these animals that is away from our clean quarantine area.

Please note that all mice entering the facility must come with results of current health status. Rodents from commercial suppliers will automatically come with a health report. If you are getting animals from an alternate source, then it is up to you to ensure that the facility manager has a copy of the health status report **BEFORE** the animals arrive. Obtain from the facility veterinarian at the point of origin, recent health surveillance data including serology and results of ecto and endo parasitic examinations.

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