

Rodent Health Surveillance Program

General Information:

Several infectious agents can cause disease in laboratory rodents and interfere with research. Many agents can alter research results without the animal exhibiting overt signs of disease. Although commercial vendors have eliminated these agents from their colonies, wild rodents remain a source of potential infection. Rodents from non-approved vendors may also harbor pathogens that we exclude from UC rodent colonies.

Laboratory Animal Medical Services (LAMS) requires that all investigators house their mice in micro-isolator cages and practice barrier techniques. Having a strong barrier to contamination at the cage level is the best method to prevent infection. Personal protective equipment, the use of containment hoods, and quarantine/testing of rodents from non-approved vendors is essential. LAMS' rodent health surveillance program monitors UC's rodent colonies for infectious agents.

Sample Collection and Testing:

Blood samples are collected from one animal in each sentinel cage for serologic testing conducted by an outside diagnostic laboratory. Endo-(pinworms) and ecto-(furmites) parasite testing is performed in-house. Alternative testing strategies involve the use of PCR-based technology (animal and environmental sampling).

Mice

Annual testing

- Cilia-associated respiratory bacillus
- Clostridium piliforme (Tyzzer's Disease)
- Ectromelia virus
- Encephalitozoon cuniculi
- Endo/ectoparasites
- Hantaan virus
- K virus
- Lactate dehydrogenase elevating virus
- Lymphocytic choriomeningitis virus
- Minute virus of mice
- Mouse parvovirus panel 1-5
- Mouse adenovirus (MAV-1 and MAV-2)
- Mouse cytomegalovirus
- Mouse hepatitis virus
- Mouse norovirus
- Mouse rotavirus (EDIM)
- Mouse thymic virus
- Mycoplasma pulmonis
- NS-1
- Pneumonia virus of mice

- Polyoma virus
- Reovirus 3
- Sendai virus
- Theiler's virus (TMEV/GD7)

Quarterly testing

- Endo/ectoparasites
- Mouse hepatitis virus
- Mouse norovirus
- Mouse parvovirus panel 1-5
- Mouse rotovirus (EDIM)
- Minute virus of mice
- Mycoplasma pulmonis
- NS-1
- Sendai virus
- Theiler's virus (TMEV/GD7)

Rats

Annual testing

- Cilia-associated respiratory bacillus
- Clostridium piliforme (Tyzzer's Disease)
- Encephalitozoon cuniculi
- Endo/ectoparasites
- H-1 (Toolan's)
- Hantaan virus
- Infectious diarrhea of infant rats
- Kilham's rat virus
- Lymphocytic choriomeningitis virus
- Mouse adenovirus (MAV-1)
- Mouse adenovirus (MAV-2)
- Mycoplasma pulmonis
- NS-1
- Pneumonia virus of mice
- Rat minute virus
- Rat parvovirus
- Rat theilovirus
- Reovirus 3
- Sendai virus
- Sialodacryoadentitis virus (Corona virus)

Quarterly testing

- Endo/ectoparasites
- H-1 (Toolan's)
- Kilham's rat virus
- Mycoplasma pulmonis
- Pneumonia virus of mice
- NS-1

- Rat minute virus
- Rat parvovirus
- Rat theilovirus
- Sendai virus
- Sialodacryoadenitis virus (Corona virus)