

Department of Laboratory Animal Medicine Biosecurity Health Program

UNT Health Fort Worth's Department of Laboratory Animal Medicine uses a sentinel-free rodent health monitoring program. This system relies on PCR testing of contact media exposed to soiled bedding, which allows for the detection of viral, parasitic, and bacterial pathogens. Testing is performed three times per year across all rodent colonies.

Exclusion List

Mice: MHV, MVM, MPV, MNV, MCPV, TMEV, EDIM, Sendai, M. pulmonis, PVM, REO3, LCMV, Ectro, MAV 1, MAV 2, Polyoma, Helicobacter spp. (H. bilis, H. ganmani, H. hepaticus, H. mastomyrinus, H. rodentium, H. typhlonius), Pinworms, Fur mites, Encephalitozoon cuniculi (ECUN), Filobacterium rodentium (CAR bacillus), Clostridium piliforme, Mouse cytomegalovirus (MCMV), Tritrichomonas muris, Giardia muris, Spironucleus muris, Entamoeba muris, Salmonella spp., Pseudomonas aeruginosa, Citrobacter rodentium, Rodentolepis nana, Klebsiella pneumoniae, Klebsiella oxytoca, Proteus mirabilis, Rodentibacter heylii, Rodentibacter pneumotropicus, Staphylococcus aureus, Streptococcus β -hemolytic (Groups A,B,C,G), Streptococcus pneumoniae, Bordetella hinzii, Streptobacillus moniliformis, K virus, Lactate dehydrogenase-elevating virus (LDV), Hantaviruses (Hantaan & Seoul), Mouse thymic virus (MTV), Cryptosporidium spp., Campylobacter coli, Campylobacter jejuni, MKPV, Bordetella bronchiseptica, Corynebacterium kutscheri, Pasteurella multocida

Rats: RCV/SDAV, RPV, RMV, KRV, H1, RTV, PCAR, Sendai, PVM, MPUL, REO3, LCMV, CARB, Hantaan Virus, C. piliforme, MAV 1, MAV 2, Encephalitozoon cuniculi (ECUN) Infectious diarrhea of infant rats (IDIR), Rat Polyoma virus 2 (RPyV2), Helicobacter spp. (H. bilis, H. ganmani, H. hepaticus, H. mastomyrinus, H. rodentium, H. typhlonius), Pinworms, Fur mites, Pseudomonas aeruginosa. Tritrichomonas muris, Spironucleus muris, Entamoeba muris, Salmonella spp., Giardia muris, Klebsiella pneumoniae, Klebsiella oxytoca, Proteus mirabilis, Campylobacter coli, Campylobacter jejuni, Boone Cardiovirus (BCV), Cryptosporidium spp., Hymenolepis diminuta, Rodentolepis nana, Rodentibacter heylii, Rodentibacter pneumotropicus, Staphylococcus aureus, Streptococcus β -hemolytic (Groups A, B, C, G), Streptococcus pneumoniae, Streptobacillus moniliformis, Bordetella bronchiseptica, Corynebacterium kutscheri, Pasteurella multocida

Facility Description

Each facility is staffed with dedicated animal care technicians who perform daily husbandry, environmental monitoring, and animal health checks. To maintain biosecurity and a controlled environment, all personnel must wear protective clothing, including a lab coat or disposable gown, face masks, shoe covers, hair bonnets, and gloves, before entering the animal room suite. Animal handling is conducted in a HEPA-filtered IVC cage changing station by researchers, animal care staff, and veterinarians to minimize occupational exposure to allergens. Regular monitoring of animal housing rooms ensures proper lighting and temperature controls for optimal environmental regulation.

Experimental rodents entering from non-approved commercial vendors or non-routine sources must be proven SPF (Specific Pathogen-Free) during quarantine. The rodents are accommodated in IVC cages with autoclaved water bottles and bedding, and they receive irradiated feed.

Rodent Helicobacter

Regarding Rodent Helicobacter, this bacterium is present in only a few colonies across the total population of rodents in our facilities. At present, all Helicobacter-positive colonies are isolated and there are no plans to eradicate. In the event that any colony develops clinical signs attributable to Helicobacter infection, the Veterinary Health Team will promptly contact the PI to develop an appropriate management plan moving forward.