CARE AND USE OF LABORATORY CATS



The following is general information for those involved in the care and use of laboratory cats. Contact occupational.health@cuanschutz.edu if you have any questions.

<u>POTENTIAL RISKS</u>



Cats are generally social animals and respond well to frequent, gentle human contact. However, any cat can become agitated when being restrained for procedures. Due to the penetrating nature of their bites, cats can inflict serious bite wounds and prompt first aid is particularly important when dealing with such injuries. Scratches are also a hazard when dealing with cats. It is essential that training be provided to all employees who handle cats in order to avoid injury.

Potential cat zoonoses

Rabies

- Rabies virus (rhabdovirus) can infect almost any mammal
 - Rare in research environments
- Virus sheds in saliva 1-14 days before clinical symptoms develop
- Any random-source or wild animal exhibiting central nervous system signs that are progressive should be considered suspected for rabies
- Transmission through contact with saliva, mucus membranes, or blood (e.g. bite or saliva on an open wound)
- Symptoms
 - Pain at the site of bite
 - Followed by numbress
 - Skin becomes sensitive to temperatures changes
 - Laryngeal (throat) spasms
 - Muscle spasms
 - Extreme excitability and convulsions
- Rabies in unvaccinated people is almost invariably fatal

Toxoplasmosis

- Protozoan that has its complete lifecycle only in cats- only source of infective oocysts
- At least 24 hours for oocysts to shed in feces and become infective

- Transmission

 Accidental ingestion of oocysts
- Removal of fresh feces daily reduces risk of infection
- Symptoms
 - Mild flu-like symptoms
 - Unless immune system is suppressed
- Infection in previously uninfected pregnant women can result in prenatal infection of fetus, which can cause birth defects

Pasteurella multocida

- Bacteria that resides in oral cavity or upper respiratory tract of cats
- Transmission
 - Bite or scratch
- Symptoms
 - Local inflammation around bite or scratch
 - Could develop abscess with systemic symptoms

Cat scratch disease

- Caused by Bartonella henselae bacteria
- Transmission
 Bite, scratch, or lick of cat
- Symptoms
 - Swollen glands
 - Mild systemic infection (fever, chills, malaise, generalized pain)
- Benign and heals spontaneously (7-20 days after symptoms appear)

Ringworm

- Dermatophyte fungi infection commonly known as ringworm due to characteristic circular lesion
- Transmission
 - Direct contact with infected animal
- Symptoms
 - Usually self-limiting & appears as circular, reddened, rough skin
- Responsive to topical therapy

Other diseases associated with contact with cats:

Cryptosporidosis, Giardia, Campylobacteriosis

ALLERGIC REACTIONS TO CATS



- Allergies to cat fur and dander are well documented
- Major allergen in cats is a protein produced in the sebaceous glands of the skin
 - Coats hair shafts
 - Also found in saliva
- Contact Occupational Health if you develop allergic symptoms

<u>HOW TO PROTECT</u> YOURSELF



Wash your hands

- Single most effective preventative measure
- Regular, thorough hand washing
- Wash hands and arms after handling any animal
- Never drink or eat in the animals rooms or before washing your hands

Wear gloves

- When working with cats, wear appropriate gloves for the task
- Wash your hands after removing gloves

Wear respiratory protection

- Respiratory protection should be worn when there is risk of aerosol transmission of zoonotic agents
- Respiratory protection should be worn when there is a medical history or symptoms of allergies
- Initial Medical Evaluation for respiratory clearance is performed through Occupational Health
- Fit testing is performed through Industrial Hygiene once clearance is complete through Occupational Health

Wear other protective clothing

- Disposable gowns are required to be worn in the vivarium
- Consider changing clothing before leaving work. Place dirty clothing in a bag and launder clothes at home before wearing again.

Follow proper exposure reporting protocols

- If you are injured on the job, promptly report the incident to your supervisor
 - Immediately call or email Occupational Health (303) 724-9145 during business hours
 - Outside of normal hours seek medical attention at emergency department or other healthcare provider
 - Fill out incident report for exposure to biological hazards
 - File a claim with University Risk Management
 - https://www.cu.edu/risk/file-claim
- Minor cuts and abrasions should be immediately cleansed with antibacterial soap
 - Protect injuries from exposure

Tell your physician you work with cats

- Whenever you are ill, mention to your physician that you work with cats
- Many zoonotic diseases have flu-like symptoms

For more information, refer to the Occupational Health website <u>https://research.cuanschutz.edu/ehs/home/</u> <u>divisions/occupational-health</u>



or contact Occupational Health at <u>occupational.health@cuanschutz.edu</u>