

General Information: Potential Hazards

for
VISITING RESEARCHERS, NON-UC DAVIS COLLABORATORS, VOLUNTEERS and
STUDENTS



The general hazards associated with having contact with animals fall into three categories: zoonoses, allergies and injuries.

ZOONOSES

Zoonoses are diseases of animals that are transmissible to humans. They may be a significant hazard in some situations where animals are used. Fortunately, many laboratory animal species today are bred to be free of zoonoses that were once more common in these animals. However, laboratory and farm animals still can be infected with zoonotic agents, some of which can be life-threatening to humans. Field research with wild species remains an important source of exposure to zoonotic agents. Prevention of exposure to these animal-related illnesses requires knowledge of the zoonoses that may be found in the animals with which you will be working. If you are exposed through a bite, scratch, needle stick, aerosol droplet, mucosal secretion, feces or urine, there is the potential for you to become infected. You should notify your Principal Investigator or Instructor and seek medical consultation.

You may be at increased risk for zoonotic infection if you are immune compromised (e.g. taking steroids like prednisone on a regular basis, diabetic, infected with HIV infection, etc). If you have questions or concerns about your health status or risks that you will be exposed to, you should make an appointment with your health care provider for a health evaluation.

The Hazard Analysis Tool at <http://safetyapps.ucdavis.edu/IACUC/risktool/index.cfm> and the Public Health Agency of Canada at <http://www.phac-aspc.gc.ca/id-mi/index-eng.php> are a couple of sites that are excellent resources regarding zoonotic diseases.

ALLERGIES

Some people develop allergies to the animals they work with or to their own pets. The incidence is quite high - some estimate that as many as 15% of people are allergic to some animal species. If you're allergic to a species that you have regular contact with, it can be quite debilitating. If you suffer from asthma, having contact with a species to which you are allergic can be a significant health risk.

Individuals with allergies may display any of a number of symptoms. These include allergic rhinitis (a condition characterized by runny nose and sneezing similar to hay fever); allergic conjunctivitis (irritation and tearing of the eyes); asthma (characterized by wheezing and shortness of breath), and contact dermatitis (a red, bumpy rash that may appear where your skin touches the animal). If you have a stuffy nose or other respiratory signs, and if it seems to last longer than a common cold (weeks instead of days) then you may very well be suffering from an allergy. If you develop suspicious symptoms whenever you're exposed to a certain species, then you're very likely to have an animal allergy.

People may be allergic to any animal species. The allergens are proteins that are excreted in the animals' saliva, urine, and from various glands associated with the skin. The proteins tend to be sticky and become associated with the animal's hair and with particles of dander. The allergens are unique to each species of animal, so it's possible to be allergic to mice and not to rats and vice versa. It is also possible to be allergic to multiple species.

The most effective way to control and prevent allergies is to minimize exposure to the allergens. If you have animal allergies, or think you are at risk of developing such allergies as a result of working with animals, you should make an appointment to discuss your concerns with a doctor and get advice about the best methods you can use to protect yourself.

INJURIES

All animals are capable of inflicting bites and scratches. Small animals, such as rodents and rabbits, usually cause only minor wounds. Larger species like cats, dogs and nonhuman primates can inflict severe wounds. Bite and scratch wounds can become infected due to the normal bacteria present in the animal's mouth or toenails, or by bacteria that are present on your own skin. To prevent bites and scratches use proper animal handling techniques. Protective garments, such as gloves, gauntlets and long-sleeved laboratory coats can be useful in limiting injury to the hands and arms.

When you handle or move large livestock like horses or cattle, injuries can also be caused if the animal kicks you or if you get pinned between the animal and a building, implement, or other fixed object. The best way to avoid such injuries is to understand animal behavior. Only by knowing what to expect in certain situations can you protect yourself and others from injury.

Your Principal Investigator or Instructor will train you in animal handling and advise you about appropriate protective clothing. If you are bitten, scratched, or otherwise injured (e.g. stuck with a needle, etc.), immediately wash any wounds with plenty of soap and water, and let your Principal Investigator or Instructor know about the injury. You should then call your health care provider to help you make an informed decision regarding your medical needs.

Occupational Health Services: (530)757-3200
Cowell Student Health Center: (530) 752-2300
Institutional Animal Care and Use: (530)752-2364