

General Information: Health and Safety Hazards that may be Associated with Animal Contact

For Students, Volunteers, Non-UF Collaborators, Visitors

Animal-Associated Injuries

Bites, Scratches, Needlesticks, Splashes to Eyes/Nose/Mouth, Cuts & Abrasions:

Every person working with animals should be aware of the potential danger from animal bites, scratches, needlesticks, or instances where contamination of mucous membranes or non-intact skin has occurred.

Immediately wash the affected area with large quantities of soap and water. For small wounds – allow to bleed freely and if necessary, control bleeding by applying direct pressure. Apply first aid.

If eyes or mucous membranes are exposed, irrigate the area for at least 15 minutes with water.

Report the incident to the instructor right away, even if the incident may not seem serious. Seek medical treatment.

Large animals such as horses or cattle can kick, knock you down, or pin you up against equipment, a fence or in a stall. Understand these animal's behavior and get training on proper handling techniques before you attempt to handle them.

Animal Allergies

Allergy to animals or animal products is one of the most important problems for those with animal contact. Approximately one third of individuals working with laboratory animals will develop allergy symptoms and more than 10% will go on to develop asthma. Severe symptoms can affect personal health and potentially prevent someone from working with animals altogether.

Allergic reactions are expressed in a number of ways including allergic rhinitis (a condition characterized by runny nose and sneezing similar to hay fever); by allergic conjunctivitis (irritation and tearing of the eyes); by asthma (wheezing and shortness of breath), or by atopic dermatitis (a skin condition caused by contact with a substance that the individual is allergic to). Allergy to animals is particularly common in workers exposed to cats, dogs, rabbits, mice, rats, gerbils and guinea pigs.

Exposure to animal allergens occur through direct skin contact or more commonly, by inhalation of dust containing allergens from urine, dander, saliva, hair, feathers, bedding, etc. Individuals become sensitized over a period of months or years and may be allergic to just one type of animal, or multiple species. People who have a prior personal history or family history of animal allergies may be more likely to develop allergies when working with animals or entering animal facilities.

Anyone with animal allergy symptoms should consult with their health care provider.

Zoonotic Diseases

Diseases that are transmissible from animals to humans are termed zoonotic. All persons with animal contact, including those working only with animal tissues, body fluids, or waste should be familiar with the diseases associated with the species they handle. The following references are informative:

<https://www.cdc.gov/healthypets/diseases/index.html> Diseases That Can Be Spread From Pets to People, CDC, Healthy Pets healthy People

<http://www.phac-aspc.gc.ca/lab-bio/res/psds-ftss/index-eng.php> Pathogen Safety Data Sheets, Health Canada

<http://www.cfsph.iastate.edu/?lang=en> Zoonotic Diseases, Center for Food Security & Public health, Iowa State University

Exposure to zoonotic diseases can occur from animal bites and scratches, inhalation of infectious aerosols, needlesticks and cuts, ingestion of contaminated food or water, or splashes of infectious material into eyes, nose, or mouth. Work with wild animals or animals of unknown health status presents the greatest risk for infection from zoonotic diseases.

Many zoonotic diseases present with non-specific, flu-like symptoms. If you become sick, be sure to mention to the physician that you have had animal contact; this information may be important for an accurate diagnosis.

Individuals are at higher risk for zoonotic disease if they are immune compromised, have diabetes or other serious medical conditions, or are pregnant. These individuals should discuss their risks with a medical provider.

Personal Hygiene and “Universal Precautions” to Reduce Hazards from Zoonotic Diseases and Animal Allergens

There are a number of personal hygiene issues and good practices which apply to all individuals with animal contact. Attention to personal hygiene safe work practices protects not only the individual, but also prevents zoonotic diseases or allergens from being carried to other animals in the facility or home to family members and pets who may be exposed.

Handwashing

Careful hand washing will prevent the transfer of potentially infectious or hazardous materials to mouth, mucous membranes, or non-intact skin and will limit the spread of allergens to eyes and nose. Hands should be washed as follows:

- after handling animals
- prior to leaving the laboratory or animal facility
- before eating, drinking, applying cosmetics, eye drops, contact lenses, or smoking
- after touching potentially contaminated surfaces or objects
- after removing gloves (if worn)

Wash hands with plenty of soap and water, getting under fingernails and between fingers. Dry with paper towels and if possible, use the paper towel to turn off the faucet.

Protective Clothing and Equipment

Laboratory coats or other protective clothing specified by the instructor, animal facility, or animal use protocol should be worn over street clothes when working with animals to minimize contamination of street clothing. Protective clothing should be left in the lab or animal facility and should not be worn in common areas, bathrooms, when eating, or in public eating areas.

Additional personal protective equipment (PPE) may be specified as part of the facility requirement, animal protocol, or as specified by a health provider. This may include a combination of gloves, eye protection, mask, respirator, etc. Safety eyewear is worn when there is a potential of splash with infectious or hazardous materials. Contact lens wearers must wear safety eyewear when working in the laboratory.

Gloves, if worn, are changed when contaminated, when the integrity has been compromised, or when otherwise necessary, and are not worn outside animal areas. Gloves should be removed in a manner that prevents transfer of hazardous materials.