



Sheep and Goat Fact Sheet

Occupational Safety and Health Information

General Safety Information for Sheep and Goat Handlers

The following information is intended to inform individuals who are involved with the care and use of animals about potential hazards (e.g., zoonoses, allergies, injuries) associated with working with various animal species and to provide information as to how they may lessen these hazards (e.g., personal hygiene, personal protective equipment [PPE]).

Zoonotic Diseases of Sheep and Goats

Sheep and goats can carry organisms that may cause infection and disease in humans (zoonotic diseases, zoonoses). Exposure to these organisms can come through direct contact with the animal, or indirectly through contact with the animal's feces or body fluids/secretions. In general, sheep and goats maintained in research/teaching facilities have routine health maintenance (e.g., vaccinations, deworming) and are closely monitored for disease so the likelihood of disease transmission to humans is greatly reduced. People who handle sheep and goats should be aware of a number of important diseases that they may carry, which include: **Rabies, Q-Fever (Coxiella burnetti), Contagious Ecthyma (Orf), Brucellosis, Anthrax,** and gastro-intestinal diseases (e.g. **Salmonellosis, Campylobacteriosis, E. coli 0157:H7, Giardia and Cryptosporidia**). Some of these diseases may not produce observable signs of illness in the sheep and goats; therefore, if you handle sheep and goats or their wastes you must take appropriate precautions to prevent transmission of these infections. You can view more information on these agents and other agents in [Appendix C](#) of the university Infection Prevention Program and the [Occupational Safety and Health Program for Animal Handlers](#). Please see the [Rabies Fact Sheet](#) for guidance on how to respond if there is a suspect exposure event.

Injuries from Handling Sheep or Goats

Handling sheep and goats can be physically demanding. Injuries to people can occur as a result of sheep or goats running into them and/or knocking them over, lacerations, bites, back strain, and knee injuries associated with trying to restrain. Jumping is common in sheep and they can jump with enough force to break a handler's leg, or high enough to strike a handler in the face. Butting is another defensive activity of sheep, and the rule of handling these animals is to never turn your back on the animal while in its pen. Goats are more difficult to handle than sheep or cattle. They do not flow through handling systems easily and when they are frightened they may lie down and pack in a corner, risking injury to other goats in the enclosure. They can also become aggressive towards each other and their defensive mechanisms are to ram or bite, which may also be used against humans. Other hazards in sheep or goat facilities that can injure handlers include: gates, chutes, and other hinged caging causing pinched fingers or bruising; overhanging objects; exposed nails or broken pen wire; electrical shock from hosing pens and

walls where light and electrical sockets are not waterproof. Physical injuries such as back strain can occur from handling and restraining sheep and goats due to their size and strength. Individuals with pre-existing back problems may need assistance when catching and handling sheep or goats. It is essential that people who handle sheep or goats for research or teaching be provided with training in proper handling techniques in order to avoid injury to themselves or the animals, such specific handling and restraint techniques, and protective clothing requirements.

Allergic Reactions to Sheep or Goats

Allergic reactions in humans to sheep are rare. Proteins on the hair and skin flakes of goats can cause allergic reactions in some humans. The housing environment of sheep and goats may contain a number of allergens (e.g., grasses, pollens) that can cause allergic reactions in some people. The signs of allergies/allergic reactions may include sneezing, nasal stuffiness/congestion, itchy and watery eyes, and skin rash/itching. Contact dermatitis (itchy skin) can also occur when handling the wool of sheep.

How to Protect Yourself

Wash your Hands: The single most effective preventative measure that can be taken is thorough, regular hand washing. Wash hands and arms after handling sheep or goats. You should avoid touching your face, eyes, nose or mouth with unwashed hands or contaminated gloves. Never eat, drink or smoke in animal areas.

Wear Personal Protective Equipment: Coveralls and covered shoes (no open-toed shoes or sandals are allowed) should always be worn when working with sheep or goats. Dust masks should be worn if you have a history of allergies, if you are working in dusty areas, or if you are working with these animals in an indoor location. Respiratory protection (mask or respirator) should be worn during necropsy if there is a risk of aerosol transmission of a zoonotic disease. Employees who need to wear respiratory protection must be medically cleared by Environmental Health and Safety (EHS) before being fit tested with a respirator (if applicable). Complete the [medical survey form](#) to start this process if you are an employee. Students will be fit tested by EHS after providing our medical staff a note from your primary care physician, or after signing an 'informed consent' form at the time of service.

Tell your Physician you work with Sheep or Goats: Whenever you are ill, even if you are not certain that the illness is work related, always mention to your physician that you work with sheep or goats. Many zoonotic diseases have flu-like symptoms and would not normally be suspected. Your physician needs this information to make an accurate diagnosis. Questions about personal human health should be answered by your physician.

Seek Medical Attention Promptly: If you are injured on the job (e.g., bitten, kicked, stepped on) provide immediate first-aid. Stop the bleeding of wounds and wash the affected areas with soap and water. For fieldwork where soap and water may not be readily available, use of baby wipes (available in small portable packages) or alcohol-based cleansing gel is acceptable. Alcohol-based gels are neutralized by organic matter so the first application should be wiped off to remove debris, or the area can be cleaned first with a baby wipe, and the next application

of gel can be left on the skin.

- Immediately report the incident to the facility director, your supervisor, or the teaching instructor if applicable.
- Those individuals needing immediate medical treatment for serious injuries may visit an appropriate healthcare provider for treatment (e.g., emergency room, primary care physician, students may also be treated at Student Health Services). Immediate medical treatment may be required if:
 - An individual's ability to breath properly is affected;
 - Bleeding is excessive and difficult to control;
 - An injury clearly needs sutures; or
 - There is a loss of consciousness associated with the incident.
- If you are working with a purposefully infected animal, the individual seeking medical attention must take a Hazard Summary sheet or agent SDS and present them to the healthcare provider prior to receiving services. It is important that the healthcare provider be made aware of the hazards present in the facility in order to appropriately diagnose and treat an individual.
- Employees' supervisor completes an [Employers' Accident Report](#) within 24 hours of the incident for employees. This document is specific to the Workers Compensation Program and is required prior to any follow-up medical services being provided for employees.
- The facility director or manager completes a General Incident Report form to be used by the facility director, facility manager, and Environmental Health & Safety for review of the incident.