

Biosecurity for Sheep and Goat Producers

Biosecurity is a series of management practices designed to prevent the introduction, delivery, and spread of disease pathogens that can harm or adversely affect livestock, crops, environments, and people. These practices may also help eliminate or control diseases already existing on the premises.

Below are topics related to biosecurity and VS' role in emergency planning and response and public health. Additionally, links to other sources of information on biosecurity on the farm are included below.

[Principles of Biosecurity](#)

Segregation

Keeping infected animals and contaminated material away from uninfected animals is the most important and effective part of biosecurity. Following are strategies you can use to achieve segregation.

- Maintain a closed flock. If this is not possible, only purchase animals that appear healthy and have been inspected by a veterinarian within the last 30 days, and keep them separate from your flock for at least 30 days.
- Restrict access to your premises to employees and service personnel, since pathogens can be introduced by vehicles, clothing, and equipment.
- Establish a clean/dirty line, where only certain people, vehicles, and equipment are allowed on the clean side.
- Require a waiting period of 24 to 48 hours between livestock premise visits for your employees and also your veterinarian.
- To the extent possible, prevent contact between your animals and pets, wildlife and rodents.
- Use insect control measures, as these pests can transmit pathogens.

Cleaning and Disinfection

Cleaning and disinfection of animal housing facilities, vehicles, and equipment (including boots and clothing) is a very effective way to minimize disease transmission to or between your animals. Clean everything that is moved between livestock premises and within your own premises. Regularly clean production areas and always clean equipment after use.

Manure, dirt, and other potentially heavily contaminated materials need to be cleaned from housing facilities, vehicles and equipment. Follow the two steps below to ensure proper cleaning.

- Apply detergents and foaming agents to surfaces prior to cleaning to help remove organic matter and debris.
- Use hot water to rinse, and if possible rinse with high-pressure.

After cleaning, let all surfaces dry completely. Then apply a disinfectant(s) directly to all cleaned surfaces. The selection and/or use of disinfectants will depend on many factors including, corrosive properties and safety, mechanism of action, presence of organic matter, and the pathogens you are worried about. Rotate the disinfectants you use to avoid pathogens becoming resistant to the action of a particular disinfectant's compounds.

[Emergency Management](#)

APHIS' National Preparedness and Incident Coordination Center (NPIC) develops strategies and policies for effective animal health incident management and helps coordinate incident responses.

Visit the [APHIS Emergency Management](#) Web page for more information about our planning and response activities.

Visit the [FADPReP](#) Web page to download APHIS animal incident response and continuity of business plans .

Zoonotic Diseases

Zoonotic diseases are diseases of animals that can infect humans. Humans can contract zoonotic diseases through direct contact with infected animals, and also by consumption of contaminated food or water, inhalation, arthropod vectors (such as flies, ticks, and mosquitoes) and pests.

There are several zoonotic diseases of sheep and goats. Protect yourself and your employees by learning more about these diseases on the [APHIS Zoonotic Diseases of Sheep and Goats](#) Web page.

Additional Information for Veterinarians

National Animal Health Emergency Response Corps (NAHERC)

When an animal health emergency occurs, an immediate response is necessary to protect both animals and people. The United States Department of Agriculture's (USDA's) Animal and Plant Health Inspection Service (APHIS) will look to many sources to obtain the veterinary personnel needed to help meet the critical staffing needs of such an emergency.

In 2001, APHIS established the NAHERC to respond to exotic disease outbreaks and other disasters which affect livestock, poultry, companion animals, and wildlife. More volunteers are urgently needed to assure a decisive response to any potential animal health crises.

Visit the [APHIS NAHERC](#) Web page to learn more about the program and join as a volunteer.

Personal Protective Equipment (PPE)

PPE is safety equipment and defensive tools developed to protect personnel from the hazards of their job's environment by anticipating the unexpected. Using PPE reduces the chance of suffering an injury .

You can find PPE designed to protect:

- Eyes – goggles / face shields / safety glasses
- Face – face shield / protective shields / barriers
- Head – hard hat, bump hat
- Ears – earplugs / earmuffs
- Feet – safety shoes / boots
- Hands and arms – gloves / sleeve guards
- Protective clothing – vests / safety suits / safety jackets.
- Body – shields / barriers / restraints
- Airways / lungs – respiratory devices

[Additional information on PPE](#) is available.

Related Information

- [APHIS Animal Health Emergency Management - Educational and Training Materials](#)
- [APHIS Cleaning and Disinfection Presentation](#)
- [American Sheep Industry Association – Biosecurity](#)
- [Canadian Food Inspection Agency - Biosecurity Standards & Principles](#)
- [University of Maryland Cooperative Extension - Biosecurity for Sheep and Goats Presentation](#)
- [Extension – Goat Biosecurity](#)

- [APHIS – Biosecurity on U.S. Goat Operations](#)
- [APHIS – Biosecurity on U.S. Sheep Operations](#)