

Biosecurity for Rabbits

What is biosecurity?

Biosecurity consists of procedures and measures implemented to protect pets, livestock and people from infectious diseases. Rabbit owners and rabbitry managers should develop biosecurity plans tailored to their location, facility, animals and daily activities. The intent of a biosecurity plan is to prevent the introduction and spread of disease through routine and measurable practices. Diseases can be introduced from a variety of sources, and a good biosecurity plan addresses all known routes of transmission from disease agents including viruses, bacteria, fungi and parasites. Biosecurity procedures should consider potential exposure to disease from plants, animals, people, equipment, air, water, food and waste.

Proper execution of a well thought out biosecurity plan will significantly reduce the chance of Rabbit Hemorrhagic Disease Virus 2 (RHDV2) or other contagious diseases affecting your rabbits.

Pet rabbits

People and households

- Always wash hands with warm soapy water before entering your rabbit area, after handling rabbits, after removing protective clothing and before leaving the rabbit area. Always scrub hands with warm soapy water for 20 seconds following [CDC Handwashing guidelines](#).
- Designate a pair of boots or shoes and a protective clothing layer to be used only when interacting with rabbits or doing rabbit-related chores.
- Wash clothing after contact with other animals, cages, or equipment.
- Do not allow visitors to handle or pet rabbits without washing hands and wearing clean clothing.
- Do not allow people with sick rabbits to visit your rabbits.
- Reduce the potential spread of disease by avoiding travel to areas experiencing disease outbreaks.
- Be aware that this disease has been found in wild and domestic rabbits in the U.S. If you live near or visit an area where RHDV2 has been confirmed, do not touch any wild rabbits you may see.
- [Contact the Minnesota DNR](#) if you notice multiple wild rabbit mortalities with no obvious cause (i.e., due to prey or roadkill). Do not touch or move rabbit carcasses.
- Be extra diligent if you have visited a rabbit shelter, rescue, vet office, farm or have been outdoors in areas that have an active outbreak in pet or wild rabbits.

Animals

- Monitor rabbits for signs of illness, including:
 - Difficulty breathing
 - Loss of coordination
 - Reduced appetite
 - Lethargy
 - Bleeding from the nose
 - Blood in the feces
 - Sudden death with few clinical signs
- Contact your veterinarian if your rabbits appear ill or die suddenly.
- When possible, vaccinate animals against disease.
- Keep rabbits indoors or minimize the use of outdoor exercise areas for rabbits. Do not release pet rabbits into the wild.
- Do not allow other pet or wild rabbits to have contact with your rabbits or enter your home.
- Limit the introduction of new rabbits. If you bring rabbits into your home, keep them separated from your rabbits for 60 days. Use separate equipment to care for new or sick rabbits to avoid spreading disease.
- Avoid “hoppy hours,” bunny yoga, or other gatherings of rabbits.
- Consider disease risks when attending rabbit shows, fairs or other events due to exposure to potentially sick animals.
 - Follow the [Minnesota Board of Animal Health biosecurity guidelines \(PDF\)](#) if you attend events.
 - Isolate all rabbits returning from events. Dedicate space and equipment to care for isolated rabbits when possible to prevent physical and indirect contact between rabbits.
 - Provide care for isolated rabbits last and wash your hands thoroughly before and after providing care.
 - Monitor the health of isolated rabbits and seek veterinary care if you observe signs of disease.

Equipment

- Use only your own equipment. Do not share equipment (food dishes, waterers, kennels, leashes, grooming supplies, etc.), food or treats with other rabbit owners.
- Sanitize all equipment (including carriers) before bringing home.
- Remove all organic material prior to disinfecting with 10-percent bleach or 10-percent sodium hydroxide mixed with water. Refer to the [USDA’s General Guidance for Cleaning and Disinfecting RHDV Contaminated Premises \(PDF\)](#) for more information.

Feed and water

- Disinfect water bottles and feed dishes regularly.
- Obtain feed from suppliers with quality control programs.
- Check the source of your rabbits’ hay and food: most commercially available rabbit hay and food products are quarantined for three months after harvest to ensure they will not be a source of potential exposure. If you aren’t sure, you can quarantine your rabbits’ hay and feed for three months prior to feeding to be safe.

- Do not collect and use wild plants as a food source. It is best to avoid these items when RHDV2 is detected. Foods purchased from the grocery store are likely safe with regards to RHDV2 (although there is still a small risk if these items were harvested from areas where RHDV2 is present).
- Use municipal tap water. Surface water sources and shallow wells are not recommended due to the increased risk of contamination.
- Protect feed and bedding from contamination by storing them indoors or in tightly sealed containers.
- Clean up feed spills immediately.

Veterinary care

- Establish a relationship with a veterinarian prior to any illness or concern and seek routine veterinary care for your animals.
- Regularly review biosecurity practices with your veterinarian to identify and close possible gaps.
- Make a list of your rabbits, breeds, and tattoos/microchip numbers, as well as any pertinent medical history.
- Cats and dogs who live in a home with rabbits should be on year-round flea and tick prevention, as they can act as fomites for transmitting RHDV2.

Commercial rabbitries, shelters or rescues

- Establish a “clean” and “dirty” line between your animals and the external environment. When crossing from the “dirty” to “clean” area, require that all personnel and equipment follow protocols outlined in your biosecurity plan.
- Work with your veterinarian to review and update your biosecurity practices regularly. Audit your plan and take steps to address potential gaps.
- Lock gates and doors to secure access to animal housing areas.
- Minimize visitor access to the premises and restrict contact with rabbits to only those people necessary for their care. Post biosecurity signs to advise visitors that access to the property and animals is restricted.
- Require essential visitors (veterinarians or staff) to:
 - Obtain approval before visiting
 - Understand and implement established biosecurity protocols
 - Fill out a visitor log or sign-in sheet
 - Be escorted at all times
 - Follow screening policies to prevent spread of human illness
- Require employees and visitors to wash their hands before entering the rabbitry, after handling rabbits, after removing protective clothing and before leaving the rabbitry.
- Require employees and visitors to wear farm or barn specific clothing and to clean and disinfect barn boots after caring for rabbits.
- Maintain a current animal inventory log including gender, date of birth, breed, identification (tattoo/microchip) and pertinent medical information.
- Dispose of dead rabbits using an approved method. RHDV2 is very hardy and a carcass could be a means of virus spread. Contact your veterinarian or refer to the [Board of Animal Health’s Carcass Disposal Guide \(PDF\)](#).
- Do not share equipment, water or food with other rabbit breeders or owners.

Biosecurity protocols for veterinary clinics

- If examining multiple rabbits in one day, thoroughly disinfect exam rooms and any supplies that come into direct contact with rabbits (i.e. otoscopes, stethoscopes, thermometers and scales) between patients using accelerated hydrogen peroxide (Rescue), 10-percent bleach, or 1-percent potassium peroxymonosulfate (e.g. Virkon S). Follow package instructions for contact times.
- Wear PPE when examining rabbit patients (gloves, gowns, shoe covers).
- Screen rabbit patients for fever; if febrile, utilize isolation protocols.
- Consider RHDV2 as a differential for rabbits with acute signs of hemorrhage, icterus, fever, and/or elevated liver enzymes.
- Contact the Board of Animal Health about any suspicious patient deaths to determine next steps.
- In the face of an active RHDV2 outbreak, discuss risks and benefits of performing elective exams or procedures with clients. Consider postponing non-essential procedures if possible.

Some information courtesy of Government of Canada, USDA Animal and Plant Health Inspection Services, American Rabbit Breeders Association, Peacebunny Foundation, and Dr. Megan Schommer.