



Rabbit Hemorrhagic Disease:

Factsheet for Rabbit Owners

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UTAH DEPARTMENT OF AGRICULTURE AND FOOD ANIMAL HEALTH PROGRAM

Craig Butters
COMMISSIONER

Leann Hunting
*ANIMAL INDUSTRY
DIVISION DIRECTOR*

Dean Taylor, DVM
STATE VETERINARIAN

Amanda Price, DVM, MS
*ASSISTANT STATE
VETERINARIAN*

Robert Erickson, DVM
FIELD VETERINARIAN

State Veterinarian's Office
350 N Redwood Rd
Salt Lake City, UT 84116

801-982-2200

ag.utah.gov

Rabbit Hemorrhagic Disease (RHD) is a very contagious fatal disease of wild and domesticated rabbits caused by a calicivirus called rabbit hemorrhagic disease virus. There are two types of RHD, RHDVa (or RHDV1) only affects domestic rabbits, while RHDV2 can infect hares, jackrabbits, cottontail rabbits, and domesticated rabbits.

Geographic Distribution

Rabbit Hemorrhagic Disease is considered endemic (or always present) in Australia, New Zealand, Cuba, parts of Asia and Africa, and most of Europe. The US has had cases of RHDVa in Iowa, Illinois, New York, Indiana, Minnesota, and Utah. The last case of RHDVa in Utah was in 2001. RHDV2 was first diagnosed in Europe in 2010. Southwestern Canada experienced its first cases of RHDV2 in 2018, followed by cases in Ohio, Washington, and New York City. In early 2020, a widespread outbreak of RHDV2 emerged in the Southwestern US and northern Mexico, affecting both wild and domestic rabbits.

Clinical Signs and Testing

Rabbits infected with RHD have a short period of high fever and lethargy followed by sudden death in 80–100% of infected rabbits. The incubation period, or time from infection to signs of illness ranges from 1-3 days. Death occurs 3-9 days after infection. In most cases in pet rabbits, the rabbits rarely show any signs of illness and die suddenly within 6-24 hours. Rabbits may have a fever, nervous signs, difficulty breathing, and refuse to eat. They may have frothy blood coming from their noses just prior to death. Some rabbits survive the acute phase, but will continue to shed the virus for at least a month.

The only treatment for RHD is supportive care. Survival of the acute form of RHD is rare, and chronic cases often succumb to the disease after several weeks. There are no tests currently within the United States for detecting RHD in live rabbits. Dead domestic rabbits may be submitted to the Utah Veterinary Diagnostic Laboratory by your veterinarian.



Disease Spread

RHD virus may be inhaled, eaten, or absorbed through wounds to the skin. It can survive in the environment for several months, and is usually transmitted by direct contact with infected rabbits or by contact with objects, people, shoes, or clothing that has been contaminated by rabbit bodily fluids or feces. Rodents, insects, birds, and other animals may also become contaminated with the virus and transfer it to rabbits.

Biosecurity measures you can take to protect your rabbits include:

- Minimize exposure to wild rabbits and hares by keeping your rabbits in hutches or cages that are elevated off the ground.
- Do not allow your rabbits to graze or roam in the yard if there are wild rabbits in your area.
- Avoid contact with other people's rabbits. If you do have contact with other peoples' rabbits, change your clothes prior to handling your rabbits.
- Always wash your hands with warm soapy water before and after handling your rabbits.
- Limit the handling of your rabbits by visitors.
- Control dogs, insects, birds, rodents, and other animals that may carry disease to your rabbits.
- After visiting a show or fair, shower and change clothes before handling your rabbits.
- Disinfect all equipment and cages that moves on or off your property before contact with your rabbits. 10% bleach and Virkon-S are effective disinfectants against RHDV2. Lysol, Clorox wipes, and Odoban are not effective.
- Keep sick rabbits separated from healthy rabbits.
- Keep any new rabbits separated from your existing rabbits for 10 days.
- Do not touch any dead wild rabbits you see. Contact state wildlife officials.

Vaccination

There is one licensed vaccine for RHDV2 in the United States, made by Medgene. Currently, this vaccine is only available through a veterinarian. The vaccine requires two doses 21 days apart. It can be given as early as four weeks of age.

There are some drawbacks to the RHD vaccine:

- The vaccine is fully protective 14 days after the second booster. Your rabbit may not be fully protected from RHDV2 until that time.
- Vaccines for RHDV2 alone do not protect against RHDVa, and vice versa.
- Vaccine side effects may include swelling at the vaccination site, lethargy, and a mild fever.
- This vaccine has not been tested in nursing and pregnant does.
- The USDA requires a 21-day withdrawal period for rabbits intended for meat consumption.

For more information, visit the UDAF RHD webpage at bit.ly/UtahRHD.

REPORT SUSPICIOUS CASES

- If you see at least 3 dead wild rabbits, contact your Division of Wildlife Resources regional office or the main office at (801) 538-4700.
- For domestic rabbits, contact your veterinarian or the Utah State Veterinarian at (801) 982-2235.

