



Rabbit hemorrhagic disease virus 2 (RHDV2)



What is RHDV2?

Rabbit hemorrhagic disease virus 2 (RHDV2) is an emerging viral disease of domestic and wild rabbits. This virus has been detected in wild cottontail rabbits and jackrabbits in the southwestern United States, but may affect all wild lagomorph species (i.e., rabbits, cottontails, hares, pygmy rabbits and pikas). The virus is highly contagious and can cause significant mortality in both wild and domestic rabbits.

Where has RHDV2 been found?

As of December 18 2020, RHDV2 has been detected in wild rabbit populations in Arizona, California, Colorado, New Mexico, Texas, Utah, Nevada, Wyoming, and several states in Mexico. For the most up-to-date map of the distribution of this virus, visit <https://usda-aphis.maps.arcgis.com/apps/webappviewer/index.html?id=37791da88ef04cd08404a5794aaf0be3>.

However, for North America, this disease has been detected in Ohio, Washington and New York, and the provinces of British Columbia and Quebec in domestic and feral rabbit populations.

How is it spread?

The virus is spread through direct contact with infected rabbits and rabbit carcasses, as well as contaminated environments. The virus can also spread indirectly by people carrying the virus on items such as clothing or shoes. The virus is resistant to extreme temperatures and can survive in the environment for an extended period of time.

What are some clinical signs of disease?

Typically, the first signs of disease will be sudden death/illness in multiple rabbits, and/or animals may have a blood-stained nose and mouth due to internal bleeding. Clinical signs are generally subtle and may include fever, respiratory distress, loss of appetite or nervous system abnormalities (incoordination, convulsions, etc.).

Can humans be infected?

This disease does not impact human health and does not infect domestic animals (other than domestic rabbits). However, wild rabbits and hares can carry other diseases that are a concern to human health (i.e., plague, tularemia).

Do not handle or consume sick or dead wildlife, and do not allow domestic pets to contact or consume wildlife carcasses. If your cat or dog comes in contact with a sick or dead rabbit (or any other wildlife), please contact your veterinarian.

Recommendations from the USDA for preventative measures include:

- Do not allow pet, feral, or wild rabbits to have contact with your domestic rabbits or gain entry to the facility or home.
- Do not allow visitors in rabbitries or let them handle pet rabbits without protective clothing (including coveralls, shoe covers, hair covering, and gloves).
- Always wash hands with warm soapy water before entering your rabbit area, after removing protective clothing and before leaving the rabbit area.

- Do not introduce new rabbits from unknown or untrusted sources. Do not add rabbits to your rabbitry from animal shelters or other types of rescue operations.
- If you bring outside rabbits into your facility or home, keep them separated from your existing rabbits. Use separate equipment for newly acquired or sick rabbits to avoid spreading disease.
- Sanitize all equipment and cages moved on or off premises before they are returned to the rabbitry. We recommend disinfecting with 10% bleach or 10% sodium hydroxide mixed with water.
- Establish a working relationship with a veterinarian to review biosecurity practices for identification and closure of possible gaps.
- If you are a breeder or grower who purchases live rabbits, even if you have existing biosecurity measures in place, you should review your practices and take steps to address potential gaps.

Information for outdoor recreationists:

When out recreating, if you find dead rabbits, please report to your local wildlife biologist. Do not handle/move dead wild rabbit carcasses or their feces. Serious zoonotic diseases such as tularemia are associated with rabbit die offs and can be contracted by direct contact of an infected individual or being bitten by infected deer flies, ticks and fleas.

This virus is very hardy and can survive on clothing, plant material, or other items/equipment that may be moved from an infected area. Before visiting other wild areas, wash clothing and disinfect footwear/equipment with a solution of 1:10 (10%) household bleach mixed with water, after cleaning the item(s).

Falconers, raptors may be able to move RHDV2 after coming into contact with infected rabbit carcasses or parts. Avoid contact between your birds and rabbit carcasses or parts.

USDA recommendations:

- If you live near or visit an area where this disease was confirmed, do not touch any dead wild rabbits you may see. You may contact your local veterinarian, state and federal animal health officials to learn if RHDV2 has been detected in your area.
- If you see multiple dead wild rabbits, report it to state wildlife officials.
- If you own domestic rabbits, do not release them into the wild. If your rabbits appear ill or die suddenly, contact your veterinarian.
- If you volunteer at animal shelters or wildlife rescue facilities, be aware that this disease has been found in feral rabbits. If rabbits appear ill or die suddenly, contact the facility's veterinarian.
- Anyone working with rabbits should always practice good biosecurity. This includes basic steps like washing your hands before and after working with rabbits and not sharing equipment with other owners.

For additional information on RHDV2 or any other wildlife disease, please visit the WGFD website (<https://wgfd.wyo.gov/Wildlife-in-Wyoming/More-Wildlife/Wildlife-Disease/Wildlife-Disease-Information>), or contact the WGFD Wildlife Health Laboratory at 307-745-5865.