

## WILDLIFE IMPACTS

Pennsylvania is home to three wild species of lagomorphs: the eastern cottontail, Appalachian cottontail, and snowshoe hare. Since eastern cottontails are common throughout Pennsylvania and found throughout agricultural and residential landscapes, they are the wild lagomorph species most likely to come into contact with domestic rabbits and RHDV2. Appalachian cottontails and snowshoe hares are species of conservation concern, and while they are less common and more sporadically distributed than eastern cottontails, they often share habitat. If RHDV2 is introduced to Appalachian cottontails or snowshoe hares, it would place additional stress on these already vulnerable species. Furthermore, large numbers of wild lagomorph mortalities would have devastating effects not only on rabbit and hare populations but on the balance of the ecosystem, potentially impacting plants that these animals eat and predators that rely on rabbits and hares for food.



## ABOUT US

The Wildlife Futures Program is a science-based, wildlife health program that serves to increase disease surveillance, management, and research to better protect wildlife across the Commonwealth of Pennsylvania and beyond. The program is a partnership between the Pennsylvania Game Commission and the University of Pennsylvania School of Veterinary Medicine. If you encounter ill wildlife, contact the Pennsylvania Game Commission at 1-833-PGC-WILD. Wildlife Health Technicians from the Wildlife Futures Program are stationed throughout the commonwealth to respond to wildlife health incidents. Your help will allow us to better manage wildlife for current and future generations.

Visit <https://www.vet.upenn.edu/wildlifefutures> for more information.



## MORE INFORMATION:

PA Game Commission  
Rabbit Hemorrhagic  
Disease webpage

Wildlife Futures  
Rabbit Hemorrhagic  
Disease webpage



# RABBIT HEMORRHAGIC DISEASE VIRUS 2



## WHAT IS RHDV2?

Rabbit hemorrhagic disease virus 2 (RHDV2) is a highly contagious virus that infects both domestic and wild lagomorphs (rabbits and hares), but it does not affect humans or other species. It can spread rapidly in the wild, killing more than 70% of some populations.

## HISTORY

The disease first emerged in France in 2010 and has spread to more than 40 countries around the world, including the United States and Canada.

## DISTRIBUTION

RHDV2 was found in the southwestern U.S. in 2020 and has since become established in wild rabbit populations in many states.

## CLINICAL SIGNS

Most lagomorphs die within 12 to 36 hours.

- Many collapse and die suddenly, sometimes with vocalizations.
- Many show bleeding from the mouth, nose, or rectum and may have fever, difficulty breathing, loss of coordination, seizures, depression, or loss of appetite.
- Bloody eyes, blood in feces, or yellow gums may occur.
- Enlarged spleen, pale liver, or hemorrhage in internal organs may occur.
- Occasionally, individuals become lethargic or lose weight, but recover.



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## TRANSMISSION

Lagomorphs infected with RHDV2 can spread the virus for at least 30 days in urine, feces, blood, and other secretions.

Spread of RHDV2 can occur through direct contact with live infected lagomorphs, or exposure to infected carcasses, animal products, fur, food, water, or clothing. The virus can also be spread by insects, scavengers, and predators.

RHDV2 is very resistant to environmental degradation and can survive long periods outside its host. It has survived at room temperature for as long as 105 days, and one hour at freezing temperatures or heat up to 122°F. It has been detected in decaying tissue after 90 days outdoors.

Rapid detection and testing of suspect cases are important to try to prevent the virus from becoming established in the wild.

## STEPS TO AVOID SPREADING THE VIRUS

Humans are the greatest threat for spreading RHDV2, but steps can be taken to reduce the chance of further spreading the disease.

- Reduce contact between wild and domestic lagomorphs.
- In areas with RHDV2, wash clothes and boots after coming into contact with any lagomorphs.
- Clean surfaces that have contacted rabbits with soap and water, then disinfect with 10% bleach solution.
- If two or more dead rabbits or hares are found dead of unknown causes at the same time and in the same area, immediately notify appropriate authorities.

### Wild rabbits or hares:

If you encounter sick or dead lagomorphs, contact the Pennsylvania Game Commission by calling 1-833-PGC-WILD or using the online Wildlife Health Survey reporting tool at <https://www.pgcapps.pa.gov/WHS>.

DO NOT touch or move sick or dead lagomorphs unless authorized to do so

If instructed to dispose of carcasses, always wear gloves and double bag the bodies. Dispose in the commercial trash or bury deep enough to prevent scavenging (more than 2 feet).

### Domestic rabbits or hares:

Contact your veterinarian with questions about sick or dead domestic rabbits. Veterinarians who suspect RHDV2 should immediately contact the Pennsylvania Department of Agriculture at 717-772-2852 to speak with an on-call state veterinarian.