

## Rabbit Hemorrhagic Disease Virus 2 (RHDV2) Frequently Asked Questions

### What is Rabbit hemorrhagic disease virus 2?

Rabbit hemorrhagic disease virus 2 (RHDV2) is a highly contagious and fatal calicivirus that affects lagomorphs (hares, rabbits and pikas). RHDV2 is classified as a Foreign Animal Disease, although it is now considered stable endemic in the southwestern U.S. It is a federally reportable disease. In North America, RHDV2 has been confirmed in wild populations of black-tailed jackrabbits, desert cottontail rabbits, mountain cottontail rabbits, snowshoe hares, western brush rabbits, and antelope jackrabbits.

### Where has RHDV2 been found?

The virus first reached North America in 2016 in Quebec, Canada and sporadic isolated outbreaks occurred in domestic and feral rabbits in Ohio (2018), Washington (2019), and New York (2020). In March 2020, RHDV2 was detected in wild black-tailed jackrabbits and cottontail rabbits in New Mexico and has quickly spread to other states, including Arizona, California, Colorado, Florida, Georgia, Idaho, Kentucky, Montana, Minnesota, Mississippi, Nevada, New York, Oregon, South Dakota, Texas, Utah, and Wyoming. As of February 2022, RHDV2 has not been detected in Michigan, but it has been identified in 18 states mostly in the western U.S., 15 states in western and central Mexico, and three provinces in Canada.

For a map of current affected states and rabbit types, please visit:

<https://www.aphis.usda.gov/aphis/maps/animal-health/rhd>

### How do I know if a rabbit has RHDV2?

Sudden mortality in otherwise healthy rabbits is characteristic of RHDV2. Die-offs in wild rabbits can involve single to multiple rabbits. Dead rabbits often appear externally normal but can have bloody discharge from the nostrils and/or mouth (Figure 1). Typically, infected rabbits are simply found dead, although sick rabbits may occasionally be observed prior to death and can appear lethargic, reluctant to move, or with respiratory or neurological signs. Infected rabbits die within 1 day to 2 weeks after becoming infected. The virus kills 70-90% of infected rabbits.



Figure 1. Bloody discharge from a rabbit's nose, characteristic of RHDV2. Photo credit: Karen Fox, Colorado Parks and Wildlife.

### **How is RHDV2 spread?**

RHDV2 is highly contagious and can spread through direct contact with infected rabbits or indirectly through infected carcasses, blood, urine, feces, as well as contaminated food, water, and vegetation. Mechanical vectors, such as insects, and avian and mammalian scavengers and predators can also spread the virus. People can also unintentionally move the virus to new areas through footwear, clothing, or equipment that has contacted infected soil, feces, or carcasses. Outdoor recreationalists, hunters, and falconers can help protect rabbit populations by washing clothing and disinfecting footwear and equipment before traveling to other areas or interacting with pet rabbits.

### **How long can the virus live in the environment?**

RHDV2 is very persistent and stable in the environment and is resistant to extreme temperatures. Carcasses of infected rabbits contain viable virus particles for up to 90 days and the virus can survive high heat and freezing.

### **What wildlife species are susceptible to RHDV2?**

Only lagomorphs are susceptible to RHDV2, which in Michigan would include wild snowshoe hares and Eastern cottontail rabbits. No other species of wildlife are susceptible.

### **Can RHDV2 infect humans?**

RHDV2 only affects lagomorphs. Humans are not susceptible. However, the DNR highly discourages the consumption of sick wildlife.

### **What should I do if I find a sick or dead rabbit?**

You can help the DNR's efforts to fight RHDV2 by reporting sightings of sick or dead rabbits or hares and taking precautions to not spread the virus to new areas. If you find sick or dead rabbits or hares, please contact your local DNR Field Office or the DNR Wildlife Disease Lab at 517-336-5030, or file an online mortality report through the DNR Eyes in the Field website: [DNR Reporting \(state.mi.us\)](https://www.dnr.state.mi.us/eyesinthefield).

### **Where can I go for more information on RHDV2?**

Up to date information on RHDV2 can be found on United States Department of Agriculture APHIS webpage.

[USDA RHDV2 fact sheet](#)

[General Guidance for Cleaning and Disinfection of Rabbit Hemorrhagic Disease Virus \(RHDV\) Contaminated Premises - July 2020 \(usda.gov\)](#)

[Rabbit Hemorrhagic Disease Fact Sheet \(iastate.edu\)](#)