



# Rabbit Hemorrhagic Disease

Rabbit hemorrhagic disease virus serotype 2 (RHDV2) is caused by

infection with a calicivirus. It is highly infectious and exhibits a high mortality rate. All domestic and wild rabbits and hares are susceptible to the virus and severe local or landscape-level rabbit population declines are possible. It was diagnosed in wild rabbits in North America for the first time in April 2020. RHDV2 is not a human health concern.

## Transmission

RHDV2 is highly contagious and is shed by infected rabbits in urine, feces, and respiratory secretions. It is spread via direct contact with infected wild or domestic rabbits, meat, fur, or carcasses, and through indirect contact with contaminated objects (e.g., food, bedding, water, cages, etc.) or habitat. Insects, rodents, domestic animals, and scavenging mammals and birds may also become contaminated with the virus and transfer it to rabbits. The virus is very hardy, survives freezing, and persists in the environment and on surfaces for months.

## FAST FACTS



**Affected animals:** wild and domestic rabbits



**Affected systems:** circulatory and respiratory systems



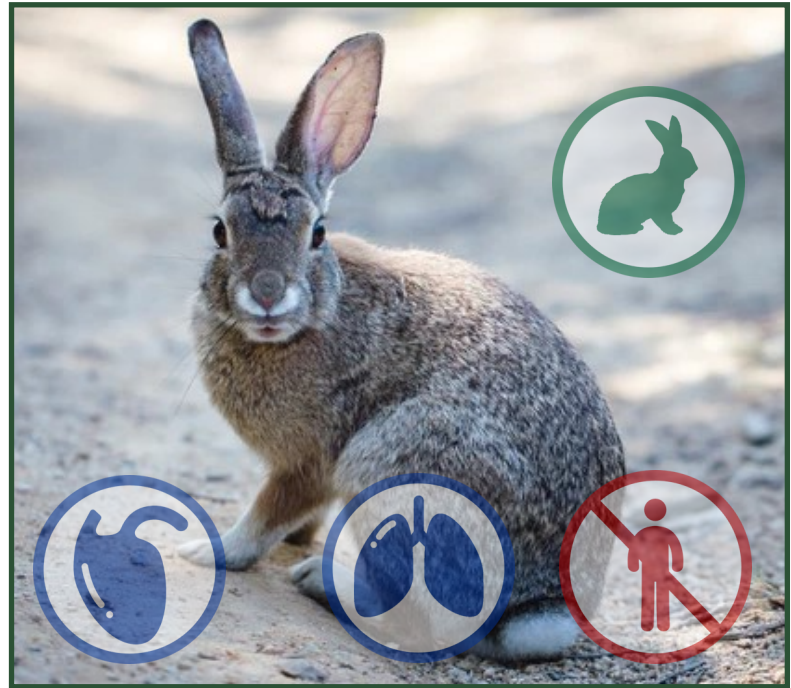
**Transmission:** contact with infected individuals or contaminated bodily fluids, tissues, objects, or vectors



**Human health concern:** no



**Mortality rate:** 80 - 100%



## Distribution

RHDV2 was first detected in France in 2010 and has since spread around the world. As of June 2020, all North American detections in wild rabbits have been confined to the southwestern U.S. and Mexico. It has also been diagnosed in domestic rabbits in various states, including Ohio (2018), Washington (2019), and New York (2020).

## Clinical Signs

In the wild, reports of an outbreak usually consist of multiple dead rabbits found within close proximity of one another over a relatively short period of time. Rabbits often die suddenly with no outward signs of illness, sometimes out in the open and not under cover. Some dead rabbits may exhibit bright red blood around the nose. Infected animals that do clinical signs prior to death may exhibit inappetance, lethargy, muscle spasms, difficulty breathing, blue-tinged lips, and may bleed from various body cavities.

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## Mortality Rate

80 - 100% of infected wild or domestic rabbits die from the disease.

## Treatment

There is no treatment currently available for RHDV2 nor is there a vaccine available for legal use on domestic rabbits in Virginia.

## Control

Do not release domestic rabbits into the wild for any reason. This practice is illegal in Virginia and can facilitate transmission of diseases. Sick domestic rabbits should be isolated immediately to prevent contact with other rabbits and contact between domestic and wild rabbits should be eliminated. Use of a 10% bleach solution with at least 10% contact time will effectively kill the virus on cages, tools, food bowls, etc.

## Human Consumption of Infected Rabbits

The meat of rabbits infected with RHDV2 is safe to eat if cooked to an internal temperature of at least 165°F.

## Information for Hunters

Do not move wild rabbits for any reason, including stocking or dog training purposes, as translocation of rabbits can facilitate spread of disease. Avoid harvesting rabbits that appear sick, wear rubber or disposable gloves when handling game, and minimize contact between dogs and dead rabbits. Rabbits may also be infected with Tularemia, which is a bacterium that is lethal to both humans and dogs. Bury rabbit remains deep enough to discourage scavenging or double-bag and discard in a trash bin, trash dump, or at a landfill. After cleaning or handling game, do not interact with live rabbits before showering and changing clothes.

## Information for Rabbit Owners

Minimize exposure to wild rabbits by keeping hutches or cages elevated off the ground. Minimize or eliminate contact with other pet rabbits. If you do interact with other rabbits at a private residence or a show/fair, shower and change clothes before handling your own rabbits. Assess the health status of the rabbitry from which you purchase animals by inquiring about recent mortalities, recent additions to the population, any observed signs of illness, etc. If you suspect your rabbit may be infected with RHDV2, consult your veterinarian immediately.

## Reporting

Localized population-level impacts are possible as a result of an RHDV2 outbreak. If you suspect RHDV2, please report it to either a Virginia Department of Wildlife Resources Regional Office or via the Wildlife Conflict Helpline at **855-571-9003**. This number is active Monday to Friday, 8:30 AM - 4 PM.

