



## American Fish and Wildlife Guidance

### Rabbit Hemorrhagic Disease Virus 2 (RHDV2)

#### Frequently Asked Questions Involving Wild Rabbits and Hares

#### **What is Rabbit Hemorrhagic Disease Virus 2?**

Rabbit Hemorrhagic Disease Virus 2 (RHDV2) is a highly contagious calicivirus affecting domestic rabbits and wild species in the taxonomic order Lagomorpha. RHDV2 is a Foreign Animal Disease that has appeared periodically in North America and has a high case fatality rate.

#### **Where has RHDV2 been found?**

RHDV2 initially occurred in North American domestic rabbits in Vancouver, Canada (2018) and was subsequently identified in Ohio (2018) and Washington (2019-present, and New York (2020).. The virus appeared later in 2020 in domestic rabbits in Arizona, Nevada, New Mexico, New York, Utah, and Texas. RHDV2 was first confirmed in wild black-tailed jackrabbits and cottontail rabbits in the United States in April 2020. As of June 2020, RHDV2 has been confirmed in wild populations in Arizona, California, Colorado, Nevada, New Mexico, Texas, and in 5 northern states of Mexico. The source of the recent RHDV2 outbreaks has not been identified.

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

Sudden mortality in otherwise healthy rabbits is characteristic of RHDV2. Observation of sick rabbits prior to death is rare, but sick rabbits may be lethargic and reluctant to move. Infected rabbits die within 1 day to 2 weeks after becoming infected. The virus kills 70-90% of infected rabbits. Rabbit carcasses may have bloody discharge from the nostrils and/or mouth or have no external signs.

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

RHDV2 is highly contagious and can spread through direct contact with infected rabbits or indirectly through contact with infected carcasses, blood, urine, and feces. The virus can also be present on contaminated surfaces such as cages, feed, water, and bedding. Insects, scavengers, predators, and birds can also spread the virus by contact with infected rabbits or carcasses.

#### **What precautions should I take if I hunt rabbits or harvest domestic rabbits for food?**

Do not harvest rabbits that appear sick. RHDV2 can persist in chilled or frozen rabbit meat for an undetermined period of time and may be a source of infection for domestic and wild rabbits. If you find a wild dead rabbit in an area with known infection of RDHV, do not take the carcass home for human or animal consumption and do not process the pelt for sale or use. Contact your local state wildlife office to report your finding to a biologist, game warden, or wildlife

veterinarian. Dead domestic rabbits should be reported to the state veterinarian. Please follow the disposal guidance provided by your state wildlife or agriculture agency.

### **What precautions should I take when field dressing a harvested rabbit?**

Field-dressing or cleaning rabbits should include the securely bagging entrails and hide or other remains and disposal routinely in the trash unless special guidance has been provided by your state wildlife or agriculture agency. Do not dispose of remains where other rabbits or scavengers may have access to them. This can indirectly spread the virus. Do not eat, drink, or smoke while handling animals.

### **Handling or cooking rabbit meat: are there special precautions?**

Careful biosecurity considerations for handling meat should be taken. Hunters should wear rubber or disposable latex gloves while handling and cleaning game. Similar to all wildlife meat preparation, meat should be cooked thoroughly and all surfaces in contact with meat should be cleaned and disinfected with an appropriate sanitizing agent. Individuals handling meat should use effective and thorough hand washing practices with soap and at least 20 seconds of scrub/contact time. All game should be thoroughly cooked to an internal temperature of 165 degrees.

### **Can I freeze rabbits or rabbit meat to kill the virus?**

Freezing does not kill the virus. Rabbits that die of RHDV should not be frozen for human consumption due to the risk of virus persistence in the frozen meat and of reinfection of domestic or wild rabbits.

### **Can I transport hunter-harvested rabbits across stateliness?**

Sick or rabbits found dead should not be collected or handled. Before you leave on a hunt in another state, check with your State Department of Fish and Wildlife regarding recommendations or state restrictions on wild rabbit carcass movement.

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

RHDV2 is very persistent and stable in the environment. It is resistant to extreme temperatures and can survive freezing. The virus can survive up to 15 weeks in dry conditions.

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

Only Lagomorphs are susceptible to RHDV2, which has 2 families: the Leporidae (hares and rabbits) and the Ochotonidae (pikas). In North America, RHDV2 has been confirmed in wild black-tailed jackrabbits, desert cottontail rabbits, mountain cottontail rabbits, and antelope jackrabbits. Experiments have shown eastern cottontails (*Sylvilagus floridanus*) are susceptible to infection and mortality. No other species of wildlife are known to be susceptible.

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

RHDV2 only affects Lagomorphs. Humans are not susceptible; however, sick wildlife of any species should not be consumed. Hunters who may have contact with live domestic rabbits should shower and change clothing as soon as possible after cleaning game. Rabbits and other wildlife can transmit zoonotic diseases such as tularemia) and plague to people. People handling live or dead wildlife should always wear appropriate personal protective equipment (PPE) including, at a minimum, nitrile or latex gloves.

<https://www.cdc.gov/tularemia/index.html>

<https://www.avma.org/resources/public-health/disease-precautions-hunters#tularemia>

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

If you find sick or dead wild rabbits, please contact your local state wildlife office to report your finding to a biologist, game warden, or wildlife veterinarian. Dead domestic rabbits should be reported to the state veterinarian.

**Where can I get more information on RHDV2?**

Current information on RHDV2 can be found on [United States Department of Agriculture APHIS](#) webpage.