

Rabbit Haemorrhagic Disease

Fall 2021

Updated from RHD fact sheet [Spring 2021](#). See original for background info on RHD and RHDV

Emerging Disease

Rabbit haemorrhagic disease virus (RHDV) is deadly for European rabbits, *Oryctolagus cuniculus*, and spread throughout their range. Various forms of the virus are linked to an extremely infectious viral disease in wild, captive, and pet European rabbits.

In 2010, a new rabbit haemorrhagic disease virus, **RHDV2**, was identified in France. Subsequently, large-scale mortality in European rabbits and hares occurred across Europe and Australia.

***RHDV2 can also infect native
North American lagomorphs!***



Myrna Pearman

Since summer 2020, RHDV2 outbreaks occurred in various western states and northern Mexico. The virus escaped from captive and pet rabbits into adjacent feral populations of domestic rabbits as well as native wild rabbits and hares.

The social nature and natural high density in populations of rabbits and hares facilitates viral transmission. All forms of rabbit haemorrhagic disease are highly contagious, with high mortality rates in susceptible species and populations. North American lagomorphs have no natural protection against this new invasive foreign disease and initial mortality could be quite high as the virus sweeps across the continent.

To date, mortality has been documented in wild black-tailed jackrabbits, antelope jackrabbits, desert cottontails, Nuttall's/mountain cottontails, and Eastern cottontails, as well as feral domestic rabbits.

Alberta has Nuttall's/mountain cottontails, as well as abundant populations of white-tailed jackrabbits and snowshoe hares. And pikas (also members of the hare family). While not specifically known to be susceptible, these species could be at risk of infection and mortality from RHDV2.

This is a classic WILDLIFE disease. It has no implications for human or livestock health, although commercial rabbitries are at considerable risk.

Wild lagomorphs are key herbivores and essential prey species in various ecosystems. They significantly modify natural vegetation by altering patterns in plant community biodiversity and growth. They also feed many other wild species. Loss of lagomorphs would send ripples through these systems from the bottom-up and the top-down.

UPDATE Oct 2021

The outbreak of rabbit haemorrhagic disease virus 2 (RHDV2) in captive household rabbits near Taber last spring appears to have affected only the pet rabbits. Enhanced passive surveillance by local AEP staff did not find dead wild rabbits, hares or jackrabbits. Whew!

BUT... in late September 2021, Edmonton Animal Protection staff received three dead young bunnies from a group of feral domestic rabbits in northwest Edmonton. The city staff members submitted the rabbits to a veterinarian for post mortem. On October 7, 2021 we received notice that RHD was confirmed in all three rabbits. Subsequent enquiry revealed that ~50 feral rabbits at this site disappeared/died in late September 2021. Very few live rabbits are left.

Our primary concern is that these rabbits were largely free-ranging in an unfenced area and there is abundant suitable habitat for wild hares and jackrabbits nearby. Initial search of the area on Oct 8 did not reveal any dead hares or jacks, but terrestrial and avian scavengers also use the area.

What is Alberta Doing?

Local Alberta Environment and Parks (AEP) wildlife staff are coordinating with Edmonton Animal Protection staff to conduct enhanced passive surveillance (increased checks for carcasses) at the site.

Local wildlife rehabilitators were notified of the outbreak and were asked to let AEP know if there is an increase in reports of sick or dying hares or jackrabbits.

Alberta Agriculture and Forestry are preparing information for distribution for AVMA (veterinarians) and to registered commercial rabbit operators in the province.

We share appropriate information with the public and with government staff in various provincial departments. We ask staff to be alert to potential local mortality events in hares, jackrabbits, cottontails, and pikas.

Individual wild rabbits and hares born this year (baby rabbits/hares) or any rabbits/hares hit by vehicles are NOT a concern in regards to RHDV2. Groups of dead rabbits or hares of any age (an unusual mortality event) are a concern.

If mortality events are observed by staff or the public, please notify the Wildlife Disease Unit.

Margo Pybus margo.pybus@gov.ab.ca

Mark Ball mark.ball@gov.ab.ca

<https://www.alberta.ca/wildlife-diseases-in-alberta.aspx>
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Owners of pet rabbits are advised to contact their veterinarian directly if they have questions or concerns.

Additional Information

US Department of Agriculture
https://www.aphis.usda.gov/publications/animal_health/fs-rhdv2.pdf

