Rabbit calicivirus RHDV2 strain

Frequently asked Questions and Answers

26 June 2018

Will you be trying to eradicate the virus?

We will be considering options with regard to how the risk will be managed, however given the nature of the organism, it is unlikely that eradication would be viable. In addition, it is possible that the way the virus entered New Zealand will never be found. We will not be making a decision on eradication until we have enough confidence that we can eradicate the virus.

How widespread is it, and how do you know?

We put in place a surveillance programme to monitor the effectiveness of a related strain of the virus which was released as part of a planned rollout through March and April this year.

The first infected rabbit was found in the Marlborough area in May and we suspected a wider distribution than this, since it was a wild rabbit. Two further cases of RHDV2 have been confirmed, both involving wild rabbits in the Bay of Plenty. These cases were picked up as part of monitoring the effectiveness of the controlled calicivirus K5 release.

We will continue the surveillance programme to help us understand the new strain's spread.

What other countries have this virus?

This strain of RHDV is exotic to New Zealand, though prevalent in Europe and Australia, and present in Canada.

How did it get here?

At this stage, we do not know how the virus may have got into New Zealand. It is possible that the way the virus entered New Zealand will never be found.

Is it likely that a farmer brought the virus to New Zealand to control pest rabbits?

At this stage, we do not know how the virus may have got into New Zealand.

What is MPI doing to get to the bottom of how it got here?

By identifying data that has been or needs to be collected to determine how widespread the virus might be and how the virus might have been introduced.

Could it have gotten here with the imported RDHV-1?

We can rule that out because of extensive testing at the time.

When did you find out, and what did you do?

As part of a planned release of RHDV1-K5, MPI's Sustainable Farming Programme, Environment Canterbury and MBIE contracted Manaaki Whenua - Landcare Research (MWLR) to conduct routine sampling. On 30 April 2018, a sample from Molesworth Station was tentatively confirmed by MWLR as RHDV2. This strain of RHDV is exotic to New Zealand, though prevalent in Europe and Australia,

and present in Canada. For full confirmation, MPI's Animal Health Laboratory contracted independent testing at overseas labs. The result was confirmed on 14 May 2018 as RHDV2.

How does the virus spread?

Through contact mostly, which is why we are advising rabbit owners to keep their rabbits separate from wild rabbits. Insects can also spread the virus so rabbit owners should look to control the insects around their pet rabbits.

How long have you known about the risk of this virus coming to New Zealand, and what did you do to mitigate it?

In a global world there is always the chance of unwanted pests or diseases entering the country. We've known for some time that it has been prevalent in Australia and Europe, but this rabbit has been the first confirmed case of the new strain in New Zealand.

MPI has been working with AsureQuality before confirmation to secure sufficient quantity of vaccines to satisfy initial demands of rabbit owners and veterinary practices.

What is the difference between these two strains, RHDV1-K5 vs RHDV2?

RHDV1-K5 was released to reduce wild rabbit populations. It affects almost exclusively wild or domesticated European rabbits, in animals older than 6-8 weeks. Other rabbits i.e. cottontails and hare species i.e. European brown hare are not affected by RHDV1-K5. Mortality rate is 40-100%.

RHDV2 affects European rabbits and at least two species of hares: Sardinian Cape hare and the Italian hare and can cause mortality in young animals from 11 days onwards. It is thought RHDV2 is less virulent than classic RHDV1-K5 and affected animals tend to show more subacute to chronic clinical signs. RHDV2 has a variable mortality rate of 5% to 70%.

Will the new strain impact the efficacy of RDHV1-K5?

We think there should be no impact on the K5 release. The K5 strain belongs to the Lineage 1 (RHDV1/RHDVa) group and these are more pathogenic than the RHDV2. In other words the K5 strain should cause higher levels of mortality than RHDV2. Furthermore there is no cross protection between the RHDV1/K5 strain and RHDV2.

What should rabbit owners do to protect their rabbits?

There is a vaccine available - FILAVAC, however until more stock arrives, the vaccine is limited to 2000 doses nationwide. Rabbit owners who would like to vaccinate their rabbits will need to book an appointment with their veterinarian. While MPI will cover the cost of these first 2000 vaccine doses, rabbit owners will need to cover any additional costs, such as the veterinarian's consultation fee. There are a number of practical steps people can take to minimise the risk to their pets. If you own rabbits, you should:

- Keep them separate from wild rabbits
- Wash hands between handling rabbits
- Control insects around pet rabbits as they can spread the virus between rabbits

Have the first 2000 vaccines arrived in New Zealand?

We are pleased to advise that the initial order of 2000 doses for the RHDV2 virus strain have now arrived in New Zealand and have been distributed to the first 100 vet practices who placed early orders.

How can I get my pet rabbit vaccinated?

Call your vet to let them know that you want to get your pet rabbit vaccinated. Your vet will let you know if and when they have the vaccine.

I'm a veterinarian. How can I get doses of the vaccine?

RHDV2 vaccines are available to veterinarians by placing orders with AsureQuality.

What does this mean for the rabbits that have been vaccinated for RHDV1-K5?

The current vaccine Cylap covers the RHDV1-K5 strain (the one that was already here, and the one that was recently introduced), but does not protect against the strain that has just been found, RHDV2.

Does the virus cross into other animals?

The virus affects rabbits and the European hare. It does not cross into other animals, but we know that insects are a vector.

Does the virus have any human health impacts?

No.