

Vaccinating pet rabbits against RHDV1 K5 – information for veterinarians

A new strain of rabbit calicivirus, RHDV1 K5, will be released in Victoria in March. Pet rabbit owners should make sure animals' vaccinations are up-to-date to protect against the virus.

WHAT IS RHDV1 K5?

A new strain of the rabbit calicivirus called Rabbit Haemorrhagic Disease Virus, K5 (referred to as RHDV1 K5 or simply 'K5'), will be released in Victoria in March 2017 to help land owners control pest rabbits.

RHDV1 K5 is not a new virus, it is a Korean variant of the existing virus already widespread throughout Australia.

RHDV1 K5 should work better in the cool-wet regions of Australia where the current variant has not been so successful. RHDV1 K5 is a naturally occurring variant of RHDV and has not been altered by humans in any way.

RHDV1 K5 causes more rapid death than the current variant of RHDV. This leads to improved animal welfare, as well as helping to lessen the impacts of rabbits on agricultural production and biodiversity.

WHY DO WE NEED RHDV1 K5?

Pest rabbits are Australia's most destructive agricultural pest animal, costing \$200 million in lost agricultural production every year, with a further \$6 million expended on rabbit control measures.

Rabbits also have a significant environmental impact. The Threat Abatement Plan released by the Australian Government Department of the Environment and Energy in 2016 found that pest rabbits are a significant threat to biodiversity, affecting 304 nationally threatened plant and animal species.

The impacts of rabbits in Victoria are felt across the state, from the urban edge through to the ecologically sensitive habitats of the Mallee.

Rabbits prefer well-drained soils, which are also often the most productive areas for domestic livestock.

Pest rabbit numbers are increasing and an improved biological control agent, in conjunction with a community-led response using best practice rabbit management principles, is an opportunity to reduce the impacts of pest rabbits.



VACCINATING AGAINST RHDV1 K5

A vaccine (Cylap®) for prevention of RHDV1 disease in rabbits has been available in Australia since 1996.

Before registering RHDV1 K5 for use in pest rabbit control, the NSW Department of Primary Industries and the Invasive Animals CRC examined whether the vaccine would protect domestic and production rabbits from RHDV1 K5.

One group of rabbits was vaccinated and another was left unvaccinated. Both were then infected with a high dose of RHDV1 K5. All of the vaccinated rabbits survived the infection. All of the unvaccinated rabbits died.

Cylap® has a proven 20-year track record in Australia and has also been protecting rabbits from all RHDV1 strains in Europe for 30 years.

The World Organisation for Animal Health (OIE) provides strong support that existing vaccines provide good protection against RHDV1 strains, including RHDV1 K5.

To read more about the effectiveness of Cylap® against RHDV1 K5, visit: www.pestsmart.org.au/minimise-rhdv1-infection-in-pet-rabbits/

FURTHER PROTECTION FOR PET RABBITS

Domestic pet rabbit owners can take the following extra precautions to protect pet rabbits from RHDV1 infection:

- Prevent contact between pet and pest rabbits.
- Don't cut grass from areas where pest rabbits may be foraging and feed it to pet rabbits.
- Wash hands with warm soapy water between handling rabbits.
- Insect proof the hutch with fly- and mosquito-proof wire or keep pet rabbits indoors.

WARNINGS

Agriculture Victoria has been disseminating some dedicated communications to provide advance warning to communities and domestic pet rabbit owners that RHDV1 K5 is on its way into the pest rabbit population. This has included social media posts like the Twitter graphic below.



RELEASE OF RHDV1 K5

The strategic release of RHDV1 K5 will proceed during March 2017. It has been carefully selected to be released in sites where it is likely to be more effective and is part of a 20 year national biological control plan to control pest rabbits.

There are nine nationally coordinated monitoring sites: three in NSW, four in Victoria and one each in WA, SA, ACT and Queensland. There are nominated state coordinators who are the key contacts in each jurisdiction.

RHDV2

In May 2015, RHDV2 virus was found in pest rabbits in the ACT and has since been isolated across NSW, SA, WA, Tasmania, Victoria and the Northern Territory. This new virus is referred to as RHDV2 because although the mode of death is the same as RHDV1, they are two separate viruses. The origin of RHDV2 is unknown.

Cylap® is not considered to be fully effective against RHDV2. Australian researchers are working on a vaccine for this virus. The Australian Veterinary Association (AVA) recommends a revised vaccination protocol to help protect rabbits against RHDV2.

Read more at: www.ava.com.au/rabbit-calicivirus

MORE INFORMATION

For more information, visit:

- Pestsmart – the website of the Invasive Animals CRC: <http://www.pestsmart.org.au/minimise-rhdv1-infection-in-pet-rabbits/>
- The Australian Veterinary Association information on rabbit calicivirus: www.ava.com.au/rabbit-calicivirus
- Agriculture Victoria's information on rabbit biocontrol: <http://agriculture.vic.gov.au/agriculture/pests-diseases-and-weeds/pest-animals/invasive-animal-management/established-invasive-animals/rhd-boost>
- Agriculture Victoria's information on pet rabbits: <http://agriculture.vic.gov.au/pets/other-pets/rabbits>