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Information on myxomatosis vaccine availability in Australia

There has been an increase in the rates of myxomatosis infection in rabbits in some areas. The Department of Agriculture, Fisheries and Forestry (DAFF) has received enquiries from veterinarians and rabbit owners about the availability of a vaccine to provide protection against myxomatosis.

No vaccines for myxomatosis are currently registered for use in Australia, but other preventative measures can be taken. These include protecting pet rabbits from mosquitoes and fleas which spread the disease.

Answers to frequently asked questions about preventing myxomatosis are provided below.

Rabbit owners should ask their veterinarian for more information and advice.

Frequently asked questions

A vaccine is available in other countries, why isn't it available here?

A vaccine is not a viable option for Australia. Live attenuated vaccines (also known as 'modified live' vaccines) are available overseas. They are not allowed to be used in Australia because the live virus in the vaccine has the potential to spread into the wild rabbit population which could result in wild rabbit immunity to myxomatosis. If this happened, there would be a dramatic increase in the number of wild rabbits in Australia, which would cause major damage to the environment and economic losses.

How would the myxomatosis virus spread from a vaccinated pet rabbit to a wild rabbit?

When a rabbit has been vaccinated with a modified live vaccine, there can be enough vaccine virus in their skin for it to be spread. Infected rabbits shed the myxomatosis virus through their skin, and the virus is then spread from one rabbit to another via mosquitoes and fleas. Desexing would not affect the ability to spread live vaccine virus into the wild rabbit population.

What can I do to protect my rabbit?

Because the virus is spread from one rabbit to another by mosquitoes and fleas, protecting rabbits from these insects by using mosquito-proof hutches and powders or sprays could help prevent myxomatosis. Your veterinarian can provide you with further advice.

Is a vaccine being developed for Australia?

Australian scientists undertaking research for the Invasive Animals Cooperative Research Centre have identified myxomatosis vaccines that might be suitable for use in Australia. These vaccines could be used in pet rabbits without the risk of spreading the vaccine strain to wild rabbits. These vaccines have not yet been developed beyond the experimental stage.

What's DAFF's role in developing a vaccine?

The Australian Government through DAFF seeks the best outcomes for the health and welfare of all animals, including domestic rabbits. However, the decision to develop commercial vaccines rests entirely with vaccine manufacturing companies. The development of vaccines beyond the research stage is a long and complex process, as rigorous testing is required to safeguard human, environmental and animal health against potential risks. As commercial ventures, only vaccine manufacturers can decide whether it is viable for them to undertake commercial development of a vaccine. If such a vaccine were developed, Australian Government agencies, including DAFF

would then have to consider whether to approve the vaccine for use in Australia. This would involve assessing any possible risk to human and animal health, and to the environment.

Why is myxomatosis spreading now?

The rapid growth of mosquito populations which transmit the virus is the result of recent wet conditions on the east coast of Australia. Mosquitoes transmit the virus from infected to uninfected rabbits, though infection may sometimes occur through direct contact between rabbits.

Why do we still need to use myxomatosis to help control feral rabbits?

Despite a proportion of the wild rabbit population developing genetic resistance to the introduced myxoma virus, the virus is still considered a necessary biological control agent. Biological control agents are still needed to help control wild rabbits in Australia because they cause major damage to the environment (such as soil erosion, weed invasion and competition against native species for habitat) and cost Australian agriculture [an estimated \\$206 million in annual losses](#). Wild rabbits have been implicated in the near extinction or extinction of small native mammals and have been a food resource for other introduced pests such as the European red fox and the feral cat.

Other strategies, such as immunocontraception (a fertility control vaccine), are yet to become viable control methods for wild rabbits.

Please note: If you live in Queensland it is illegal for you to keep a pet rabbit. Visit the [Department of Employment, Economic Development and Innovation](#) website for more information.