

Summary

Protecting the health and welfare of pet rabbits involves taking a proactive approach to preventative healthcare. Vaccination of pet rabbits is an important part of this approach and is widely recommended to protect rabbits from two very serious viral infectious diseases - myxomatosis and rabbit haemorrhagic disease. All veterinary medicines authorised for use in the UK, including rabbit vaccines against these two diseases, have met high standards of quality, safety and efficacy as assessed by an independent veterinary regulator.

Introduction

There are an estimated 0.6 million pet rabbits in the UK (1). All of these rabbits, just like cats and dogs, are susceptible to infectious diseases that have a serious effect on their health and welfare. In some cases infection will result in rabbits needing prolonged intensive care treatment and in many cases the most serious viral diseases of rabbits are fatal.

Two very important viral rabbit diseases are myxomatosis and rabbit haemorrhagic disease (RHD).

Myxomatosis is a disease to which all breeds of domesticated, as well as wild, rabbits are at risk. It is typically spread by blood sucking insects including rabbit fleas, mosquitos and mites and by direct contact with infected rabbits. All rabbits are at potential risk of infection as the disease can be carried over distances by insects, which can then come into contact with indoor as well as outdoor rabbits. Signs of the disease include swellings, including the head/face/ears, which can cause blindness and affect their ability to feed and drink. The disease is frequently fatal and so vaccination, along with flea control, good husbandry and stress reduction, is recommended.

Rabbit haemorrhagic disease (RHD), also known as Viral Haemorrhagic Disease (VHD) is another very serious infectious disease of rabbits. All rabbits are again at potential risk as it is spread by both direct and

indirect contact with infected rabbits. Indirect transfer can occur via people and their clothing, through contaminated hutches and bedding, as well as insect vectors such as fleas and flies. The disease is endemic in wild rabbits in the UK. Signs of infection in rabbits include being depressed or collapsed, breathing difficulties, convulsions, a fever and bleeding from the nose. Death can occur very rapidly, within 12-36 hours of a fever, and mortality rates can be extremely high. Unfortunately, rabbits are often found dead. More recently, another new variant of RHD has emerged (RHD-2) and owners should be aware that following a consultation with their vet, rabbits may also need further vaccination against this strain.

Vaccinating to protect rabbits against these deadly diseases therefore makes good sense and the benefits are clearly evident in terms of reducing rabbit suffering and death and alleviating owner distress.

Vaccine development, approval and monitoring

Vaccine research and development requires years of investment and expertise from veterinary scientists to produce suitable vaccines that meet high standards of safety, quality and efficacy as assessed and approved by independent regulators, which are the Veterinary Medicines Directorate (VMD) in UK and the European Medicines Agency (EMA) in the EU. Even after a vaccine is approved and becomes available for pets, animal medicine companies continue to support the safety and efficacy of their vaccines through a process of pharmacovigilance. [Pharmacovigilance](#) means vets and owners can report any suspected adverse reactions, which must then be reviewed by animal medicine companies and the VMD (2). Serious adverse reactions are very rare. Nevertheless, ongoing assessment helps to reduce these rare events even further. These responsibilities are taken seriously by animal medicines companies who continue to work and ensure that vaccines remain safe and effective into the future.

Rabbit Vaccines and Vaccination

Vaccines are available for the two main diseases of pet rabbits in the UK, namely myxomatosis and rabbit haemorrhagic disease (RHD) type 1 and type 2

It is widely recommended that pet rabbits are vaccinated against these serious viral diseases as part of a preventative healthcare plan (3).

As the characteristics of individual vaccines can differ, the timings for vaccination and the frequency of booster vaccinations will depend on factors such as the duration of immunity from specific vaccines. Your vet will advise on appropriate timings based on the specific product information that can be found on associated product literature (the Summary of Product Characteristics or SPC or the datasheet) (4, 5).

The benefits of vaccination can be exerted beyond the protection of individual rabbits. The prevalence of disease in regional communities can also be reduced by decreasing the overall numbers of susceptible rabbits that have not been vaccinated. When a high proportion of rabbits in the community are vaccinated the protection offered is called 'herd immunity'.

A vaccination appointment not only helps to protect your animal against infectious diseases, it also enables pet owners to discuss any concerns with their veterinary surgeon and allows the vet to perform a full health examination and diagnose any issues that need to be addressed, nipping potential problems in the bud.

We have a legal and moral responsibility to protect the animals in our care from pain, suffering and disease (6). Responsible rabbit ownership includes regular veterinary health visits and ensuring preventative steps are taken to avoid the negative welfare consequences of ill health. Working with vets, owners can proactively take steps to ensure reasonable preventative measures are taken to protect the health and welfare of their pet rabbits.

Take home messages:

- The consequences of serious viral infectious diseases of rabbits can be controlled through vaccination.
- All vaccines on the UK market meet rigorous safety, efficacy and quality standards through independent regulatory approval.
- Serious adverse reactions to vaccines are rare and the benefits of vaccination continue to outweigh this small risk.
- Consult with your veterinary surgeon to proactively make a preventative healthcare plan that benefits the health and welfare of your rabbits.

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all animals. For further information, including more briefing documents on animal medicines topics see www.noah.co.uk and follow @UKNOAH on Twitter.

(For more information on veterinary vaccines and regulation and safety of veterinary medicines see NOAH briefing documents on Vaccination for Animal Health: An Overview, Cat Vaccination, Dog Vaccination, Equine Vaccination, Farm Animal Vaccination, Pharmacovigilance and Controls on Veterinary Medicines).

References:

1. Pet Food Manufacturers' Association (PFMA) pet population report 2019:
<https://www.pfma.org.uk/pet-population-2019>
2. VMD adverse event reporting:
www.gov.uk/report-veterinary-medicine-problem
3. Animal Welfare Foundation – guide to keeping rabbits healthy and happy:
www.bva-awf.org.uk/sites/bva-awf.org.uk/files/user/caring_for_rabbits.pdf
4. NOAH Compendium of Datasheets:
www.noahcompendium.co.uk/
5. VMD Product Information Database:
www.vmd.defra.gov.uk/ProductInformationDatabase/Default.aspx
6. Animal welfare guidance and legislation:
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