Rabbit Hemorrhagic Disease Virus 2 (RHDV2)
Vaccine Information

As the 2020 outbreak of RHDV2 (a mutation of the original RHD) spreads throughout North America, rabbit guardians have concerns over the availability, efficacy, and production methods of the RHDV2 vaccines. RHDV2 is considered a foreign animal disease, meaning it is not naturally occurring in the United States (U.S.), and, therefore, a mandatory reportable disease closely monitored by state and federal agencies. This is the primary reason there is no licensed vaccine available or produced in the U.S.

Vaccine Overview

Type & Availability

- The USDA controls all aspects of the importation of vaccines and how they can be used.
- Currently, the USDA is allowing importation of two effective inactivated (killed virus) vaccines from Europe: Eravac from Spain and Filavac from France.
- A third effective recombinant vaccine, Nobivac Myxo-RHD (combined RHDV2 and Myxomatosis), is not being imported due to concerns that the vaccine is live and contains the virus for myxomatosis, which is not a significant disease in the U.S. (though it is present in coastal California and Oregon). This vaccine also has not been tested on the U.S. rabbit population, leading to concerns that the vaccine could cause myxomatosis rather than prevent it.
- For a general description of vaccines types discussed: www.vaccines.gov/basics/types
- For a comparison of Eravac and Filavac: rabbit.org/for-veterinarians-rhdv-vaccine-comparison/
Import Requirements & Usage Guidelines

- *Currently, only states with a positive diagnosis of RHDV2 in wild or domestic rabbits can import vaccine for use in domestic rabbits.* Great progress has already been made to shorten the wait time for importation of vaccine and to increase the number of doses available for affected states.
- *Do not, under any circumstances, consider bringing this or any other unapproved RHDV2 vaccine into the US.* Aside from serious legal repercussions, the rabbits may not be recognized as vaccinated by the state veterinarian or USDA if there is an outbreak of RHDV2 in your area.
- Please be patient with your local veterinarian regarding vaccine availability, because they have to follow strict USDA guidelines without exception. For veterinarians needing information on the importation process, see [https://rabbit.org/rhdv-importing-vaccines/](https://rabbit.org/rhdv-importing-vaccines/) or contact your State Veterinarian.
- Many people are frustrated that the vaccines can’t be sold in all states immediately, but there are important reasons why:
  - European vaccine manufacturers have limited capacity for production. If vaccines are sold to all states, there would be a critical shortage for RHDV2-positive states.
  - Since this is a foreign disease and we are using foreign vaccine on our rabbit populations, there is always concern, until proven otherwise, of inadequate vaccine protection.

Future of Vaccine Availability

- The USDA is currently supporting and working diligently with U.S. pharmaceutical companies to produce a vaccine in the U.S. It is expected this process will likely take a year or more, but we will keep you updated.
- The U.S. vaccine will most likely be a subunit vaccine that uses a tiny particle of the virus and, therefore, is safe and humane because it is *not alive or grown in lab animals.*

Vaccine Administration

- The ERAVAC (Spain) and FILAVAC (France) vaccines are both given as one injection under the skin.
- The onset of immunity for both is approximately one week after vaccination. The earliest ages the two vaccines can be given is 4 weeks for Eravac and 10 weeks for Filavac.
- It is normal and common to have a temporary spike in body temperature after vaccination (the body making antibodies to the foreign virus that was injected).
- Owners may also notice a nodule or lump at the vaccination site. The nodule is due to the rabbit’s body reaction to the substances that make up the injectable solution that carries the RHDV2 killed virus. The nodule is usually temporary and not life-threatening.
- Please note that *no vaccine can be considered 100% efficacious or that every rabbit that receives it will be guaranteed immunity to the disease.* *This is why biosecurity is vitally important as the first and most consistent method of protection.*
HRS Position on RHDV2 Vaccine Usage

House Rabbit Society (HRS) would like to see a U.S. licensed, recombinantly-derived vaccine as soon as possible, but understands this process will take time. Our goal for the future is a readily available safe and humane RHDV2 vaccine for veterinary administration that does not require special permits or suffer delays in importation. It is important to note that all vaccines are tested on animals, including rabbits, to ensure safety and efficacy. The two killed/inactivated vaccines currently available for import (Eravac and Filavac) are produced by infecting rabbits and then euthanizing them after a period of time to collect the virus from their livers and spleens. While both manufacturers of these two vaccines follow the principles of the 3Rs in animal research (replacement of the use of animals; reduction in the number of animals used; and refinement of methods), it is our hope that future vaccines will limit or remove the need for live animals as the source of the vaccine virus. HRS is committed to doing all we can to protect rabbits and work tirelessly to support the production of a U.S. licensed vaccine that is as humane as possible.

HRS recommends individuals and rescues with rabbits living in outbreak and neighboring areas should strongly consider vaccination. Information for shelters and rescues can be found at https://rabbit.org/rhdv-shelter-sop/. This is a difficult situation and the final decision should be made in partnership with your veterinarian with consideration of your rabbits’ overall health issues, as the vaccination could represent an additional health risk. With RHDV2 spreading in wild rabbits, we anticipate that this virus will threaten the lives of companion rabbits in outbreak areas for years to come. While biosecurity measures are key to keeping rabbits safe, it is difficult to eliminate the risk of death from RHDV2 through biosecurity alone. Without vaccination, the virus could threaten indoor rabbits when they’re eating greens from affected areas; it could be brought in by other pets; or, it could be brought in by simply walking in and out of your home.

Biosecurity Measures to Reduce Risk in your Pet Rabbits

Please see our full list of biosecurity measures with a printable handout.

- House your rabbits indoors with no outdoor playtime.
- Wash your hands thoroughly before handling your rabbits.
- Change your clothes and wash hands after handling or contact with other rabbits.
- Don’t let your rabbit have physical contact with other rabbits from outside your home.
- Adopt a ‘no shoes’ policy in your home.
- Trim your rabbit’s nails and groom them at home.
- Use effective disinfectants.
- Know your sources of hay and feed and whether they were grown in outbreak areas.
- Do not feed plants, grasses, or tree branches foraged from outside.
- Use monthly flea treatments (e.g., Revolution).
- Keep cats indoors.
- Keep dogs on-leash outside, so they don’t directly interact with wild rabbits (alive or deceased). Consider having your dog wear booties outside, or washing their paws when coming inside. Designate separate areas in your home for your dog and block dog access to areas where your rabbits live or exercise.
- Minimize insects such as mosquitos and flies.
• Quarantine any new rabbits for at least 14 days.
• Do NOT touch dead wild rabbits. Contact your state officials to report any suspicious cases.

As guardians who take our rabbits to the veterinarian when they’re sick and provide them with a healthy diet and a loving home, vaccination against RHDV2 when the risk is evident, in combination with biosecurity precautions, is the best way that we can protect our rabbits from RHDV.

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