

DIY Vaccinating

It's that time of the year again. The warm weather is upon us, and the ever-increasing potential risk of Rabbit Hemorrhagic Disease Virus (calicivirus) possibly lurking in our environment. Once exposed to this introduced, highly contagious virus, there is no treatment or cure available. The incubation period from contact to death, is generally between two – five days. Some of the symptoms, which are often unnoticed by owners, are lack of appetite, lethargy, high temperature, rapid breathing and convulsions before death. Consequently, the most effective way of preventing the disease is by vaccinating our rabbits.



However before you even contemplate DIY vaccinating, ask yourself:

Have you injected a rabbit before?

If not, would you feel comfortable or queasy in doing so?

If you are in any doubt, stop now. Ask to be shown how to correctly administer the vaccine by a vet who's willing to show you. Alternatively, find a local mobile vet to vaccinate for a call out fee if you provide the vaccine. Then again, you may be able to source an experienced local breeder who is prepared to instruct and/or demonstrate the process. Regardless of this article, there is no better teacher than a live demonstration!

Step by step guide

1. Read the manufacturer's instructions and information leaflet, which is included with the vaccine. Refrigerate the vaccine at the recommended 2 to 8°C temperature. Do not freeze and keep the vial protected from light exposure by leaving it in the packaging box. Correct storage of the vaccine is imperative; otherwise, incorrect handling may render the vaccine unusable or ineffective. Use the vaccine before use by date printed on the packaging. If a vial is partly used, insert a needle in the rubber section in a previously made hole. Return to storing in the fridge and the remainder should be used within two weeks.
2. Since the vaccine may cause a rise in rabbit's body temperature choose low humidity, cool/mild weather for vaccination day. Suggested temperature: below 26°
3. Prepare your vaccination kit: Vaccine vial. Needles (a small gauge single use diabetic needle is best as it's very fine and doesn't make much of a hole in the skin). For speedier drawing of vaccine, a .25 gauge x 5/8"/16mm needle can be used, change the needle to a finer gauge to inject. Alcohol swabs to sterilize the injection site (helps visibility by exposing the skin from fur). Also recommended (LK) is Solarcain spray as a numbing and antiseptic agent on the injection site (available through chemists). One needle per rabbit is advisable (would you use a secondhand blunt needle on yourself?). Depending on your choice of injection site, either a wrap/towel for rabbits that struggle on their back, or if on your lap a folded towel for buns comfort and sure footing. Gloves, if you feel the need. A chair (for you) and a side table for setting up your vaccination kit to have at hand. A sharps container, which can be purchased from your local chemist for



a minimal amount and includes approximately 10 x 1ml syringes. Finally, a paper towel (or something appropriately clean) to place the syringe/s and needle/s on.

4. Twelve weeks is the usual recommended age for a rabbit's first vaccination. However, current advice is to give 0.2ml to kits as early as six weeks of age (since they've been known to contract the virus much earlier than previously informed) and then a full dose again at 12 weeks. *"Young rabbits over 6 weeks of age are quite susceptible to the disease, irrespective of whether their mother was vaccinated or not. They will remain susceptible until they are vaccinated themselves"* – Mark White. Remembering no matter the size of the rabbit – a full 1ml dose is required, regardless, after 12 weeks of age. Half dosing a rabbit with vaccine is comparable to giving yourself a half dose of antibiotics – it won't offer protection!
5. Before vaccinating, it is important to check whether each rabbit is in excellent healthy condition. If the answer is yes then you are ready to proceed.
6. Collect your rabbit in a calm manner, walking slowly (securely in your arms or in a carry cage) so as not to upset and instigate skittishness. Place him or her on your lap, select the vaccination site and swab with the alcohol wipe or spray. There are several subcutaneous (under skin) injection site options to choose from. One is in the loose skin of the upper neck position with the rabbit facing you and injecting towards the back (CC's preferred method). Similar at the neck but injecting towards the head with the rabbit facing the opposite direction, or if you find it easier the rabbit sits side on. The rump area – as long as the skin is sufficiently loose rather than taut. And the inside of a back leg, (GH's favoured position) where there's plenty of 'flesh' to be had, so to speak. If you use the inside, rear leg, roll the rabbit on its back and ensure it's relaxed.
7. For medium to large rabbits, one single injection is easiest. With smaller breeds, the injection may be split between two sites, i.e. each hind leg.
8. Shake the bottle well to affect a uniformly even suspension. Remove the vial's metal tag, tip the bottle upside down, insert the needle in the rubber section and draw up the required dose, plus a fraction over the mark to compensate for releasing air. Remove the needle, hold syringe upright then tap the side to encourage air bubbles to rise to the top. This action consists of flicking your thumb and middle finger – as we see doctors do on TV. 😊 Press the plunger gently until you notice the air bubbles have released as well as a few drops of vaccine, then double check if you still have the correct dose.
9. Lift the skin to make a triangle (or otherwise described as making a 'tent') though not too high or tight, otherwise the needle may pierce through to the other side. 😊 Aim needle horizontally in the centre of the triangle in a slight upward angle to make sure you don't hit muscle. Slide the needle under the skin (as far as to at least half the length of the needle) and inject by slowly compressing the plunger. Count to ten and then slowly remove the needle so there's less chance of any vaccine being drawn back to the top of the skin and causing a reaction. If you have difficulty inserting a needle, discard it, as it is probably blunt or an inappropriate size/gauge.
10. To prevent site reactions: thoroughly massage the area well to disperse the thick serum. You may be able to feel a small lump, rub over it in a circular, spiraling outward fashion until you can't feel it anymore – and then some more for added measure. Over the next few days keep an eye on the injection site and your rabbit's demeanor whether active and eating or not. Site reactions consist of anything from fur loss to scabs and



ulcerations. These are often from poorly injected vaccinations, insufficient massages or simply individual reactions in rabbits.

11. Dispose of needle and syringe in an approved manner such as in a sharps container or something similar. Do not leave it lying around for reuse, or dump it in your wheelie bin. Your local council can advise on preferred disposal methods if in doubt.
12. It takes between three to ten days after vaccination for rabbits to acquire immunity. Annual booster shots are recommended to offer continuous protection. Immunity to RHDV is believed to be reliable for 10-11 months in a correctly vaccinated 12-week-old rabbit. Given that there is potentially an unprotected time gap, this may explain for losses of those presumed as being 'fully vaccinated'.
13. Keep a written and/or electronic record of the date of each vaccinated rabbit. Mark your calendar for 10 months time, and ensure you order vaccine in time for the next year.

Please remember: if you lack confidence to DIY vaccinate your rabbits then please put them in the capable hands of your vet.

Photos to illustrate the inside leg method





Back of the neck method – with the help of an assistant



Exposing the injection site



Making a 'tent' by lifting the skin



Thoroughly massage the area!

Disclaimer: DIY vaccination was a collaborated effort by rabbit breeders, Genevieve Hughes and Christine Carter. This article should not be a substitute for the highly qualified, expertise of a veterinarian. The authors also do not take responsibility for any adverse consequences resulting from human error or otherwise.

Photos taken by Genevieve Hughes

References: GH – Genevieve Hughes, CC – Christine Carter, LK – Leonie Kelly

Christine's revised suggestions

- 'diabetic' needles draw and release the serum too slowly and bent at insertion – making the job unnecessarily difficult.
- a vet recommended BD Precision Glide needle, 20G 1 TW (0.9mm x 25mm).
- various breeders have found the back of the leg was not an easy position or suitable for rabbits unwilling to lie on their backs.
- when a breeder vaccinated thirty-eight Netherland Dwarf rabbits, some had very tight skin at the back of their neck, which made it too difficult to provide an effective 'tent'. With a bit of improvising the problem was solved by finding looser skin at the side of rabbit's hip/upper rump area. Works a treat! (None in this rabbitry went off their food or experienced any side effects, bar one that had a small scab).
- ALDI (discount supermarket) have a spray disinfectant called 'Oust', (also kills 99.99% of germs) has a nicer, milder odour and cost less than Glen 20.

Article was made available from: <http://www.petrabbitworld.com/>

Christine Carter
Bonreiki Lop Stud (Canberra, ACT)
Author of 'The Wonderful World of Pet Rabbits'