Rabbit Hemorrhagic Disease Virus – Strain 2
Webinar Viewer Questions
(24 June 2020)

Rabbit hemorrhagic disease virus strain 2 (RHDV2) is an emergent disease in the United States. New information becomes available to the veterinary community and rabbit owners daily. Rabbit owners and veterinary professionals should be aware that information about the availability and efficacy of products is ever changing and should be researched before being used.

The following questions were posed by participants in the June 11 BOAH-hosted webinar about RHDV2. Information provided in this FAQ sheet is in line with current data at the time of publication.

Are any species other than rabbits known to contract or harbor RHDV2?
Wild and domestic species of rabbits are susceptible to infection by the calicivirus known to cause RHDV2. This virus does NOT affect other species of animals or humans. Dogs, cats, wild animals, and insects cannot contract the disease, but can transport the virus effectively. If a carnivore consumes an infected carcass, the virus can move through the gastrointestinal tract and remain infective in their feces.

How long is the quarantine period?
All new additions or animals returning to the colony should be quarantined from the main colony for a period of 30 days to 60 days.

Indiana does not currently have any confirmed cases of RHDV2. In those states with confirmed cases of RHDV2 (currently: AZ, NM, CO, CA, NV, TX) affected premises may be quarantined for an average period of 30 days to 120 days. The length of the quarantine period depends on the individual facility, the intended use of their rabbits, the level of biosecurity, and identified risk factors. Each premises with a positive diagnosis will be evaluated on a case-by-case basis. In certain situations, the quarantine period could exceed 120 days.

Will Indiana impose a certificate of veterinary inspection (CVI or “health paper”) requirement to attend shows or exhibitions like other states require?
At this time, Indiana does not have plans to impose a CVI requirement for rabbits entering the state. Managers of individual shows and exhibitions may require a certificate of veterinary inspection (CVI) for participation in their events.

What do you advise for people who work with lab rabbits who have exposure to pet rabbits at home or exhibitions?
We recommend that these individuals do not wear the same clothing or shoes to be around or handle different groups of rabbits. A person should change clothing before handling a new group of rabbits or wear protective outerwear which can be thoroughly disinfected or
discarded between groups of animals. Shoes should have all visible organic debris removed, followed by appropriate disinfection after exposure to each group of animals. BOAH advises thorough handwashing between groups of animals or use of gloves which can be discarded. Some individuals may choose to shower when returning home from work and before coming into contact with their own rabbits.

**Is it recommended or safe for 4-Hers to show rabbits this year?**

This is a decision that must be made by each individual who exhibits rabbits. We suggest that owners consider each show carefully based on the level of biosecurity that will be enforced and the participants who will be present at the show. Also consider the value of the animals and level of biosecurity at home when making this decision.

Indiana has not had a confirmed diagnosis of RHDV2, but the disease is very easily spread by vectors. Individuals and rabbits moving into and out of an affected state could possibly spread the virus after contact.

**What are good sanitation practices at shows?**

- Avoid handling rabbits that do not belong to you. IF you must handle rabbits belonging to someone else, we strongly recommend wearing disposable gloves and thoroughly washing hands before touching your own rabbits and equipment.
- Do NOT share equipment, supplies, feed, hay or water with other exhibitors.
- Ensure appropriate distancing / spacing between animals at the show.
- Disinfect surfaces before allowing your rabbits to have contact. Consider using your own carpet square when placing rabbits on common surfaces and discard the carpet following the show.
- Clean and sanitize hands frequently, especially after having contact with shared surfaces (gates, restrooms, concession stands, etc.).
- Wear different clothes and shoes at shows than what is worn at home. After returning from a show, change clothing and footwear before having contact with your own rabbits and their environment.

**Can tables and coops be disinfected between rabbits at a show?**

Non-porous surfaces can—and should—be cleaned and disinfected between rabbits at a show. Use products which are known to be effective against this virus. Be sure to maintain adequate contact time with the surface for proper disinfection.

**What disinfectant has the shortest contact time for use at shows on coops and surfaces?**

Information about RHDV2 is constantly changing. Rabbit owners and show personnel must research each product and the appropriate contact time before relying on it as a disinfectant product. Currently accepted products include 10% bleach solution, 1% Virkon solution or accelerated hydrogen peroxide products. These products all currently recommend a contact time of 10 minutes for proper disinfection.
What is a good product for wood, metal or carpets?
Wood is a porous surface and as such cannot be effectively disinfected. Non-porous surfaces (including metal and plastic) can be disinfected using 10% bleach solution, 1% Virkon solution or accelerated hydrogen peroxide products. Cleaning is an important first step; organic material such as hair or feces cannot be disinfected. Carpets may be difficult to disinfect fully, but the material may be saturated with a disinfectant. Allow the product to dry fully before allowing contact with animals. Owners should consider the risk to their rabbits when attempting to disinfect carpeted areas.

Will vaccine administration cause shedding of the virus?
The RHDV vaccine is a killed vaccine and will not cause the disease. Rabbits will not shed live virus after vaccination.

Is hand sanitizer use between rabbits sufficient to prevent spread of disease?
Information surrounding the efficacy of cleaning and disinfecting products is constantly evolving. Questions have been raised about the efficacy of hand sanitizer to deactivate the virus. Rabbit owners, exhibitors and those handling rabbits or rabbit products should consider the use of disposable gloves when handling animals that belong to someone else. The best practice is to wash your hands thoroughly between groups of animals. Hand sanitizer may help limit the spread of the virus when used with other preventive actions.

Is Oxine AH effective against this type of virus for cleaning and disinfection?
Information about RHDV2 is constantly changing. Rabbit owners and show personnel need to research each product and the appropriate contact time before relying on it as a disinfectant product. Currently, the information for this product does not state that it is effective in the deactivation of the virus that causes RHDV2.

Are sanitizing foggers effective for use when disinfecting to deactivate this virus?
Information about RHDV2 is constantly changing. It is essential that rabbit owners and show personnel research each product and the appropriate contact time before relying on it as a disinfectant product.

Do you recommend a type of water, specifically tap or bottled water?
At exhibitions and shows, we recommend rabbit owners bring water from home to meet the needs of the animals. This will reduce the animals’ exposure to shared surfaces. In affected areas of the United States, we recommend that animals drink only bottle water or municipal water sources, as surface water can be contaminated by the virus.

Do whole, frozen purchased rabbits for feeding to carnivores present a risk in a zoo setting?
The virus is capable of remaining infective through the freeze-thaw cycle. We recommend that the carcasses of infected animals be disposed of in a proper manner and not be consumed by humans or animals. Zoos should research the source of their purchased meat ensure measures are taken to avoid the use of infected rabbits.
Is there a way to clean fresh garden vegetables (kale) to be safe for feeding?
Because the virus has a high survivability in the environment, we do not recommend that vegetables originating from affected areas be fed to rabbits. Currently, we do not have any confirmed positive cases in Indiana; however, rabbit owners should evaluate the risk of feeding garden vegetables to their rabbits and make decisions accordingly. We do not recommend use of disinfectant products on items that are intended for consumption.

What is the risk of using manure for compost since the virus is capable of surviving and remaining infective in fecal material? Should people avoid using this in their gardens?
The virus is capable of surviving and remaining infective in fecal material and the soil, for these reasons rabbit manure should not be used for compost if produce is intended to be fed to rabbits OR if biosecurity practices do not have adequate insect and vector control. The virus does not pose a risk to human health.

Do petting zoos present risk? Should sanitizing or washing hands be required?
All domestic rabbits of European descent are susceptible to infection by this RHDV2. For this reason, anyone who owns rabbits should be aware of the methods of viral transmission and take appropriate biosecurity measures to prevent the spread of infection to their rabbits. Petting zoos may choose to require individuals to wash their hands prior to handling the rabbits OR they may choose to have visual-only (no-touch) displays until a vaccine is made available to all parts of the United States.

Would BOAH be involved in vaccine use once a vaccine is available in Indiana?
If a positive diagnosis of RHDV2 is made in Indiana before a licensed, domestic product is available, the Board of Animal Health would be involved in the application and approval process to import the vaccine from Europe. Once a licensed product is made available in the United States, BOAH does not need to be involved in the purchase and/or administration of the vaccine.

Does feline calicivirus serve as a model for rabbit calicivirus?
As disinfectant manufacturers begin to evaluate the efficacy of their products against this virus, they may extrapolate data from feline calicivirus trials.