1. What is Rabbit Hemorrhagic Disease?
Rabbit Hemorrhagic Disease (RHD) is a highly contagious, foreign animal disease affecting rabbits. There are many strains of the RHD virus, however it is the rare Type 2 (RHDV2) strain affecting rabbits in the U.S.
RHDV2 is a fatal, viral disease that affects both domestic and wild rabbits, including hares, jackrabbits and cottontails. It does not affect human health or other animal species.

2. Where did the virus come from?
The RHD virus was first detected in China in the winter of 1983-84. Outbreaks occur periodically throughout the world and are endemic in some countries.
The RHDV2 strain emerged in Europe in 2010, and has since spread widely among domesticated and wild rabbits there. The RHDV2 strain was first discovered in North America on Vancouver Island in British Columbia in 2018-2019. Subsequently, RHDV2 was identified in Washington State. In 2020, the disease has been discovered in Arizona, California, Colorado, Nevada, New Mexico, and Texas.

3. How is RHDV2 transmitted?
Rabbit Hemorrhagic Disease primarily spreads between rabbits through ingestion and inhalation of the virus. The virus is present in urine and feces from infected rabbits, so contaminated bedding, food or forage can be a source of infection. The virus can also be moved from place to place by flies, predators, scavengers, wild rabbits, vehicle tires, clothing, footwear, equipment, and wind and water movement.

4. How many cases of RHDV2 have been confirmed in Texas?
The first case of RHDV2 in Texas was reported in domestic rabbits on a Hockley County premises on April 10, 2020. Since that time, RHDV2 has also been confirmed in wild rabbits. For the full list of cases in Texas, visit the TAHC website at https://www.tahc.texas.gov/animal_health/rabbits/.

5. What if I suspect RHDV2 in my rabbits?
If you observe high fever, poor appetite, depression, inactivity, bloody discharges, and/or sudden death in most or all of your rabbits call your private veterinarian right away. Only laboratory tests can confirm RHDV2 for sure.

6. Do rabbits exposed or infected with RHDV2 become carriers of the virus for life?
Exposure to a virus does not mean a rabbit is infected. Some rabbits will just be exposed; others will be exposed and become infected and either die or recover. Surviving rabbits will develop antibodies to the virus and become resistant to related calicivirus strains for an unknown amount of time. Also, surviving rabbits can continue to shed RHDV for at least a month after they recover, but it is unknown if they can become carriers for life.

7. How long can RHDV2 persist in the environment?
The virus can survive for long periods outside the host. Environmental temperature and protection by organic material are important factors in the survival of the virus. Studies have shown the virus to be detected on objects or materials at room temperature for up to 105 days, and found in decaying tissue of infected carcasses for up to 90 days. The virus has been found to persist in chilled or frozen rabbit meat.

8. Does the TAHC depopulate domestic rabbits that have had confirmed cases of RHDV2?
The TAHC will not depopulate domestic, feral, or wild rabbit colonies where rabbits have been exposed and recovered from RHDV2.

9. What should I do if I find a dead rabbit?
If an owned rabbit dies, contact your veterinarian. If you find a dead feral or wild rabbit, contact the local TPWD wildlife biologist to determine whether the carcass should be submitted for testing.
Always wear disposable gloves when handling a dead animal; dispose of them when done and wash your hands. Rabbits that do not qualify for testing should be double bagged and disposed of by deep burial or landfill.

10. Can humans, dogs or other animals contract Rabbit Hemorrhagic Disease?
RHD is not a zoonotic disease and there is no public health concern. RHD is specific to rabbits. Dogs, cats and other pets cannot contract the disease, but may act as carriers just like vehicles, shoes, and equipment can.
11. Is a vaccine available?

There is no licensed vaccine for RHDV2 in the United States. However, two commercial RHDV2 vaccines manufactured in Europe are permitted for emergency use by Texas veterinarians. The TAHC has been working with federal permit authorities and has approved private veterinarians to import the vaccine from overseas.

If you are interested in vaccinating your rabbits, contact your private veterinarian for availability and requirements. It is important to note that lengthy transportation of rabbits for vaccination is discouraged so as to mitigate the risk of virus contact or spread.

12. What can I do to protect my rabbits from diseases like RHDV2?

- House rabbits indoors if possible.
- Do not allow visitors who also have rabbits.
- Do not handle others’ rabbits.
- Do not allow other pet or wild rabbits to come in contact with your rabbits or home.
- Do not introduce new rabbits from unknown or untrusted sources.
- Wash hands before and after handling or caring for rabbits.
- Control flies, rodents, cats, dogs, birds, etc. as they can physically move the virus.
- Do not collect outdoor forage as it may be contaminated.
- Remove brush and debris, and properly dispose of bedding.
- Disinfect feeders and equipment daily with 10% bleach mixed with water or other approved products.
- Sterilize cages between use.


13. How should I clean and disinfect cages, etc.?

Remove all visible debris from items to be disinfected (cages, feeding equipment, waterers, etc.). Items made of wood are best discarded or burned. First you must clean by washing items thoroughly with soap and water; rinse well and let dry. Then to disinfect, you should submerge or saturate with spray or 10% household bleach solution (1 cup bleach to 1 gallon of water). Allow 10 minutes of contact, then rinse and let dry before allowing animal contact.

The RHD calicivirus is inactivated by 10 minutes of exposure to:

- Household bleach (sodium hypochlorite) at 1:10 dilution
- 1% Virkon-S (by DuPont)

14. Should I consider not bringing my rabbits to events or meetings due to biosecurity concerns?

Rabbit events or meetings with live rabbits can contradict several biosecurity recommendations. Biosecurity practices are always a good idea, and it is recommended that meeting attendees should wash their hands and disinfect clothing and shoes before and after attending the meeting.

Rabbits co-mingled at club meetings or shows have greater risk of contracting snuffles from an infected rabbit compared to RHD. Risk of disease transmission could be reduced at club meetings by only having rabbits from one premises present per meeting.

15. What should I do about large rabbit gatherings like American Rabbit Breeders Association (ARBA) rabbit shows, 4-H rabbit shows and fairs?

It is up to each rabbit show's management to evaluate their risks and decide what parameters they would like to establish and enforce.

At this time, the TAHC does not have any restrictions for rabbits attending Texas shows and events. However, each state may require a Certificate of Veterinary Inspection. ARBA rabbit shows, 4-H rabbit shows, and fairs can determine if they choose to add additional requirements to attend an event (i.e. vaccination). It is recommended that a veterinarian inspect all rabbits prior to entry. Strict biosecurity should be observed.

Resources

- TAHC Rabbit Health Webpage https://www.tahc.texas.gov/animal_health/rabbits/
- Center for Food Security & Public Health Factsheet http://www.cfsph.iastate.edu/Factsheets/pdfs/rabbit_hemorrhagic_disease.pdf