

RABBIT HEMORRHAGIC DISEASE VIRUS 2

Since 2019, there have been multiple outbreaks of Rabbit Hemorrhagic Disease Type 2 (RHDV2) in the United States. Several outbreaks have been resolved; two areas have ongoing outbreaks: Washington (WA) State and in the southwestern (SW) United States. In both areas with outbreaks, the disease has been confirmed in feral and/or wild rabbits. For situational awareness, click [here](#) for an interactive map – by county – of current RHDV2 detections.

To meet our World Organization for Animal Health (OIE) reporting requirements (OIE Terrestrial Code, Chapter 1.1, Article 1.1.2 and 1.1.3¹), APHIS completed the initial notification to OIE and has subsequently provided weekly reports of the evolution of the event. Per OIE, weekly reports are required until the eradication of the event or until such a time as it has become sufficiently stable; at such a time, a country can choose to cease weekly reporting. Occurrences of RHDV2 in States/areas not previously affected have been reported to the OIE as a weekly update.

(The?) Rabbit Hemorrhagic Disease virus freedom definition for the OIE (Article 13.2.2)² states that a country must be free from the disease for at least a year, among other requirements (no vaccination in the last 12 months, and virological or serological surveillance in domestic and wild rabbits confirms absence of disease), before it can be considered free. The time frame could be reduced to 6 months after the last case, if disinfection procedures are completed as part of a stamping out policy and serological survey has confirmed the disease has not occurred in wild rabbits.

Given the widespread nature of the RHDV2, including wild/feral rabbits and the criteria for declaring freedom and eradicating the disease, APHIS is considering that the RHDV2 situation has become ‘stable’ in terms of the OIE reporting criteria; therefore, the United States intends to submit future information in our six-month and annual reports. Epidemiologically, this is equivalent to an endemic situation in some States; however, the OIE Code itself does not recognize the term endemic.

Testing Strategies

APHIS continues to support State-level responses for RHDV2 detection, mitigation, and disease control. APHIS will continue to work with State Departments of Agriculture and Wildlife Agencies in affected and surrounding States. The APHIS National Veterinary Services Laboratories’ (NVSL) Foreign Animal Disease Diagnostic Laboratory (FADDL) must continue to confirm the first detections of RHDV2 in new States or in new rabbit species.

In States that have had confirmed detections in domestic and feral rabbits, the State Animal Health Official can approve a laboratory to conduct RHD testing in their State, by notification to NVSL FADDL. APHIS will support the approved laboratories by providing testing standard operating procedures and technical support. There will also be two designated wildlife

¹ https://www.oie.int/fileadmin/Home/eng/Health_standards/tahc/current/chapitre_notification.pdf

² https://www.oie.int/index.php?id=169&L=0&htmfile=chapitre_rabbit_haemorrhagic_disease.htm

RABBIT HEMORRHAGIC DISEASE VIRUS 2

laboratories available for testing- USGS-National Wildlife Health Center and the Southeastern Cooperative Wildlife Disease Study (SCWDS).

Individual laboratories are responsible for quality control; however, NVSL will develop and provide an optional proficiency panel in the next 6 months. Laboratories demonstrating proficiency through this process will be added to the Approved Laboratories list on the NVSL website. NVSL-FADDL is also available to perform whole genome sequencing on positive RHDV2 isolates, as requested. Charges for testing by State or wildlife laboratories are the responsibility of the submitter. USDA-APHIS does not control any costs set by State or wildlife laboratories.

Domestic Rabbits

- In States that have not had cases of RHDV2 in domestic rabbits and RHDV2 is suspected, a foreign animal disease (FAD) investigation must be initiated and liver samples sent to FADDL to perform confirmatory testing. All samples sent to NVSL-FADDL must be assigned an FAD number from the State of origin prior to shipment.
- Subsequent RHDV2 testing in domestic rabbits can occur in laboratories that have been approved by the State Animal Health Official to test for RHDV2 from samples originating only from within their own State.
- If a domestic rabbit tests RHDV2-negative in a laboratory that has been approved by the State Animal Health Official and clinical signs are consistent for RHDV, samples must be sent to FADDL to perform testing for RHDVa and to repeat RHDV2 testing.
- All positive results for RHDV2 in domestic rabbits shall be collected and entered into the Emergency Management Response System (EMRS) by the appropriate APHIS or State employee in the submitting State.

Feral/Wild Rabbits

In States that have not had cases of RHDV2 in wild rabbits and RHDV2 is suspected, the sample can be submitted to:

- 1) FADDL for testing as an as a FAD (assigned a FAD number); or
- 2) One of two wildlife-specific diagnostic laboratories - USGS-National Wildlife Health Center (NWHC) or the Southeastern Cooperative Wildlife Disease Study (SCWDS).
- Subsequent RHDV2 testing in wild rabbits can occur in laboratories that have been approved by the State Animal Health Official to test for RHDV2 from samples originating only from within their own State or to one of two wildlife-specific diagnostic laboratories: NWHC or SCWDS.
- Follow-up, confirmatory testing at FADDL on positive wild rabbit samples needs to occur in the following scenarios:
 - RHDV2 positive results at the NWHC or SCWDS labs for a State that has previously not reported a positive wild rabbit; or
 - RHDV2 positive in a new rabbit species; or
 - By special request in other extenuating circumstance (e.g. endangered species, zoo specimen, etc.).

RABBIT HEMORRHAGIC DISEASE VIRUS 2

- No follow up testing at FADDL is required for wild rabbits that test negative in a laboratory that has been approved by the State Animal Health Official or at the wildlife specific diagnostic laboratories.
- APHIS Wildlife Services will remain the point of contact to coordinate wildlife sampling and results. All positive results for RHDV2 in wild rabbit species shall be collected and entered into EMRS by the appropriate APHIS or State personnel in the submitting State.

Vaccination

USDA remains eager to work with any company on vaccine licensure for RHDV2. Without a licensed vaccine, APHIS-Center for Veterinary Biologics will continue to process permit requests for special emergency importation of the two European Union licensed vaccines. Due to the limited inventory of vaccine available from the manufacturers, permits will be for a limited amount of time and also limited to States that have diagnosed active RHDV2 infections.