I found a dead rabbit ... how do I know if it had RHDV?

By Dr Amy Iannella Photos courtesy of Dr David Peacock

Laboratory testing of a blood or liver sample can give you a definitive diagnosis, but if you don't have that available or want an idea straight away there are signs you can look for in the carcass. These aren't a guarantee but together they can give you a very strong indication.

External signs:

Position and condition – RHDV carcasses are most often found lying in the position shown below, head tipped back in a last gasp. If freshly deceased, the rabbit usually appears in very good condition, no pussy or crusty eyes.

Discharge - A small trickle of foamy blood from the nose can be present on rare occasions.

Internal signs:

Pinch up the skin of the belly just below the rib cage and use a sharp knife or scalpel to make an incision – this needs a firm slice but try not to puncture the organs inside as a cut to the stomach, or intestines particularly, make a mess!

The first thing to look for is the **liver**, a deep red organ with flattish lobes found just below the rib cage, it might be tucked behind the stomach (which looks like a pearly grey-pink sac).

The liver is the main organ attacked by RHDV and all the dead cells create a very characteristic change: rather than smooth deep glossy red it gets pale pinkish dappling called reticulation and can also become quite friable in texture (a bit like an old degrading sponge).





Left: Classic posture of RHDV carcass with chin raised.

Above: A bloody discharge may be present, but is rarely seen.



RHDV liver with characteristic pale reticulations.

The next indicator, which is a little less reliable but can add to your evidence is the **spleen**. It looks a bit like a burgundy-coloured slug attached to the side of the stomach. An RHDV spleen is often quite dark, even blackish, and enlarged compared to a non-RHDV rabbit, which is usually about 5cm long and 1cm wide.



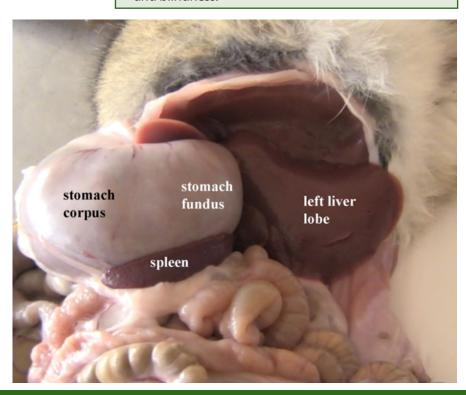
Source: R Dimitrov (2012) 'Comparative Ultrasonographic, Anatomotopographic and Macromorphometric Study of the Spleen and Pancreas in Rabbit (Oryctolagus cuniculus)'.
Not Sci Biol, 4(3):14-20



RHDV spleen - darker and swollen.

Rabbit Bio-controls

- Calicivirus: Calicivirus (RHDV) causes a rapidly fatal disease (Rabbit Haemorrhagic Disease) in European rabbits.
- Myxomatosis: Myxomavirus (MYXV) causes severe disease with moderate mortality in European rabbits. It can affect their skin, eyes, lung and liver, causing redness or ulcers, discharges from the nose and eyes, and blindness.



More information about Rabbit-Free Australia

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