Ebola for Bunnies: Rabbit Hemorrhagic Disease Strikes Washington State

By Alex Berezow — July 25, 2019

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Consider African Swine Fever[^2], a fatal hemorrhagic fever of pigs. Though the virus does not infect people, it still has the potential to devastate entire communities. Many who live in rural areas around the globe rely on livestock, such as pigs, for their livelihoods. With one strain causing a fatality rate at or near 100% -- and with at least one million pigs having died or been culled (as of November 2018) -- African Swine Fever has the ability to wreak havoc, not just for these small towns and villages but for the global pork industry.

Now, a new virus is sweeping the globe. Though it targets rabbits and therefore does not pose nearly the same economic threat as that posed by African Swine Fever, it nonetheless reveals how frightening new plagues can rapidly spread across our highly interconnected planet.
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Earlier this week, it was reported that Rabbit Hemorrhagic Disease Virus 2 (RHDV2) was detected in a domesticated rabbit in the San Juan Islands, which are located north of Puget Sound in Washington State. Reports suggest that it is almost invariably lethal.

According to an article [3] by Carlos Rouco and colleagues in the journal *Transboundary and Emerging Diseases*, RHDV2 was first detected in France in May 2010. It then spread like wildfire. Within one year, the virus was in southern Europe, and then in northern Europe shortly thereafter. Within five years, RHDV2 had spread to Africa and Australia. By 2016, the virus was in North America, and by 2018, in the United States and Israel. The authors conclude that a virus could only spread this quickly among rabbits if it was facilitated by humans, perhaps via transport of farmed rabbits.

Not all rabbits are affected by the virus. RHDV2 infects the European rabbit (*Oryctolagus cuniculus*), but this species has been introduced in places all over the world, such as the San Juan Islands. (It's considered an invasive species [4].) It is thought that hares, jackrabbits, and eastern cottontail rabbits [5] may also be vulnerable to RHDV2.

A Lesson About Bioterrorism

It's quite unlikely that a bioterrorist would seek to kill off a bunch of bunny rabbits, but he might want to inflict damage upon a nation's food supply, perhaps by killing cows, pigs, or chickens. The lessons from African Swine Fever and Rabbit Hemorrhagic Fever should not be taken lightly.

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