

## The Tilapia Lake Virus – a new threat to food security

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Dr. Paul Cadogan

In recent years, infectious diseases that directly impact us humans have been cropping up one after another. We have had Chikungunya, Ebola, Middle-East Respiratory Syndrome (MERS), Enterovirus D68 in the USA, a new version of H1N1 Influenza-A, Zika Virus and most recently an outbreak of Yellow Fever in southern Africa. However it is not just human illnesses we have to worry about when it comes to emerging diseases that could have a major impact on our well-being.



Enter a new virus that affects *Tilapia*, the fish that is central to fish farming around the world in an industry worth US\$7.5 billion, providing a major food source as well as livelihood for people. Scientists have recently identified a previously unknown virus that has caused major die-offs of *Tilapia* on farms in widely separated countries – Israel in the

Middle East and Ecuador and Colombia in South America. It has been called the *Tilapia* Lake Virus or TiLV.

TiLV seems to affect multiple systems in the fish, with some showing swelling of the brain and others showing liver disease. From the scientific studies done, it seems to bear a close relationship to the influenza viruses. Efforts are underway to develop diagnostic tests, control measures and a vaccine.



TiLV does pose a threat to the Caribbean region and Dr. Carla Phillips, aquatic and marine specialist at the UWI School of Veterinary Medicine in Trinidad, is very concerned. “We should therefore be aware and vigilant as a region and promptly report any clinical signs - (eye)

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abnormalities, skin lesions, ulcers/erosions, unusual spikes in mortality - to the Veterinary Services and, if available, the Aquaculture Extension service providers in our islands.”

TiLV is just one of the disease threats to animal health that, while it does not affect humans directly, can have a huge economic and food security impact – a major One Health issue. We know our veterinary services are paying close attention and the regulation of imports is strictly controlled.

