



# RANAVIRUS

Ranavirus is a genus of viruses and many strains (species) are known. Frog virus 3 (FV3) infects amphibians, Epizootic haematopoietic necrosis virus (EHNV) infects fish. It has worldwide distribution; it may have always been present in North America, although prevalence of infections have increased since the mid-80s). Environmental sampling in 2013-2014 detected Ranavirus in 12 of 21 sites in Delaware.

Ranavirus infects species of fish, amphibians, and reptiles and is transmitted by direct contact. It is usually lethal to larvae and young; infected adults suffer reduced overall health and are more susceptible to other diseases and predation. Outbreaks can result in 90% mortality of a population. In Delaware, the woodfrog (*Lithobates sylvaticus*) and eastern box turtle (*Terrapene carolina*) are most susceptible. Signs of an infected individuals includes swelling of the legs and body, redness of the legs and belly, lethargy, emaciation, swollen eyes, and/or wheezing. An outbreak includes observations of 10 or more dead or dying amphibians or 2 or more freshly dead reptiles.

No treatment exists for ranaviral infections and ranavirus is resistant to drying, freezing, and high temperatures. Decontamination of boots, field equipment, and gear with 10% bleach solution or viricides can reduce the risk of spread. Also, wildlife should not be transported and released in areas where they did not originate. If a die-off is observed you should contact Delaware Fish and Wildlife Herpetologist Nate Nazdrowicz [Nathan.nazdrowicz@delaware.gov](mailto:Nathan.nazdrowicz@delaware.gov).



## QUICK FACTS

- Infects amphibians, reptiles, and fish
- Can cause mass die-offs
- Frog virus 3 is the type specimen for Ranavirus genus
- Discovered in 1965

