

# Viral and Fungal Diseases Affect Amphibians

## World-Wide

Amphibians are the most threatened of all vertebrates. According to the International Union for the Conservation of Nature (IUCN) 41% of all amphibians already face extinction. So outbreaks of deadly strains of viral and fungal diseases make their future look quite bleak.

Outbreaks of a virus called Ranavirus, which affects cold blooded animals such as amphibians and fish, were first recorded in the 1980s. The virus is responsible for declines in amphibian population in the United Kingdom, the United States of America and Canada.

Outbreaks have also been detected in Europe and Australia.

In 2014, suspected new strains of Ranavirus were thought to be responsible for deadly outbreaks of disease that killed frogs, toads and newt species in Northern Spain.

Widespread mortality of amphibians has also been caused by a type of chytrid fungus. Outbreaks of chytridiomycosis (disease caused by chytrid fungus) were first noticed in the early 1990s. A new strain called *Batrachochytrium dendrobatidis* (Bd) was detected in 1996.

Since then Bd has spread to all continents with populations of amphibians.

Chytridiomycosis can be treated with application of antifungal cream. However this is not a practical treatment for the wild population.

Chytridiomycosis is thought to be responsible for the rapid decline of some amphibian populations. This includes the probable extinction of the Northern species of Darwin's Frog (*Rhinoderma rufum*) as well as the rapid decline of the Southern species of Darwin's Frog (*Rhinoderma darwinii*).