Reptiles and amphibians that are kept as pets may vector (transfer) pathogens to native, wild conspecifics (members of the same species). The effects of pathogen-spillover may be dramatic, since native species are often highly susceptible to an infection with non-native pathogens.



The chytrid fungi, *Batrachochytrium dendrobatidis* (Bd) and B. salamandrivorans (Bsal), have been able to spread globally due to the amphibian trade. These fungi threaten the persistence of populations and species all over the world. For instance, Bsal, which originates from Asia, has caused the near extinction of the fire salamander in the Netherlands. A high standard of biosecurity is recommended to prevent pathogen spillover.

'Snake fungal disease' is a skin disease caused by a fungus that affects these reptiles. Various fungi (CANV-complex) may cause a lethal skink disease in lizards. In the USA, SFD has caused snake populations to decline. It has also been detected in wild snake populations in Europe. Both fungi (CANV-complex and SFD) are known to be present in collections. The spillover of these fungi to wild populations of lizards and snakes may have devastating consequences.





Ranaviruses may affect wild and captive fish, amphibians and reptiles. An infection with ranavirus may cause mass mortality events to occur. Asymptomatic (symptom-free) infected individuals and contaminated equipment are frequent sources of pathogen transfer to naïve populations or collections. Several amphibian populations in Europe have collapsed due to ranavirus introductions.

Are you considering buying an amphibian or a reptile?

- Be well informed about the husbandry guidelines, and whether or not you can provide these for the lifetime of the animal.
- Only buy healthy-looking animals, preferably, captive-bred specimens from a reliable source.
- Ensure a quarantine period of, at least, 6 weeks (Attention! Some pathogens can be aerosolized and, hence, ideally, the quarantine terrarium should be placed in a separate room).
- Never release amphibian or reptile pets into nature, parks or garden ponds.
- Ensure that there is no contact between captive and wild amphibians and reptiles. Pets can transmit pathogens to native populations and cause disease and mortality (and vice versa).
- Ensure a high standard of biosecurity, including when disposing the content of your aquarium or terrarium.
- Report and share your experiences when confronted with a disease in your collection.

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More information: www.sossalamander.nl, www.ravon.nl, www.salamandervereniging.nl, www.lacerta.nl, www.dibevo.nl, www.bsaleurope.com, www.gifkikkerportaal.nl, www.satonederland.nl, www.snakesociety.nl, OFI.org

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