SALMONELLA in REPTILES and AMPHIBIANS: VETERINARY GUIDELINES

Veterinarians caring for reptiles and amphibians play an important role in informing clients about salmonellosis and advising them on precautions for reducing the risk of acquiring *Salmonella* infection from reptiles and amphibians.

Veterinarians should be aware of the following information and recommendations concerning reptiles, amphibians, and *Salmonella*. Any human illness of salmonellosis acquired from a pet reptile or amphibian is reportable to the state or local health department.

All reptiles and amphibians should be considered potential carriers of *Salmonella*. The organism is shed in feces of reptiles and amphibians and, if ingested by humans, may result in a potentially serious illness. Because *Salmonella* may be shed intermittently, it is not possible to use diagnostic testing to guarantee that any reptile or amphibian is “free” of *Salmonella*. Bacterial culture of fecal specimens will not detect *Salmonella* infection in all reptiles and amphibians.

Attempts to treat asymptomatic reptiles and amphibians with antibiotics to eliminate *Salmonella* from their intestinal tract have not been demonstrated to be effective. Doing so is not recommended as it may increase the risk of emergence of antimicrobial-resistant *Salmonella* strains. Attempts to raise "*Salmonella*-free" reptiles have been equally unsuccessful and colonization of the intestinal tract can occur at any point in the reptile or amphibian’s lifecycle.

*Salmonella* has also been associated with rodents fed to reptiles, so those handling live or frozen prey, including frozen rodents, should use proper precautions: [https://www.cdc.gov/healthypets/pets/reptiles/feeder-rods.html](https://www.cdc.gov/healthypets/pets/reptiles/feeder-rods.html)

The following guidelines provide information for veterinarians on how to minimize risks of exposure to *Salmonella* and to help prevent development of reptile- and amphibian-associated salmonellosis in humans.

1. Veterinarians who treat reptiles should educate clients who own reptiles and amphibians about *Salmonella* and provide information on the recommended precautions for reducing the risk of transmission of *Salmonella* to humans. Prevention recommendations are available at [https://www.cdc.gov/healthypets/pets/reptiles/safe-handling.html](https://www.cdc.gov/healthypets/pets/reptiles/safe-handling.html)

2. All veterinarians, staff, and clients who handle reptiles and amphibians should follow recommended precautions ([https://www.cdc.gov/healthypets/pets/reptiles/safe-handling.html](https://www.cdc.gov/healthypets/pets/reptiles/safe-handling.html)) for reducing the risk of transmitting *Salmonella* between these animals and humans.

3. All reptiles and amphibians should be presumed to be carrying *Salmonella* in their intestinal tract and potentially shedding it in their feces. Bacterial culture of fecal specimens from reptiles and amphibians to determine *Salmonella* infection status is discouraged. If veterinarians are called upon to assist health officials in determining the cause of salmonellosis in a person, bacterial culture of fecal samples from reptiles with which that person has had direct or indirect contact and environmental sampling are recommended.

4. It is not recommended to treat healthy reptiles and amphibians with antimicrobial agents with the intent of eliminating *Salmonella* from the intestinal tract. Clients who request treatment of healthy reptiles and amphibians for *Salmonella* should be discouraged from such treatment and cautioned about the possibility of causing the emergence of antimicrobial-resistant *Salmonella* strains that might pose a greater health risk to humans.
Healthy reptiles and amphibians can carry Salmonella and other bacteria that can make people sick. But there’s good news! You can help keep yourself healthy around your pet reptiles and amphibians.

- Always wash your hands thoroughly after handling reptiles and amphibians, and anything in the area where they live or roam such as their habitats, food, or equipment.
- Reptiles and amphibians are not recommended for children under the age of five. This includes in households or school settings. Children younger than 5 years of age, people with weak immune systems, and adults over 65 years of age should not handle or touch amphibians or reptiles or their environment because they are at a higher risk for serious illness and hospitalization from Salmonella.
- Keep your reptiles and amphibians and their equipment out of your kitchen or anywhere in your home where food is prepared, served, or consumed. Never use food-preparation areas to clean reptile and amphibian habitats or anything in their habitats. These items should be cleaned outside of your home. If you clean the habitat in the bathroom, thoroughly clean and disinfect the area right afterwards.
- Don’t cross-contaminate! You don’t have to touch a reptile or amphibian to get sick from their germs. Be aware that any reptile food such as frozen or live rodents, equipment, and materials, including the tank water, can be contaminated with Salmonella and other germs.
- Do not kiss or snuggle with reptiles and amphibians because this will increase your risk of getting sick.

Follow these safe handling steps and enjoy your pets!

This post was developed by the Association of Reptilian and Amphibian Veterinarians in collaboration with the Centers for Disease Control and Prevention and is intended for informational purposes only.

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