



## So You Think You Want a Pet Reptile or Amphibian?

You've been begging your parents for months to buy you a pet reptile or amphibian. To show off how much you know about these animals, you tell your parents all about how to take care of one. You explain to your mom that a young milk snake should eat two feeder rodents twice a week. You remember that your dad loved to play Pacman as a kid, so you tell him that the large Pacman frog was named after the classic video game. Sounding like an expert herpetologist—a person who studies reptiles and amphibians—you add that the Pacman frog needs to live by itself because it may eat any cage mates.

But one thing you may not have thought of is *Salmonella*, a group of bacteria that can cause a serious, even fatal, disease in people. Pet reptiles, pet amphibians, and feeder rodents can be sources of *Salmonella* infection for people.

### **What are feeder rodents?**

Feeder rodents are mice and rats—both frozen and live—used to feed some reptiles and amphibians, like that young milk snake and Pacman frog you want to get.

Feeder rodents go by various names, depending on their age: pinkies (1 to 5 days old), fuzzies (6 to 13 days old), hoppers (14 to 20 days old), and adults (21 days and older).

### **What's the name of the disease that *Salmonella* bacteria cause?**

Salmonellosis.

### **Where are *Salmonella* bacteria found?**

*Salmonella* bacteria can be found in the feces or droppings of many different animals, such as reptiles, amphibians, rodents, and chickens, and in the areas where these animals live and roam. (Feces and droppings are fancy words for poop.) The bacteria can also be found in the aquarium water where some animals, like turtles and water frogs, live as pets.

### **How do I get salmonellosis?**

You get salmonellosis by eating *Salmonella* bacteria. "Gross," you say. "I would never eat bacteria." But the bacteria are so small that you can't see them with your eye (you have to use a microscope) and you don't even know you're eating them.

### **What are the symptoms of salmonellosis in people?**

Symptoms of salmonellosis include fever, diarrhea (which may be bloody), nausea, vomiting, and stomach pain. Symptoms start within 12 hours to 3 days after infection. Most people recover from salmonellosis within 4 to 7 days without treatment. Children under 5 years of age, the elderly, and people with weakened immune systems (like pregnant women and people with cancer or other diseases) are at higher risk for salmonellosis and may develop more severe symptoms.

### **What should I do if I have symptoms of salmonellosis?**

If you have symptoms of salmonellosis, tell your parents. They should call your doctor. You or your parents need to tell your doctor if you have had recent contact with reptiles, amphibians, or feeder rodents.

### **How do feeder rodents, reptiles, and amphibians get *Salmonella*?**

Feeder rodents, reptiles, and amphibians can naturally carry *Salmonella* in their intestines and show no signs of illness. The animals shed the bacteria in their droppings. The droppings, in turn, contaminate the environment with *Salmonella*, including the outside of the animals' bodies and their habitats. Even if the animals have *Salmonella* on their bodies, they can appear healthy and clean. Remember—the bacteria are too small for you to see.

### **How do I become infected with *Salmonella* from feeder rodents, reptiles, or amphibians?**

Because feeder rodents, reptiles, and amphibians can have *Salmonella* on their bodies, you may become infected if you spread the bacteria from their bodies to your mouth during or after handling. For instance, you may touch your mouth while you're holding your pet reptile or amphibian, or while you're preparing some feeder rodents for it to eat, and accidentally eat the bacteria.

Because rodent, reptile, and amphibian habitats can also be contaminated with *Salmonella*, you can pick up the bacteria from bedding, basking rocks, the water where reptiles and amphibians swim and live, food and water dishes, and other objects in their enclosures.

Any object or surface used to store, thaw, and prepare feeder rodents can be contaminated with *Salmonella*, including countertops, microwave ovens, refrigerators and freezers, kitchen utensils, and glasses and bowls.

If you get *Salmonella* on your hands or clothing, be aware that you can spread the bacteria not only to yourself but also to other people, objects, or surfaces.

### **Does freezing kill *Salmonella*?**

Freezing does not kill *Salmonella*, so both frozen and live feeder rodents can carry the bacteria. Some companies may [irradiate](#) packages of frozen feeder rodents to lower the risk of *Salmonella* contamination. The labels on these packages will include the statement "treated with radiation" or "treated by irradiation" along with the international symbol for irradiation, the Radura.



### **Is salmonellosis the only disease I can get from rodents?**

No, you can get other diseases from rodents besides salmonellosis. Worldwide, rats and mice spread over 35 diseases to people. Rodents spread some diseases directly to people, through handling, bites, or contact with their droppings, urine, or saliva. Rodents spread other diseases indirectly to people, through ticks, mites, or fleas that have fed on an infected rodent and then bite a person. Be aware that feeder rodents, wild rodents, and pet rodents can all spread (transmit) diseases—directly or indirectly—to people.

- [Diseases directly transmitted by rodents](#)
- [Diseases indirectly transmitted by rodents](#)

# Be Salmonella Safe!

*Click to find out more about Salmonella Safety!*



## The **Do's** and **Don'ts** of handling frozen and live feeder rodents

- **DO** thoroughly wash your hands with soap and water (for at least 20 seconds) immediately after handling feeder rodents or touching anything in the areas where they are stored, thawed, prepared, and fed to reptiles and amphibians.
- **DO** thoroughly clean and disinfect all surfaces that come in contact with feeder rodents. You can ask your parents to help you make an effective disinfectant by adding 1 tablespoon bleach to 1 quart (4 cups) water. For a larger supply of the disinfectant solution, add ¼ cup bleach to 1 gallon (16 cups) water.

### The Difference between Cleaning and Disinfecting

**Cleaning removes germs (like bacteria)** and dirt from surfaces and objects. Cleaning works by using soap (or detergent) and water to physically remove germs and dirt. This process does not necessarily kill germs, but by removing them, cleaning lowers the number of germs and the risk of spreading infection.

**Disinfecting kills germs** on surfaces and objects. Disinfecting works by using chemicals, such as bleach, to kill germs. This process doesn't necessarily clean dirty surfaces and objects or remove germs, but by killing germs after cleaning, disinfecting can further lower the risk of spreading infection.

*Source: [How to Clean and Disinfect Schools to Help Slow the Spread of Flu](#) – Centers for Disease Control and Prevention*

- **DO** keep feeder rodents out of areas where you and your family store, prepare, serve, and consume food and drinks.
- **DON'T** thaw frozen feeder rodents in a microwave oven that you and your family use for your own food.
- **DON'T** prepare feeder rodents or feed them to your pet reptile or amphibian with kitchen utensils that you and your family use to prepare your own food. **DO** prepare feeder rodents and feed them to your pet with separate kitchen utensils used only for these purposes. **DO** clean and disinfect the utensils after each use.
- **DON'T** let children under 5 years of age, elderly people, and people with weakened immune systems handle or touch feeder rodents.

## The **Do's** and **Don'ts** of handling pet reptiles and amphibians

- After handling your pet reptile or amphibian:
  - **DO** thoroughly wash your hands with soap and water (for at least 20 seconds);
  - **DON'T** touch your mouth until you have washed your hands thoroughly.
  - **DON'T** eat or drink until you have washed your hands thoroughly.
- **DO** thoroughly clean and disinfect all surfaces that come in contact with your pet reptile or amphibian, including objects in the enclosure where it lives. Talk with your veterinarian about which disinfectant is safe to use and how often. The Association of Reptilian and Amphibian Veterinarians has a [Find a Vet Web page](#) that lists veterinarians, by state, who have experience with these animals.
- **DO** clean your pet reptile's or amphibian's habitat and its contents outside and use disposable gloves when cleaning. **DON'T** dispose of the waste water from cleaning in your kitchen sink, bathroom sink, or bathtub. **DON'T** clean the habitat and its contents near any sources of food (such as gardens or crop fields) or drinking water for people.
- **DO** flush waste water from your pet reptile or amphibian down the toilet.
- **DO** put droppings in a trash can used only for this purpose and keep the trash can out of the kitchen.
- **DON'T** put waste water or droppings down your kitchen sink, bathroom sink, or bathtub.
- **DON'T** ask your parents to buy you a pet reptile or amphibian if you have children under 5 years of age, elderly people, or people with weakened immune systems living with you.
- **DON'T** let children under 5 years of age, elderly people, and people with weakened immune systems handle or touch your pet reptile or amphibian.
- **DON'T** keep your pet reptile or amphibian in your bedroom.
- **DON'T** kiss your pet reptile or amphibian.
- **DON'T** bathe your pet reptile in your kitchen sink, bathroom sink, or bathtub. **DO** bathe your pet reptile in a small plastic tub or bin used solely for this purpose.
- **DON'T** let your pet reptile roam freely throughout your house, especially in areas where you and your family store, prepare, serve, or consume food and drinks.

Most of these tips hold true for pet rodents. Please see "[After you touch your pet rodents, rabbits, and other small animals, wash your hands so you don't get sick!](#)"

# More Information

- **Centers for Disease Control and Prevention**
  - [After you feed and handle reptiles, wash your hands so you don't get sick!](#)
  - [Luego de alimentar o tocar reptiles, ¡lávese las manos para que no se enferme!](#)
  - [Reptile Handling Steps](#)
  - [Reptiles, Amphibians, and \*Salmonella\*](#)
  - [Salmonella Infection \(salmonellosis\) and Animals](#)
  - [Diseases from Reptiles](#)
  - [Salmonella](#)
- **Health Protection Agency, Public Health England –**  
[Reducing the risks of salmonella infection from reptiles](#)
- **Association of Reptilian and Amphibian Veterinarians –**  
[Salmonella Bacteria and Reptiles: CLIENT EDUCATIONAL HANDOUT](#)

