

Pet Turtles: Cute But Contaminated with *Salmonella*

The little glassy-eyed creatures may look cute and harmless, but small turtles can make people very ill. Turtles commonly carry bacteria called *Salmonella* on their outer skin and shell surfaces.

People can get *Salmonella* by coming in contact with

- turtles or other reptiles (lizards, snakes)
- amphibians (frogs, salamanders, newts)
- the habitats of reptiles or amphibians

Salmonella can cause a serious or even life-threatening infection in people, even though the bacteria do not make reptiles or amphibians sick. An example is the 2007 death of a four-week-old baby in Florida linked to *Salmonella* from a small turtle. The DNA of the *Salmonella* from the turtle matched that from the infant.

People infected with *Salmonella* may have diarrhea, fever, stomach pain, nausea, vomiting, and headache. Symptoms usually appear 6 to 72 hours after contact with the bacteria and last about 2 to 7 days. Most people recover without treatment, but some get so sick that they need to be treated in a hospital.



Centers for Disease Control and Prevention

Because young children are more vulnerable to the effects of *Salmonella*, since 1975, FDA has banned the sale of turtles with a shell less than four inches long.

All reptiles and amphibians are commonly contaminated with Salmonella. But it is the small turtles that most often are put in contact with young children, where consequences of infection are likely to be severe.

Who Is at Risk?

Anyone can get *Salmonella* infection, but the risk is highest in

- infants
- young children
- elderly people
- people with lowered natural resistance to infection due to pregnancy, cancer, HIV/AIDS, diabetes, and other diseases

“All reptiles and amphibians are commonly contaminated with *Salmonella*,” says Joseph C. Paige, D.V.M., a Consumer Safety Officer in the Food and Drug Administration’s (FDA’s) Center for Veterinary Medicine. “But it is the small turtles that most often are put in contact with young children, where consequences of infection are likely to be severe.” Because of this health risk, since 1975, FDA has banned the sale of small turtles with a shell less than four inches long.

“Young children are ingenious in constructing ways to infect themselves,” says Paige. “They put the small turtles in their mouths or, more often, they touch the turtles or dangle their fingers in the turtle tank water and then put their hands in their mouths. Also, sometimes the tanks and reptile paraphernalia are cleaned in the kitchen sink, and food and eating utensils get cross-contaminated.”

Surfaces such as countertops, table-tops, bare floors, and carpeting can also become contaminated with the bacteria if the turtle is allowed to roam on them. The bacteria may survive for a long period of time on these surfaces.

Infection From Turtles and Frogs on the Rise

Infectious disease specialists estimate that banning small turtles prevents 100,000 *Salmonella* infections in children each year in the United States. But disturbingly, *Salmonella* infections still occur because some pet shops, flea markets, street vendors, and online stores still sell small turtles.

From May 1, 2007, to January 18, 2008, the Centers for Disease Control and Prevention (CDC) received reports of *Salmonella* infection in 103 people—most of them children—in 33 states. Fortunately, there were no deaths. However, 24 people were so sick that they landed in the hospital. The investigation showed that most of the sick people were exposed to a turtle (touching, feeding, cleaning habitat, changing water) shortly before they got sick. Two teenaged girls who became ill had been swimming in an unchlorinated, in-ground pool where the family’s pet turtles had also been allowed to swim.

Health officials found that the strain of *Salmonella* that caused the outbreak in people was the same strain found on many of the turtles (or their habitats) belonging to those who became ill.

More recently, frogs were the source of an outbreak of *Salmonella* infection. As of Dec. 30, 2009, CDC has received reports of infection in 85 people in 31 states due to contact with water frogs, including African dwarf frogs. Water frogs commonly live in aquariums or fish tanks. The outbreak, which affected mostly children, likely began in April 2009, and some infected people needed to be hospitalized.

Advice for Consumers

- Don’t buy small turtles or other reptiles or amphibians for pets or as gifts.
- If your family is expecting a child, remove any reptile or amphibian from the home before the infant arrives.
- Keep reptiles and amphibians out of homes with children under 5 years old, the elderly, or people with weakened immune systems.
- Do not clean aquariums or other supplies in the kitchen sink. Use bleach to disinfect a tub or other place where reptile or amphibian habitats are cleaned.
- Always wash hands thoroughly with soap and water after touching any reptile or amphibian, its housing, or anything (for example, food) that comes in contact with the animal or its housing.
- Watch for symptoms of *Salmonella* infection, such as diarrhea, stomach pain, nausea, vomiting, fever, and headache. Call your doctor if you or your family have any of these symptoms.

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