



Philadelphia Department of Public Health
Division of Disease Control

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Health Advisory
**Outbreak of *Salmonella typhimurium* Infections Associated
with Exposure to Pet Turtles**
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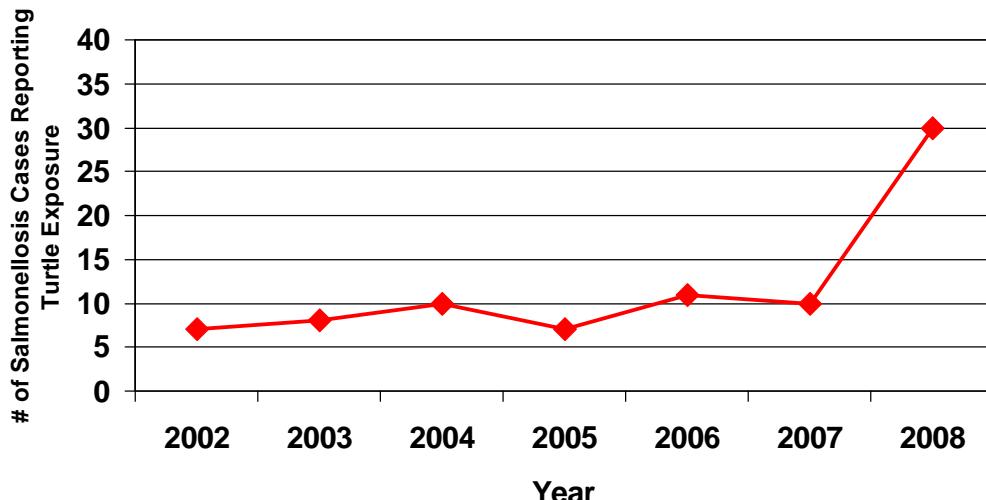
The Philadelphia Department of Public Health (PDPH) has been working with the Centers for Disease Control and Prevention (CDC) to investigate a multi-state outbreak of *Salmonella typhimurium* infections. As of October 7th 2008, 107 cases of infection with a unique strain of *S. typhimurium* have been identified across 24 states, predominantly ones east of the Mississippi. Twenty-two of these cases occurred in Philadelphia residents, 73% of whom were children.

Detailed investigation of outbreak-related *Salmonella* cases has identified that most had exposure to a small turtle within seven days of the onset of their symptoms. Turtles are known carriers of *Salmonella*, which may spread to persons who come into contact with the animal or its environment. *Salmonella* causes diarrhea, fever, stomach pain, nausea and vomiting. It can be a serious infection for children, resulting in hospitalization and, on rare occasion, death.

In Philadelphia alone, the number of cases of all turtle-associated *Salmonella* in Philadelphia has more than tripled this year. To date, 30 cases of salmonellosis have reported exposure to small turtles, compared to an average of nine cases during most years (see graph). The majority of cases have occurred in young children, including infants. Many have had severe infection, with bloody diarrhea and dehydration. Clinicians who are caring for children with diarrhea illness, particularly severe illness associated with bloody stools, fever and dehydration, should consider the diagnosis of *Salmonella* and obtain a stool culture for diagnostic testing.

**Number of Salmonellosis Cases Reporting Turtle
Exposures in Philadelphia, 2002- 2008**

(Reported from January 1 through October 11 of each year)



Recommendations for Disease Prevention

The sale of small turtles in Philadelphia, either by a street vendor or in a pet store, is illegal. The US Food and Drug Administration banned the sale of small turtles (shell size smaller than 4 inches) in 1975 because of the health risks associated with keeping these animals in households. Most of the turtles being sold illegally in Philadelphia are "red-eared sliders." The Philadelphia Animal Care and Control Association (PACCA) will confiscate the turtles from vendors. Everyone, especially parents and caretakers of young children, should understand the risks of reptile exposures.

PDPH requests that healthcare professionals do the following:

- Obtain stool cultures from children or adults with gastroenteritis, particularly if there is a history of reptile exposure or if the illness is severe
- Advise patients who live in households with children under the age of 5 years, pregnant women or others with immunosuppressive conditions against owning reptiles as pets
- Educate all patients regarding the risks of reptile ownership and exposure

The Philadelphia Department of Public Health issues the following advice for persons who are thinking about buying, currently have, or come into contact with turtles:

- Keep turtles out of homes with children under 5 years old, the elderly, or people with weakened immune systems.
- Turtle tanks or supplies should never be cleaned in the kitchen sink or other areas used for personal hygiene or food preparation. Use bleach to disinfect areas where turtle habitats are cleaned.
- Always wash hands thoroughly with soap and water after touching a turtle, its cage, or anything that comes into contact with a turtle or its housing.
- Do not allow turtles to roam freely through the house, especially in food preparation areas.
- The Health Department urges anyone who is currently keeping a turtle as a pet to dispose of it humanely, especially if the household has young children or a person with a weakened immune system. Call the PDPH Vector Control Program at 215-685-9000 to arrange to surrender the turtle to PACCA. The Department does NOT recommend releasing turtles into the wild.

Citizens who witness a person selling turtles with a shell size of less than 4 inches can report the information to the Vector Control Program, Philadelphia Department of Public Health, at 215-685-9000. The Division of Disease Control, Philadelphia Department of Public Health, has brochures and other information for distribution in patient care areas and waiting rooms.

For more information, contact the Division of Disease Control at 215-685-6740, or visit http://www.cdc.gov/healthypets/spotlight_an_turtles.htm.