

Reptile-Associated Salmonellosis

Salmonella infections may be acquired in various ways other than consumption of contaminated food or water. Recently, we reported on *Salmonella* infection transmitted through “dog chew” products. This report addresses reptile-related salmonellosis.

According to the Centers for Disease Control and Prevention (CDC), during 1996-1998, approximately 16 state health departments reported *Salmonella* infections in persons who had direct or indirect contact with reptiles (e.g., lizards, snakes, iguanas, or turtles). *Salmonella* infection can result in invasive illness including sepsis and meningitis, particularly in infants. Four such cases were described in the November 12, 1999 issue of Morbidity and Mortality Weekly Report (MMWR), one of whom died suddenly of *Salmonella* serotype Marina septicemia.

Approximately 93,000 (7%) of cases per year of *Salmonella* infection are attributable to pet reptile contact. *Salmonella* serotypes carried by reptiles tend to be rare. Most persons who contract reptile-associated salmonellosis are infants and young children who along with immunocompromised individuals are at risk for serious complications.

Many reptiles are colonized with *Salmonella* spp. and intermittently shed the organism in their feces. Persons become infected by ingesting *Salmonella* after handling a reptile or objects contaminated by a reptile and then failing to wash their hands properly. Either direct or indirect contact with infected reptiles and their environment can cause human illness.

The risks for transmission of *Salmonella* spp. from reptiles to humans can be reduced by thoroughly washing hands with soap and water after handling reptiles or objects that have been in contact with reptiles. Reptile contact with food-preparation areas should be avoided. It is also recommended that children aged less than five years and immunocompromised persons avoid direct and indirect contact with reptiles (see box).

The Pet Industry Joint Advisory Council (PIJAC) has been working with the CDC to develop educational material (including posters) on safe pet reptile handling. These materials may be obtained by contacting PIJAC at 800-553-7387.

Recommendations for Preventing Transmission of *Salmonella* from Reptiles to Humans

- Pet store owners, veterinarians, and pediatricians should provide information to owners and potential purchasers of reptiles about the risk for acquiring salmonellosis from reptiles.
- Persons should always wash their hands thoroughly with soap and water after handling reptiles or reptile cages.
- Persons at increased risk for infection or serious complications of salmonellosis (e.g., children aged less than 5 years and immunocompromised persons) should avoid contact with reptiles.
- Pet reptiles should be kept out of households where children aged less than 5 years or immunocompromised persons live. Families expecting a new child should remove the pet reptile from the home before the infant arrives.
- Pet reptiles should not be kept in child care centers.
- Pet reptiles should not be allowed to roam freely throughout the home or living area.
- Pet reptiles should be kept out of kitchens and other food-preparation areas to prevent contamination. Kitchen sinks should not be used to bathe reptiles or to wash their dishes, cages, or aquariums. If bathtubs are used for these purposes, they should be cleaned thoroughly and disinfected with bleach.