Reptile-associated Salmonellosis: A Health Risk in Child Care and Pre-School Settings

Turtles and other reptiles such as iguanas, snakes, and lizards are popular pets in childcare and early childhood education settings. These animals are attractive to small children, but most carry harmful bacteria that may cause disease. Reptiles in child care settings pose a risk even if children don't touch them. Turtles and other reptiles are not appropriate for classrooms and childcare settings. Direct and indirect contact exposure is possible since Salmonella bacteria can live on surfaces for months. When people see reptiles in a center-based or family-based day care or early education setting, it gives the impression to parents, caregivers, and children that it's safe to have such a pet in their home as well. Early childhood education providers, caregivers, and the community at large are often unaware of the health risks these animals pose to children, their families, friends and people they work with.

Salmonellosis is normally a diarrheal illness but can have serious consequences such as sepsis (blood infection) and meningitis, leading to hospitalization and death. It poses heightened risk to young children as well as to chronically ill individuals or those with weakened immune systems (including pregnant women). Although salmonellosis is typically a foodborne disease, reptile-associated salmonellosis (RAS) accounts for over 100 laboratory-confirmed cases each year in Los Angeles County—and many more cases may occur that are not reported. Each year in the United States, an estimated 74,000 cases of reptile-associated Salmonella infections occur. The incidence rate of infection is highest among infants and young children. Latinos account for 60% of the reported RAS cases in Los Angeles County, and low-income families who live in apartments may be more likely to have small turtles as pets. Illnesses due to RAS can result in financial burden to families, including the cost of hospitalization and lost wages.

Because of the ongoing problem, the Food and Drug Administration re-issued a warning to consumers on the disease risk of pet turtles. Furthermore, the Center for Disease Control and Prevention (CDC) recommends that reptiles and amphibians not be kept in childcare centers. The National Association of Education of Young Children (NAEYC) accreditation performance criteria prohibit reptiles as classroom pets. Guidelines from the Humane Society state that reptiles, including lizards, snakes, and turtles are never appropriate classroom pets.

Recommendations

Reptile-associated salmonellosis is a public health risk, and its prevention should be integrated into quality standards, environmental assessment tools, and workforce education efforts. Family-based and center-based day care and early childhood education providers, as well as parents and caregivers, should be made aware of this problem and encouraged to take action to prevent RAS.

Early childhood education settings and childcare settings which already have turtles and/or other reptiles should remove the animals. Do not give reptiles to children to take home. Find an appropriate home for the reptile—do not dump it in a park or dispose of it inhumanely. To prevent further infection with Salmonella, disinfect surfaces, floors, sinks, and restrooms with bleach solution. Do not reuse the bowl or aquarium that was used as a reptile habitat, and steam clean carpets and rugs.