Disease Vectors
Salmonellosis is caused by the bacterium *Salmonella*. Although the majority of infections result from contaminated foods, an estimated 11% of all cases are attributed to animal exposure. Even an animal that appears healthy can carry *Salmonella* — you cannot tell simply by looking at your pet if it has *Salmonella*. *Salmonella* is found in the intestinal tract of many animals including reptiles, amphibians, and live poultry (e.g., chicks, chickens, ducklings, ducks, geese, turkeys). Infection may result from hand-to-mouth contact after directly handling animals, as well as after indirect contact through cleaning cages or bedding, handling food or food bowls, or touching other things in the area where the animal lives (Hale 2012). Children are more likely than adults to contract salmonellosis.

Symptoms, Diagnosis and Treatment
Most persons infected with *Salmonella* develop diarrhea, fever, and abdominal cramps 12 to 72 hours after infection. Salmonella infection has an incubation period of 12–72 hours, and illness duration is typically 4–7 days. Acute uncomplicated gastroenteritis is typical; however, serious illness sometimes occurs. Occasionally, *Salmonella* invades normally sterile sites (e.g., blood, cerebrospinal fluid, bone). Infection is usually diagnosed by culture of a stool sample. In many patients, no treatment is needed.

Antibiotics may be necessary for infections that spread from the digestive system to other parts of the body. Children under 5, pregnant women, senior citizens, and people with weakened immune systems run a greater risk of infection; contact your health care provider for more information.

Prevention
Most zoonotic pathogens are transmitted from animals to people through hand-to-mouth contact either directly from animals or indirectly through the environment. Both direct and indirect contact with infected animals can lead to human salmonellosis. Indirect transmission can occur through contact with anything in areas where animals live or through consumption of food/drink prepared in contaminated environments. Live poultry infected with *Salmonella* typically appear healthy, but can intermittently shed bacteria. In general, salmonellosis from animal contact is preventable by thoroughly washing hands with soap and water after contact with animals or their environments. It’s important not to wash food bowls, cages, habitats, and other equipment in the areas where food is prepared. Pets should always be kept away from food preparation areas. Children are more prone to *Salmonella* infection than adults. Certain pets, such as reptiles, amphibians and live poultry, are not appropriate in homes with children under 5, pregnant women, senior citizens and persons with weakened immune systems, due to the increased risk of severe complications from salmonellosis.

References