



# DuPage County Health Department R E V I E W

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to send suggestions  
or to be added to the  
distribution list.

The purpose of this two-page surveillance update is to promote the control and prevention of **communicable disease (CD)** by providing clinically relevant information and resources to healthcare professionals in DuPage County.



## Under the Microscope Salmonellosis

For questions or to report suspect and known cases of salmonellosis, please call the DuPage County Health Department at 630-682-7979, ext. 7553.

Foodborne illnesses are a substantial health burden in the U.S., and the most commonly reported enteric pathogens include *Salmonella*, Shiga toxin-producing *Escherichia coli* O157 (STEC O157), *Shigella*, *Campylobacter*, *Listeria*, *Cryptosporidium*, *Vibrio*, and *Yersinia*.<sup>1</sup> Among the communicable diseases caused by these pathogens, **Salmonella is the most frequently reported.**

Approximately 40,000 cases of *Salmonella* infection are reported annually in the U.S. Many milder cases are not diagnosed (by stool culture) or reported to the local health department; the actual number of infections is an estimated 1.4 million cases of infection.<sup>2,3</sup> In Illinois, about 1,500 to 2,500 cases of this foodborne illness are reported each year, with DuPage County averaging approximately 113 cases annually in recent years.<sup>4</sup> Salmonellosis is more common in the summer than winter. **The most common serotypes in the U.S. remain *Salmonella* Typhimurium, *S. Enteritidis*, and *S. Newport*.**

**Transmission** of *Salmonella* to humans usually occurs by **eating foods contaminated with animal feces.** Contaminated foods are often of animal origin, such as beef, poultry, milk, or eggs, but any food, including vegetables, may become contaminated. Many raw foods of animal origin are frequently contaminated, but fortunately, thorough cooking (to at least 165° F) kills *Salmonella*.

**Food may also become contaminated by the unwashed hands of an infected food handler, who did not wash his or her hands with soap after using the bathroom.<sup>2</sup>**

*Salmonella* may also be found in the feces of some pets, especially those with diarrhea, and people can become infected if they do not wash their hands after contact with these feces. Reptiles are particularly likely to harbor *Salmonella* and people should always wash their hands immediately after handling a reptile, even if the reptile is healthy. Adults should also be careful that children wash their hands after handling a reptile.<sup>2</sup>

**Treatment** for uncomplicated salmonellosis usually includes replacement of fluids and electrolytes. **Antibiotic therapy is not routinely recommended for uncomplicated cases, since it may not eliminate the carrier state, and may lead to resistant strains or more severe infections.** However, antibiotic therapy **should be considered for infants, the debilitated, the chronically ill (e.g., persons with sickle cell disease or immunocompromised patients), the elderly, and/or patients with continued/high fever or manifestations of extra-intestinal infection.<sup>5</sup>**

### Tips for Prevention:

- Cook poultry, ground beef, and eggs thoroughly (to at least 165° F) before eating. Do not eat or drink foods containing raw eggs (e.g., homemade caesar salad dressing, eggnog, hollandaise sauce, ice cream, or cookie dough), or raw unpasteurized milk.
- Wash hands, kitchen work surfaces, and utensils with soap and water immediately after they have been in contact with raw meat or poultry.
- Wash fresh produce before preparation or consumption.
- Wash hands with soap after handling reptiles or birds, or after contact with pet feces.
- Avoid direct or even indirect contact with reptiles (turtles, iguanas, other lizards, snakes) and children under 5 years of age or immunocompromised persons.<sup>2</sup>

### References:

1. www.cdc.gov/mmwr/preview/mmwrhtml/mm5514a2.htm
2. www.cdc.gov/nczved/dfbmd/disease\_listing/salmonellosis\_gi.html
3. www.cdc.gov/nczved/dfbmd/disease\_listing/salmonellosis\_ti.html
4. www.idph.state.il.us/public/hb/hbsam.htm
5. Heymann D., Editor. *Control of Communicable Diseases Manual*. 19th ed. American Public Health Association; 2008



