

I wouldn't exactly call myself a germaphobe, but I admittedly wash my hands 20-30 times a day. I do this because of my experience in the food industry, but I also do this to protect my co-workers and family.

September 2014 marks the 20th anniversary for National Food Safety Education Month. The National Restaurant Association identifies this month as Food Safety Education Month as a way to inform, educate, and reform consumers so that they will take action to handle and consume safe food. Food safety affects all of us.

WHY? The United States Centers for Disease Control (CDC) estimate that each year roughly 1 in 6 Americans (or 48 million people) get sick, 128,000 are hospitalized, and 3,000 die of foodborne diseases. For Geary County, whose population is just above the 38,000 mark, this would calculate to approximately 6,333 residents annually if we followed the national trend. What are these diseases and how do they affect individuals?

With more than 250 different identified foodborne illnesses, the list of symptoms is both lengthy and varied. However, since the infection enters the body through the gastrointestinal tract, there are often common initial symptoms including nausea, vomiting, stomach cramps, and diarrhea.

There are five foodborne illnesses that make up the vast majority of cases in the United States. In order of frequency they are; norovirus, salmonella (nontyphoidal), clostridium perfringens, campylobacter spp., and staphylococcus aureus. These five comprise 91% of the total estimated number of illnesses caused by food poisoning.

Norovirus provides 58% of the foodborne illness cases. It has had a lot of exposure of late, with a concentration of cases being reported from cruise ships. Although it is extremely common, it is rarely identified because of the restricted availability of the lab test used for its diagnosis. Although it is relatively short lived (generally 3 days in duration), it is highly contagious and can be easily spread through contaminated food, water, or surfaces.

The illness caused by salmonella (called salmonellosis) makes up 11% of the total estimated cases of food poisoning in the States. It is a bacterium that can spread to humans through a variety of foods that come from animal sources. Symptoms include a fever, diarrhea and stomach cramps. For people with a compromised immune system, salmonella can be life-threatening. Common food sources for salmonella are eggs and poultry. However, ground meats, fruits, and vegetables have also been identified as sources, though less frequently.

Clostridium perfringens, a foodborne illness that occurs at an annual rate of 10% runs a close third place to salmonella. It is found in many environmental sources as well as the intestines of humans and animals. Common food sources for this illness are raw meat and poultry. The symptoms, which are similar to salmonella, affect the human body within 6 – 24 hours of ingestion. The illness is short lived, usually less than 24 hours and cannot be passed from person to person.

Campylobacter is bacteria that, when infecting the human body, cause fever, diarrhea, and stomach cramps. It is reported as the most commonly identified cause of diarrheal illness in the world. It makes up 9% of the estimated cases of foodborne illness annually in the U.S. It takes two to five days for the symptoms to occur after the bacteria infect the body. Like salmonella, it can be life-threatening to people with compromised immune systems. Common food sources for this illness are undercooked chicken and cross-contaminated food (food exposed to the juices of uncooked chicken.)

Staphylococcus is a bacterium that is naturally occurring on the skin and in the nasal passages of as much as 25% of healthy individuals. Staphylococcus represents 3% of the total estimated foodborne illnesses. It is unique in that it can release as many as seven different toxins that can lead to foodborne illness. It affects the gastrointestinal system and causes symptoms such as nausea, vomiting, stomach cramps, and diarrhea. These symptoms show up within as little as 30 minutes after the individual ingests the contaminated food and lasts for no more one to three days. In rare cases, the illness can be more severe. Common food sources for this bacterium are cheeses and milk. Another common form of transmission is from food workers who are carrying the bacteria.

Pregnant women, the elderly, and people with compromised immune systems are at a higher risk for getting severe infections. Regardless of the risk level, we all need to take precautions against these types of illnesses. Here are some first steps you can take to help protect yourself from these illnesses.

- 1) **COOK** poultry, eggs, and meat to the correct temperature. Use a food thermometer to make sure you are cooking it thoroughly.
- 2) **SEPARATE** food and avoid cross-contamination by washing your hands. Use cleaned and sanitized cutting boards between different food uses, as well.
- 3) **CHILL** leftovers promptly in the refrigerator. Don't wait for the food to "cool off" because bacteria can grow quickly.
- 4) **CLEAN** your fruits and vegetables with running water before you begin your preparation tasks.
- 5) **REPORT** illnesses that you suspect were cause by food poisoning. Call the Geary County Health Department to report your illness. This is the first step to getting help as well as potentially identifying an outbreak of foodborne illness in our community.

The content for this article is based on information provided by the Centers for Disease Control, <http://www.cdc.gov/foodsafety/facts.html#whatprotect>.

Over the next couple of weeks, I will provide more Food Safety information for home and community. In the meantime, check out a fun food safety quiz on the K-State Research and Extension Food Safety website: <http://www.ksre.ksu.edu/FoodSafety/p.aspx?tabid=1>. The CDC also has a food safety quiz at: <http://www.cdc.gov/features/foodsafetyquiz/index.html>. Until next time, keep living resourcefully!