



THIS ISSUE: FOOD SAFETY

Each year, 1 in 6 Americans will become sick due to a foodborne illness. Of those sick, an estimated 128,000 will require hospitalization and 3,000 will die. Beyond health, the material costs associated with foodborne illness is substantial. The National Restaurant Association estimates the average cost of a foodborne disease outbreak to be \$75,000. The Centers for Disease Control and Prevention (CDC) figured that in 2000, the costs associated with five disease-causing organisms (campylobacter, salmonella, listeria, *E. coli* 0157:H7, and non-shiga toxin producing *E. coli*) was a staggering \$6.9 billion.



Food safety is important whether eating out or preparing food at home. The Springfield-Greene County Health Department has investigated several outbreaks in recent years that can be associated with food borne contamination (see below). One of the investigations was tied to a restaurant, while the other two were contaminated product consumed at home.

Year	People Affected	Fatalities	Disease	Suspected Food
2012	3	0	<i>E. coli</i>	Raw sprouts on sandwiches
2011	3	2	Listeria	Rocky Ford cantaloupes
2008	4	0	<i>E. coli</i> 0157:H7	Raw milk

Each outbreak is unique and demonstrates the challenge associated with food borne illness. One of the major takeaways from the last year: make deliberate choices about the food you eat. In 2012, a multi-state *E. coli* outbreak related to sprouts served by a national restaurant chain involved two of the chain's locations in Springfield. Following that incident, the sandwich chain removed sprouts from its menu. Sprouts are difficult to

clean thoroughly and are typically served uncooked, which makes them a risky choice.

An even more serious incident occurred in 2011, making national headlines with an unfortunate local connection. Two Greene County residents died as a result of eating cantaloupe infected by listeria, a bacteria with a high mortality rate in humans. This was a reminder that raw fruits and vegetables should be cleaned thoroughly prior to preparation.

Finally, when making choices about consuming raw versus processed milk, take into consideration the anatomy of the cow. Because of the location of a cow's or goat's udders, fecal contamination of the milk is possible. Unpasteurized milk is more likely than pasteurized milk to pass on these contaminants to those who drink it.

There are approximately 1,400 food service establishments in the Greene County. Each is inspected one to three times a year, depending on the type of food served, the population served, the difficulty level for food preparation, and the inspection history of the establishment (see below). For example, a restaurant preparing food from raw ingredients will be inspected more often than a convenience store serving only popcorn and soda.

Greene County	Monthly Averages		
	2012	2011	2010
Restaurant Inspections	277	292	301
Permits Suspended	0.5	2.2	1.8
Number of Critical Violations	2411	2456	2598
Complaints	40	34	30
Food Safety Class Participants	51	54	31

Examples of Critical Violations	Examples of Non-critical Violations
Contamination between raw and ready-to-eat items	Dirty floors
Touching ready-to-eat items without gloves	Dirty, non-food contact equipment
Food from an unapproved source	Grease on floor
Improper food temperature	Outside trash cans not covered
Lack of food safety knowledge by the person in charge	Repair issues
Poor personal hygiene and employee health	Workers not wearing hair restraints

Food establishment violations found during inspections fall into either critical or non-critical categories. Critical items can have a direct impact on the safety of the food while non-critical items usually deal with sanitation or maintenance issues (see above).

The health department takes a proactive role in prevention and education efforts for the food service industry in Greene County. Health inspectors work daily with those in the industry to educate and inform, and the department hosts monthly safety classes for food handlers. Food handlers are essentially anyone who works in the food industry, including restaurants, schools, caterers, daycares and temporary vendors. The course is offered free of charge, and participants receive a food handlers' safety card upon completion. For more information, call (417) 864-1667.

Recent food service establishment inspections for can be viewed at: health.springfieldmo.gov/foodinspections. The page lists all critical and non-critical violations and features the ability to view the complete inspection history of any establishment.

Food safety begins with you, from making informed choices at the grocery store (see Prevention sidebar) to

TIPS: PREVENTING FOOD BORNE ILLNESS

- When shopping at a grocery store, check for cleanliness. Does it look and smell clean?
- Keep foods separated. Separate raw meat, poultry and seafood from other foods in the cart and when bagging.
- Do not buy cans or jars that show signs of damage. Look for bulging or dented cans. Do not buy jars that have cracks or damaged lids.
- Do not buy frozen foods if the package is damaged. If the package is transparent, look for ice crystals. This could be a sign of food that has been in the case for a long time.
- When shopping in the store, pick up frozen and refrigerated items last.
- Before selecting an egg package, open to ensure that eggs are clean and not cracked.
- Ensure that perishable items are refrigerated or frozen as soon as possible. Follow the 2-hour rule: all perishable items, including leftovers, should be refrigerated within 2 hours.
- Take a cooler to transport cold or frozen items if you have more than 30 minutes of travel time.
- Harmful bacteria can multiply rapidly as foods warm to between the temperatures of 40° F and 140° F.

restaurant choices to safe food handling at home.

You can protect your family from food poisoning by following four simple steps: clean, separate, cook, and chill. While preparing food, you should clean the surfaces and your hands frequently. Avoid cross contamination by separating produce from meat, poultry, seafood and eggs. Cook foods thoroughly. Leftovers should reach an internal temperature of 165 degrees when heating in a microwave. Finally, refrigerate perishable items and leftovers within 2 hours to prevent microbial growth.

More information about food safety can be found online at: health.springfieldmo.gov or www.foodsafety.gov.

Understanding Label Terminology

Best if used by & used-by date: The product should retain maximum freshness, flavor and texture if used by this date. It is based on quality not safety.

Expiration date: If you have not used the product by this date, throw it out. This is a safety guideline.

Sell-by date: This date is used to tell grocers when to remove the product from shelves. There is some leeway for home usage.

Guaranteed fresh: Used for perishable baked goods. Beyond this date, it may not be fresh although would still be edible.

Pack date: This is the date that the product was packed, most often seen on canned and boxed goods.