

# Chow Line

News from the College of Food, Agricultural, and Environmental Sciences

## Focus on what causes most foodborne illness

### What foods are most problematic when it comes to foodborne illness?

While an estimated 48 million Americans become sick and 3,000 die each year due to foodborne illness, many of those cases can't be traced to a specific source. So, to answer questions like yours, authorities recently examined outbreaks caused by a known pathogen, which account for roughly 9 million illnesses and 1,000 fatalities annually.

The report by the Centers for Disease Control and Prevention, the Food and Drug Administration, and the Food Safety and Inspection Service identified foods associated with four major foodborne pathogens: Salmonella, Escherichia coli O157, Listeria monocytogenes and Campylobacter. They focused on these four bugs in part because of the frequency and severity of the illnesses they cause.

The report looked at foodborne illness outbreaks between 1998 and 2012, giving greater weight to those that occurred most recently, since 2008.

Among the findings:

- Beef and vegetable row crops, such as leafy vegetables, were responsible for more than 80 percent of E. coli O157 illnesses.
- Illnesses associated with Salmonella were linked to a wide number of types of foods, with seeded vegetables (such as tomatoes), sprouts, fruits, eggs, poultry, beef and pork responsible for 77 percent of illnesses.
- Dairy foods, most often raw milk or cheese produced from raw milk (such as unpasteurized queso fresco) were responsible for 66 percent of illnesses related to Campylobacter, and chicken was responsible for 8 percent of illnesses.
- Half of illnesses from Listeria were caused by fruits and another 31 percent were caused by dairy foods. The researchers cautioned,



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however, that the high proportion of illnesses linked to fruits are due to a single large outbreak from cantaloupes in 2011.

For any type of foodborne disease, people who are most at risk for serious illness include young children, older adults, pregnant women and anyone with a condition that affects the immune system, such as diabetes, cancer, AIDS or an organ transplant. To reduce the risk, take common-sense precautions, including:

- Know safe minimum cooking temperatures. Ground beef should be cooked to 160 degrees F, poultry (whole or ground) to 165 degrees, and pork to 145 degrees plus a three-minute rest period. Use a meat thermometer to be sure.
- Avoid foods that are known to put you at high risk, such as raw milk or foods that have been recalled due to a food safety issue.
- Wash hands and surfaces thoroughly and often when preparing and serving food.
- Keep raw meat and fish, which could harbor bacteria that would be eliminated during cooking, away from fresh fruits and vegetables.
- Chill perishable foods properly. Don't let them sit at room temperature for more than two hours.

For more guidance, see the CDC website at [cdc.gov/foodsafety/prevention.html](http://cdc.gov/foodsafety/prevention.html).

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**Editor:** This column was reviewed by Sanja Ilic, food safety specialist for Ohio State University Extension, the outreach arm of the College of Food, Agricultural, and Environmental Sciences at The Ohio State University.

*Chow Line is a service of the College of Food, Agricultural, and Environmental Sciences at The Ohio State University and its outreach and research arms, Ohio State University Extension and the Ohio Agricultural Research and Development Center. Send questions to Chow Line, c/o Martha Filipic, 2021 Coffey Road, Columbus, OH 43210-1043, or [filipic.3@osu.edu](mailto:filipic.3@osu.edu).*

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