



Trends in Food Recalls: 2004-13

Elina Tselepidakis Page

What Is the Issue?

The USDA Food Safety and Inspection Service (FSIS) and the U.S. Food and Drug Administration (FDA) are the primary Federal agencies responsible for overseeing the safety of food sold in the United States. Both agencies engage in preventive actions to protect consumers from unsafe foods, including overseeing food product recalls—the removal of risky food products from the U.S. marketplace. The number of food product recalls has increased significantly over the past couple of decades. This report examines the products and risks that may have contributed to this increase.

What Did the Study Find?

Between 2004 and 2008, food recalls averaged 304 a year; between 2009 and 2013, the annual average rose to 676. While an increase in the volume of food sold in the United States during this decade partially explains this statistically significant increase, other factors are also likely at play. For example, pathogen and risk detection technology substantially improved, regulatory oversight and enforcement increased, and Congress passed two major food policy laws: the Food Allergen Labeling and Consumer Protection Act (FALCPA) and the FDA Food Safety Modernization Act (FSMA).

The following six food categories accounted for the majority of food recalls in 2004-13: prepared foods and meals (excluding soups), 11.9 percent of all food recalls; nuts, seeds, and nut products, 10.9 percent; baked goods (including packaged baked goods), 9.0 percent; grains and grain products (excluding baked goods), 8.4 percent; candy products, 7.9 percent; and sauces, condiments, and dressings, 5.0 percent. For each of these foods, with the exception of nut products, the most common reason for initiating the recall was failure to declare major allergens. The most common reason for recalls of nut products was possible *Salmonella* contamination. While the number of food product recalls increased across every food category, the increase was statistically significant only for grain products, animal products, and prepared foods and meals.

Analyzing recalls by type of risk, 41.0 percent were the result of pathogen contamination (Shiga toxin-producing *Escherichia coli*, *Salmonella*, etc.) and 27.4 percent were the result of undeclared allergens. While the number of recalls due to pathogen contamination did not increase significantly during this decade, the number of allergen recalls nearly doubled. The passage of FALCPA likely played a major role in the growing number of undeclared allergen recalls.

ERS is a primary source of economic research and analysis from the U.S. Department of Agriculture, providing timely information on economic and policy issues related to agriculture, food, the environment, and rural America.

Last, food product recalls of common ingredients may have significant and exponential impacts on manufacturers and users of recalled ingredients. From 2004 through 2013, 22.4 percent of all recalls were the result of an upstream ingredient being recalled first.

How Was the Study Conducted?

Researchers from USDA's Economic Research Service analyzed a unique dataset of food product recalls from January 1, 2004, through December 31, 2013. The dataset was constructed by extracting publicly available information from FSIS and FDA press releases, FSIS Recall Notification Reports, and FDA Enforcement Reports. Researchers charted and tabulated food product recall events by the types of food being recalled, reasons for the recall, risk severity, and geographic distribution. To identify statistically significant changes, averages from the first 5 years were compared with those from the last 5 years, and any differences were tested for significance. The study gives special attention to recalls of fresh produce and meat, poultry, and seafood because these foods are considered to pose the greatest potential health risk in terms of food safety.