

# Factsheet: The Occurrence of Foodborne Illness Risk Factors in Fast Food and Full-Service Restaurants 2017-2018

The 2013-2024 FDA Retail Food Risk Factor Study examines the occurrence of foodborne illness risk factors, food safety practices, and behaviors in retail food establishments. In the 2017- 2018 Restaurant Data Collection study, the agency investigated the relationship between food safety management systems (FSMS), certified food protection managers (CFPM), and the occurrence of risk factors and food safety behaviors and practices commonly associated with foodborne illness in restaurants from 2017 to 2018. Data from this study will provide valuable insights that FDA can use to develop educational resources and guidance to improve food safety practices.

## Food Safety Management Systems Play a Major Role in Compliance

Inadequate FSMS were the strongest predictor of data items being out-of-compliance in both fast food and full-service restaurants. As shown in the tables, the average number of out of compliance items is greatly reduced when there is a well-developed FSMS. This is true for both fast food restaurants and full-service restaurants.

Restaurants with well-developed FSMS had less than half as many risk factors and food safety practices that were out of compliance than restaurants with non-existent FSMS.



Fast Food Restaurants	Non-existent FSMS	Well-developed FSMS	Full-Service Restaurants	Non-existent FSMS	Well-developed FSMS
Average # of out of compliance items	4.5	1.5	Average # of out of compliance items	5.3	2.2

## Impact of a Certified Food Protection Manager

Restaurants with a CFPM present had fewer primary data items out of compliance than those without a CFPM. Restaurants that had a CFPM who was the person in charge at the time of data collection had significantly better food safety management scores than those that did not have a CFPM present or employed.

## Control Over Foodborne Illness Risk Factors

Of the foodborne illness risk factors, restaurants had the best control over inadequate cooking. There remains a need to gain better control over improper holding/time and temperature and poor personal hygiene.

Restaurants were found to have the best control over two food safety behaviors/practices:

- Ensuring no bare hand contact with ready-to-eat foods
- Cooking raw animal-derived foods (meat, poultry, eggs) to their required temperatures

Three food safety behaviors/practices were identified as needing the most improvement:

- Cold holding of foods requiring refrigeration:  
Time/temperature control for safety (TCS) foods should be held under refrigeration at or below 41°F (5°C) to limit the growth of pathogens that may be present on the food
- Employee Handwashing (includes both when to wash and how to wash properly):  
Knowing when and how to properly wash hands is critical in reducing the spread of pathogens from food employees' hands to food, food contact surfaces, and equipment
- Foods are cooled properly:  
Excessive time for cooling TCS Food has been consistently identified as one of the leading contributing factors to foodborne illness.

## The results of the 2013-2024 study will be used to:

- Inform retail food safety initiatives, policies, industry partnerships and targeted intervention strategies focused on controlling foodborne illness risk factors
- Provide technical assistance to state, local, tribal, and territorial regulatory professionals

## For More Information

For more information regarding the *FDA Report on the Occurrence of Foodborne Illness Risk Factors in Fast Food and Full-Service Restaurants*, please visit: <https://www.fda.gov/retailfoodriskfactorstudy>.