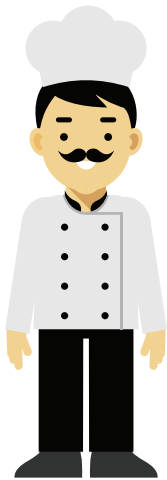




CONTRIBUTING FACTORS: ◆ PREVENTABLE CAUSES OF FOODBORNE ILLNESS ◆

Learn about contributing factors to outbreaks and how you can identify them during outbreak investigations. Each year, more than 800 foodborne illness outbreaks are reported in the United States. More than half of these are linked to restaurants.



WHAT ARE CONTRIBUTING FACTORS?

Contributing factors are behaviors, practices, and environmental conditions that lead to outbreaks. Knowing the contributing factors can help us stop outbreaks and prevent future ones.

THERE ARE 3 TYPES OF CONTRIBUTING FACTORS	FOOD PREPARATION PRACTICES THAT CONTRIBUTE TO...	FOR EXAMPLE...
Contamination	Pathogens and other hazards getting into food	A sick food worker handles food with their bare hands
Proliferation	Pathogens in food growing faster	Food is held in a refrigerator that is too warm
Survival	Pathogens surviving a process to kill or reduce them	Food is not cooked long enough or to a hot enough temperature



WHAT ARE THE MOST COMMON CONTRIBUTING FACTORS?

THE TOP FOUR CONTRIBUTING FACTORS FOR OUTBREAKS IN RESTAURANTS ARE

1

Sick food worker contaminates ready-to-eat food through bare-hand contact.

2

Sick food worker contaminates food through a method other than hand contact, such as with a utensil they contaminated.

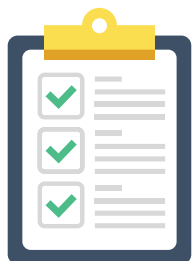
3

Sick food worker contaminates ready-to-eat food through glove-hand contact.

4

Food handling practices lead to growth of pathogens, such as food not kept cold enough.

HOW DO STATE AND LOCAL FOOD REGULATORY PROGRAMS IDENTIFY CONTRIBUTING FACTORS?



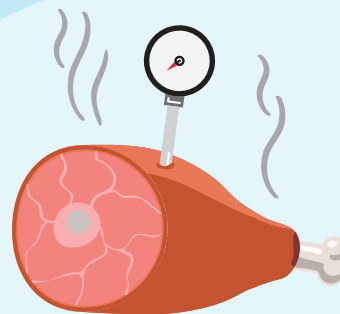
Environmental assessments conducted during outbreak investigations identify contributing factors. These assessments help us learn how pathogens are spread in the environment to cause foodborne illness.

State and local food regulatory programs should conduct environmental assessments as soon as they learn a restaurant may be linked with an outbreak.

Environmental assessment activities include



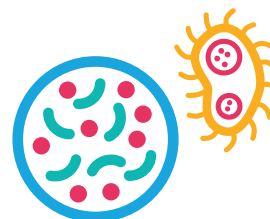
Interviewing kitchen managers and food workers



Observing how restaurants prepare food (for example, food temperatures)



Reviewing or collecting records (for example, records of food cooking temperatures, traceback records)



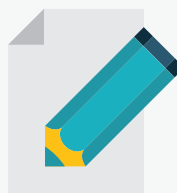
Sampling for pathogens in the restaurant kitchen

WHAT CAN YOU DO TO IDENTIFY CONTRIBUTING FACTORS AND HELP PREVENT FOODBORNE ILLNESS?

State and local food regulatory programs should



Learn more about environmental assessments and contributing factors with CDC's training



Join CDC's National Environmental Assessment Reporting System (NEARS)



Conduct environmental assessments for all foodborne illness outbreaks



Use the FDA Food Code as the model for regulation of restaurants and retail food establishments

**ACCESS THESE RESOURCES AND MORE AT
WWW.CDC.GOV/NCEH/EHS/NEARS**



**U.S. Department of
Health and Human Services**
Centers for Disease
Control and Prevention

