

Environmental Public Health Practice and CDC's Food Safety Winnable Battle

Why Food Safety Matters

- Each year, roughly 1 in 6 Americans (or 48 million people) gets sick, 128,000 are hospitalized, and 3,000 die of foodborne diseases.
- The U.S. Department of Agriculture estimates that foodborne illnesses cost \$15.6 billion each year.

How Environmental Public Health Practice Makes a Difference

- We help prevent foodborne illness outbreaks by understanding the environmental factors contributing to them.
- In the United States, state and local environmental health practitioners play a key role in helping to keep our food safe.
 - They issue permits and inspect restaurants and other retail food establishments.
 - They investigate outbreaks to identify their environmental causes.
 - They educate kitchen managers on how to improve their practices to prevent foodborne illness.



The CDC Winnable Battles are public health priorities with large-scale impact on health and known effective strategies to address them.

Did you know that every year more than 1 in 6 Americans gets foodborne illness? And that more than half of all foodborne illness outbreaks in the United States are associated with restaurants?

CDC is taking action to prevent these outbreaks by improving environmental public health practice, including foodborne outbreak response, food worker education and practices, and restaurant inspections.

CDC's National Center for Environmental Health helps local, state, territorial, and tribal food safety programs address environmental causes of foodborne illnesses



For more information about CDC's food-related work in environmental public health practice, visit www.cdc.gov/nceh/ehs/activities/food.html

National Center for Environmental Health
Division of Emergency and Environmental Health Services



Tools and Guidance for Food Safety Programs

National Environmental Assessment Reporting System (NEARS)

Collects and reports data from foodborne illness outbreak environmental assessments. NEARS provides data to help food safety programs

- Identify environmental causes of outbreaks in their jurisdiction.
- Take follow-up action to reduce or prevent future foodborne illness and outbreaks.
- Focus limited program resources on actions with the highest impact.
- Evaluate and improve their food safety program.

Infographics

Learn more about

- Restaurant food safety and the importance of certified kitchen managers.
- How we help prevent foodborne illness outbreaks by understanding the environmental factors contributing to them.

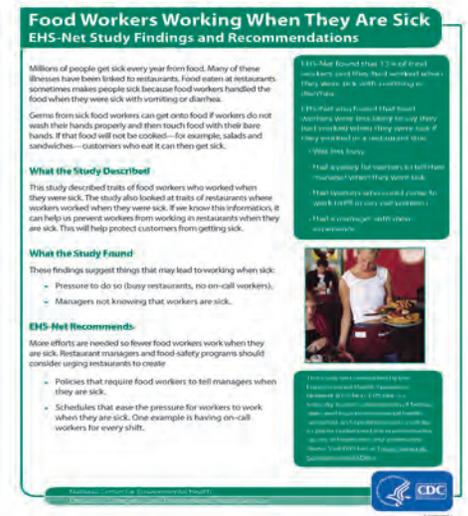
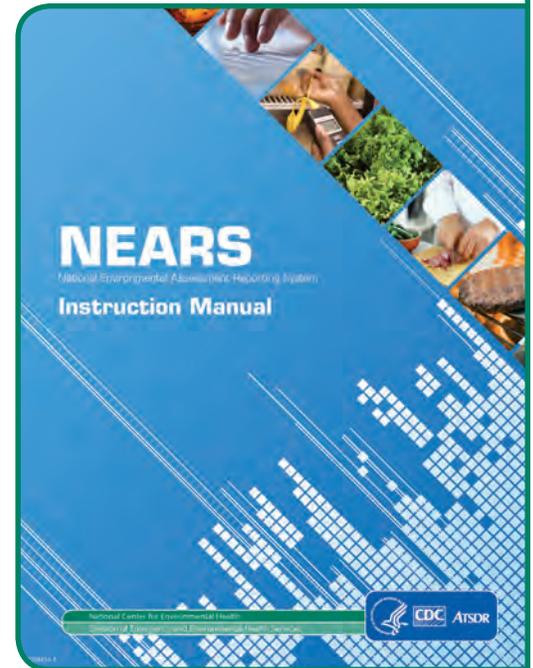
Study Tools

Our study tools can help food safety programs

- Develop their own studies using data collection instruments and study protocols created by our Environmental Health Specialists Network (EHS-Net).
- Design their own data collection instruments for environmental health research using our free web-based Environmental Health Specialists Network Information System.

Findings and Recommendations in Plain Language

Peruse our plain language research findings and recommendations on restaurant food safety topics such as sick food workers, hand hygiene, and kitchen manager certification.



Free Online Training for Environmental Health Specialists

Learn how to investigate foodborne illness outbreaks as part of an outbreak response team, identify an outbreak's environmental causes, and recommend appropriate control measures with our environmental assessment training. Practice critical skills in simulated exercises, such as interviewing food workers and conducting an environmental assessment of a restaurant implicated in an outbreak.

Learn to address environmental health impacts of emergencies and disasters on food safety (and other topics) with our Environmental Health Training in Emergency Response.

Explore our Environmental Public Health Online Courses on food protection and other topics.

Research

CDC's Environmental Health Specialists Network (EHS-Net)

Learn about EHS-Net, our research program to identify environmental causes of outbreaks in the restaurant setting.

EHS-Net brings local, state, and federal regulators (U.S. Food and Drug Administration [FDA] and U.S. Department of Agriculture [USDA]) and state disease control authorities together to actively work on a variety of food safety activities focused on prevention.

EHS-Net has done studies on

- People's experiences with and beliefs about foodborne illness.
- Restaurant food handling and food safety practices, including how restaurants handle specific foods and restaurant food safety practices.
- Practices of restaurants with outbreaks compared to restaurants without outbreaks.
- Practices of environmental health specialists during inspections and outbreak investigations and whether certified kitchen managers cause fewer critical violations.



Evidence Leading to Policy Change

Our practice-based research and funding have spurred the adoption of evidence-based practices to improve food safety. For example,

- EHS-Net researchers found that restaurants with outbreaks were less likely to have kitchen managers certified in food safety than restaurants that had not had outbreaks. These findings influenced FDA to revise certification requirements in the FDA Model Food Code. Certified kitchen managers are now required in 26 states and D.C.
 - In 2016, CDC proposed further strengthening the Food Code provision by requiring food service establishments to have a certified kitchen manager present during all hours of operation. This revision will be included in the 2017 FDA Food Code.
- An EHS-Net-funded evaluation of New York City's grading program for restaurant sanitation shows that the program improved restaurants' food safety. The proportion of restaurants scoring an "A" on their inspections increased 35%. And 9 of 10 residents said they considered grades when deciding where to go out to eat.
- In 2016, USDA's Food Safety and Inspection Service (FSIS) released a new rule on records to be kept by official establishments and retail stores that grind raw beef products. The rule requires establishments to maintain beef grinding logs, which will improve FSIS's ability to trace the source of foodborne illness outbreaks. EHS-Net study findings were part of the scientific rationale supporting the new rule.



Investigations

CDC supports outbreak investigations in state and local health departments. For example,

- Rhode Island's environmental assessment of a *Salmonella* outbreak in 2010 led to the discovery that improperly designed slicers contributed to the food contamination that led to the outbreak. The slicers could not be properly cleaned, which created harborage sites for the bacteria. In response to this outbreak, Rhode Island's EHS-Net program worked with NSF International to create new slicer standards that went into effect in November 2012 and also worked with FDA to create educational materials. FDA printed and distributed 100,000 posters on slicer safety.

**For more information about CDC's
food-related work in environmental public health practice, visit
www.cdc.gov/nceh/ehs/activities/food.html**