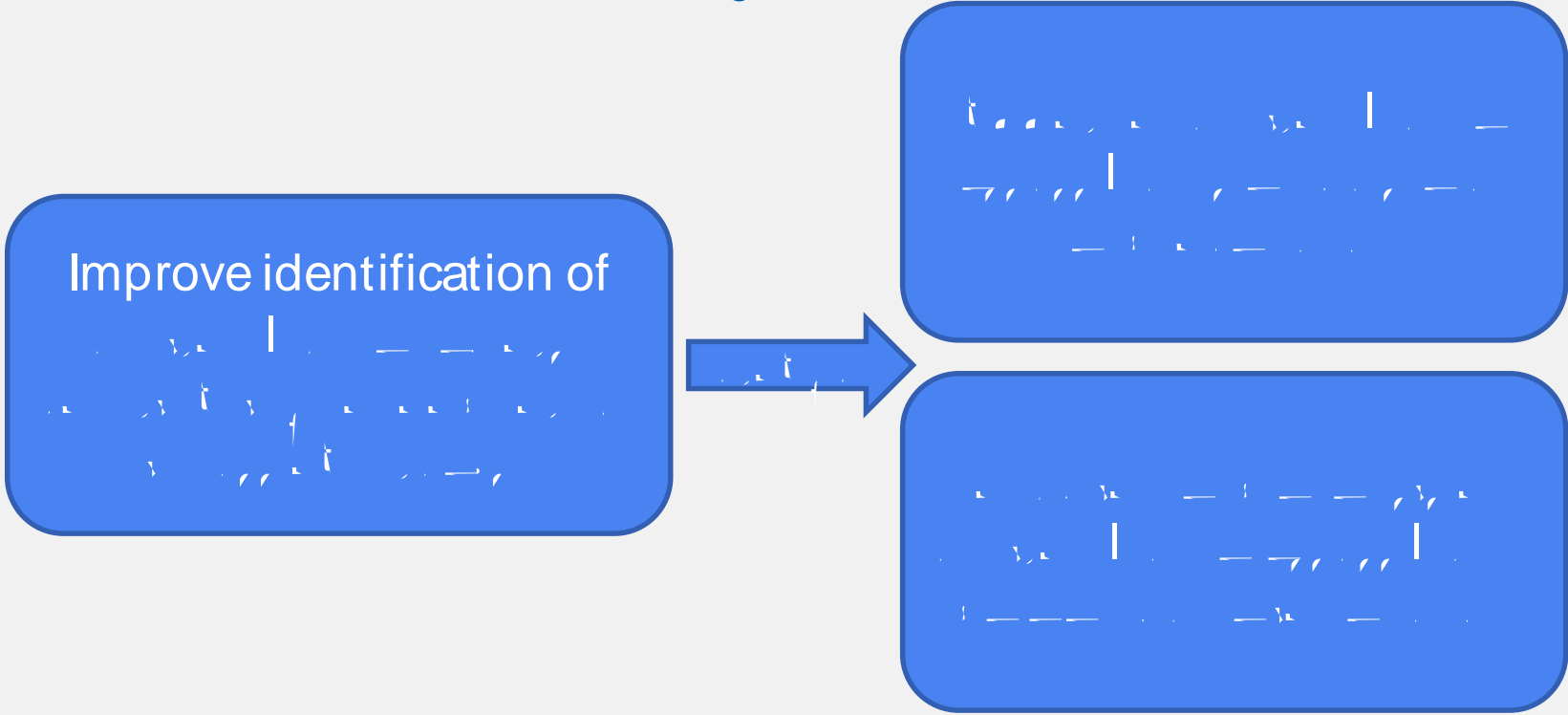


National Environmental Assessment Reporting System (NEARS)

Identifying Environmental Factors Contributing to Foodborne Illness Outbreaks

CDC's National Center for Environmental Health Objectives



Environmental Factors Contributing to Outbreaks

Water Contamination

Food Contamination

Person-to-person Contact

Environmental Factors Contributing to Outbreaks

Contributing Factors

Contamination

- Cross-contamination of ingredients
- Contact by an infectious/ill worker

Proliferation

- Improper cold holding due to malfunctioning equipment
- Improper cold holding due to improper procedure

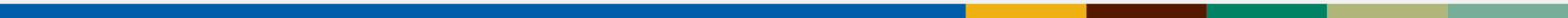
Survival

- Insufficient time/temp during reheating
- Insufficient time/temp during freezing

Environmental Antecedents

- People
- Processes
- Equipment
- Economics
- Food

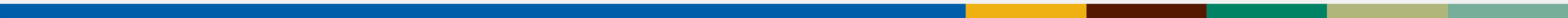
Environmental Factors Contributing to



Outbreak Environmental Assessments



The Need to Improve Reporting of Environmental Assessment Data



Environmental

Question Category


1. Tasks Performed by this FW
2. Establishment Policies
3. Food Safety Training
4. Personal Hygiene
5. Personal Handwashing/Hygiene
6. Personal Use of Gloves

Thinking back about 5 days ago, what tasks did you perform?

Average question effectiveness: 100%

Score: 4% (5 / 125 points)

TIME REMAINING: 9:20



Left Beef Stew [X]

- Take temperature
- Get depth of stew
- Get additional info

58°F

OK

Support of Environmental Assessments at the State and Local level

Development and launch of environmental assessment training

Designed to improve environmental health programs' competency in conducting environmental assessments during outbreaks

Over 5,000 people from federal, state, local government agencies have

Environmental Assessment Training

Module 1: Foundation Skills

Lesson 1: Your Assignment

Lesson 2: Overview of Foodborne Illness Outbreak Environmental Assessments

Lesson 3: Effective Interviewing Skills

Lesson 4: Observation and Records Review

Lesson 5: Environmental Sampling

Lesson 6: Critical Thinking Skills

Lesson 7: Organizing Assessment Information

Lesson 8: Control Strategies and Conducting Actions

Environmental Assessment Training

Module 2: Skill Building

Lesson 1: Guided walkthrough of an environmental assessment for a fictitious *C. perfringens* outbreak linked to a private school cafeteria

Lesson 2: Virtual environmental assessment of a fictitious *Salmonella* Enteritidis and *Salmonella* Pomona outbreak linked to a local catering establishment

Lesson 3: Guided walkthrough of an environmental assessment for a fictitious *E. coli* O157:H7 outbreak linked to a grower and distributor of organic herbs

Lesson 4: Virtual environmental assessment of a fictitious *Listeria* outbreak in a cheese plant

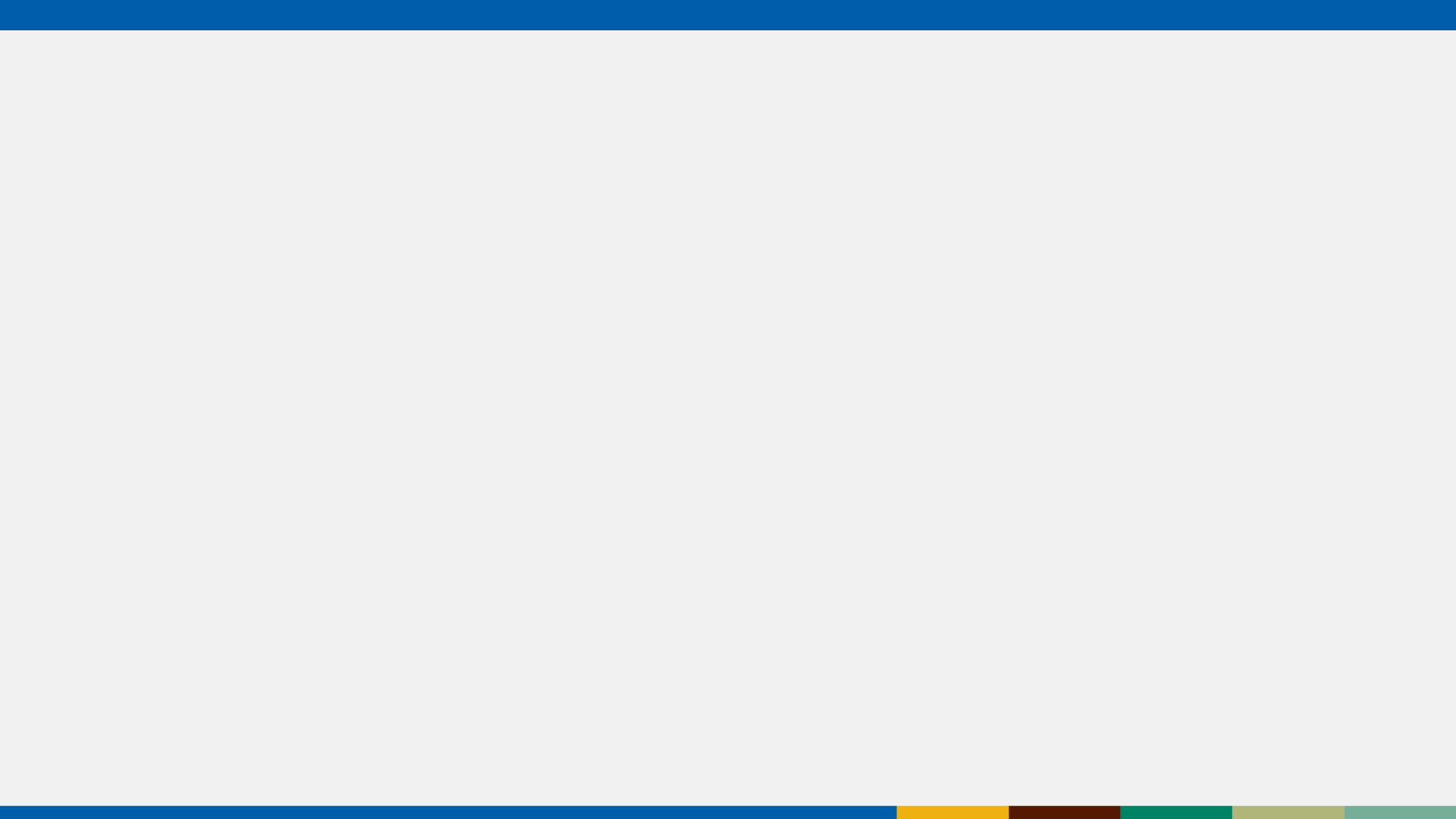
Module 3: Food Defense

Lesson 1: Overview of food defense concepts

Lesson 2: Overview of food (o)05(O)-77 8 (d)JJ 156529-1 (t)3fLa4-34 (i)-4.1 (f at)3fLa4-3ml007 Tc 0667

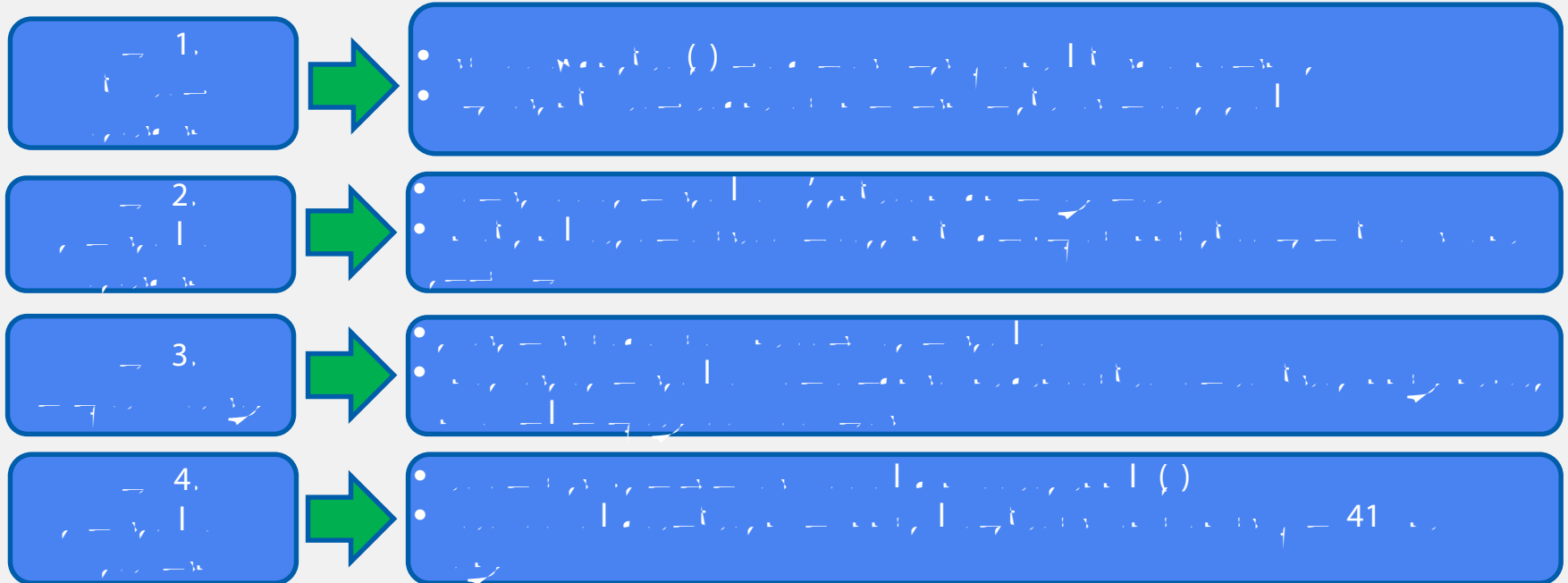
Environmental Assessment Training

<http://ow.ly/HnnxJ>



Collection and Analysis of Environmental Assessment Data at the National Level

Programs report data into NEARS on:



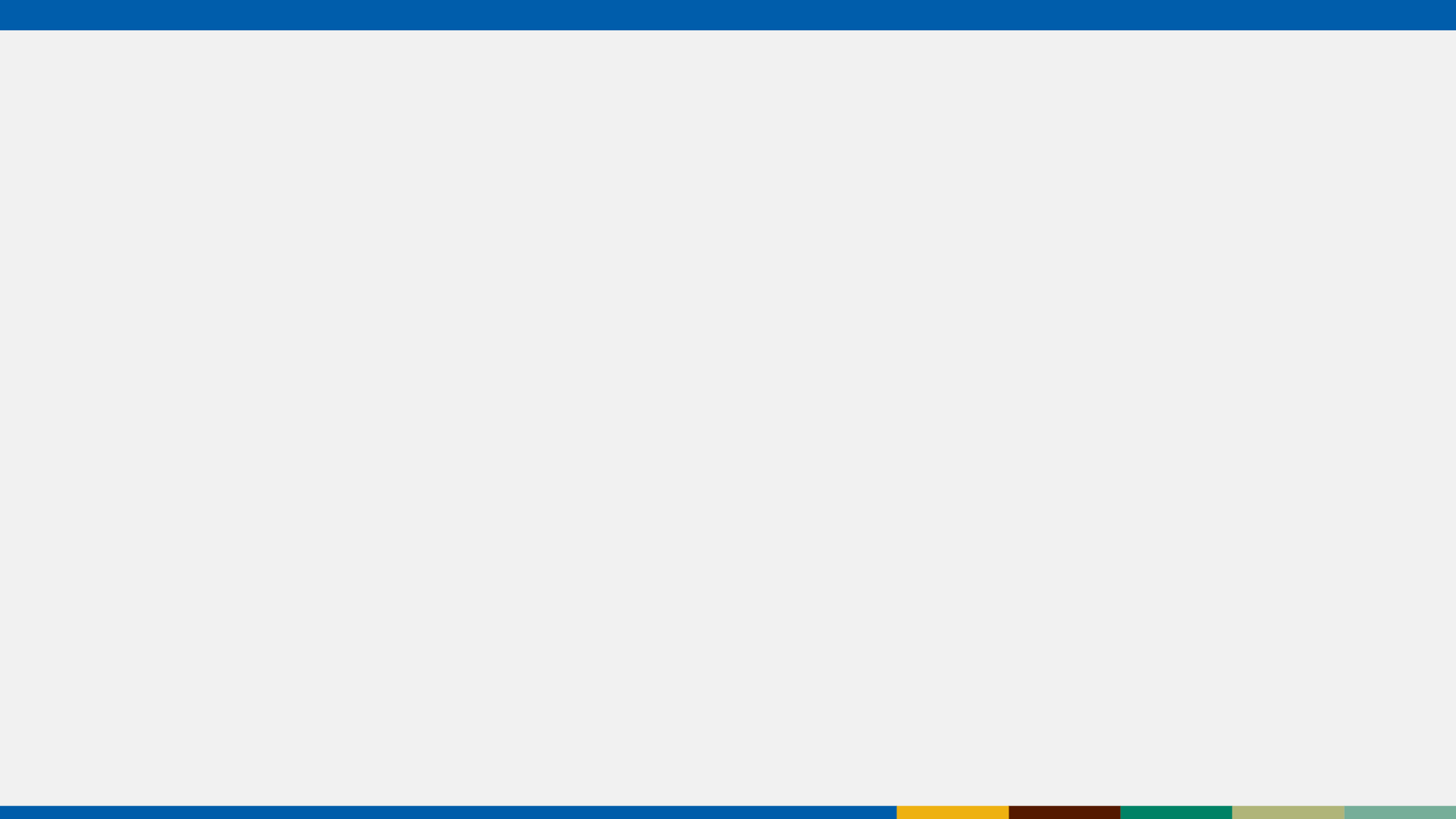
Collection and Analysis of Environmental Assessment Data at the National Level

Programs report data into NEARS on:



Short-term Benefits of NEARS Participation

Annual report from



Data to improve
foodborne
outbreak
response

What investigation characteristics lead to identification of environmental factors?



What environmental antecedents are linked with specific contributing factors?



☒ ()-1

Summary

Improved identification of environmental factors

Improved identification of environmental factors

Improved identification of environmental factors

Begin Reporting Environmental Assessment Data to NEARS

Commit to conducting environmental assessments

Complete NEARS Registration Form(s)

- State Notice and Acknowledgment of Local Participation
- Notice of Participation Form
 - <https://www.cdc.gov/nceh/ehs/nears/registration.htm>

Complete CDC's free online environmental assessment training

- https://www.cdc.gov/nceh/ehs/elearn/ea_fio/index.htm

For more information, contact NCEH
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov
Follow us on Twitter [@CDCEnvironment](https://twitter.com/CDCEnvironment)

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

