

Conducting Environmental Assessments with CDC's Foodborne Outbreak Reporting System

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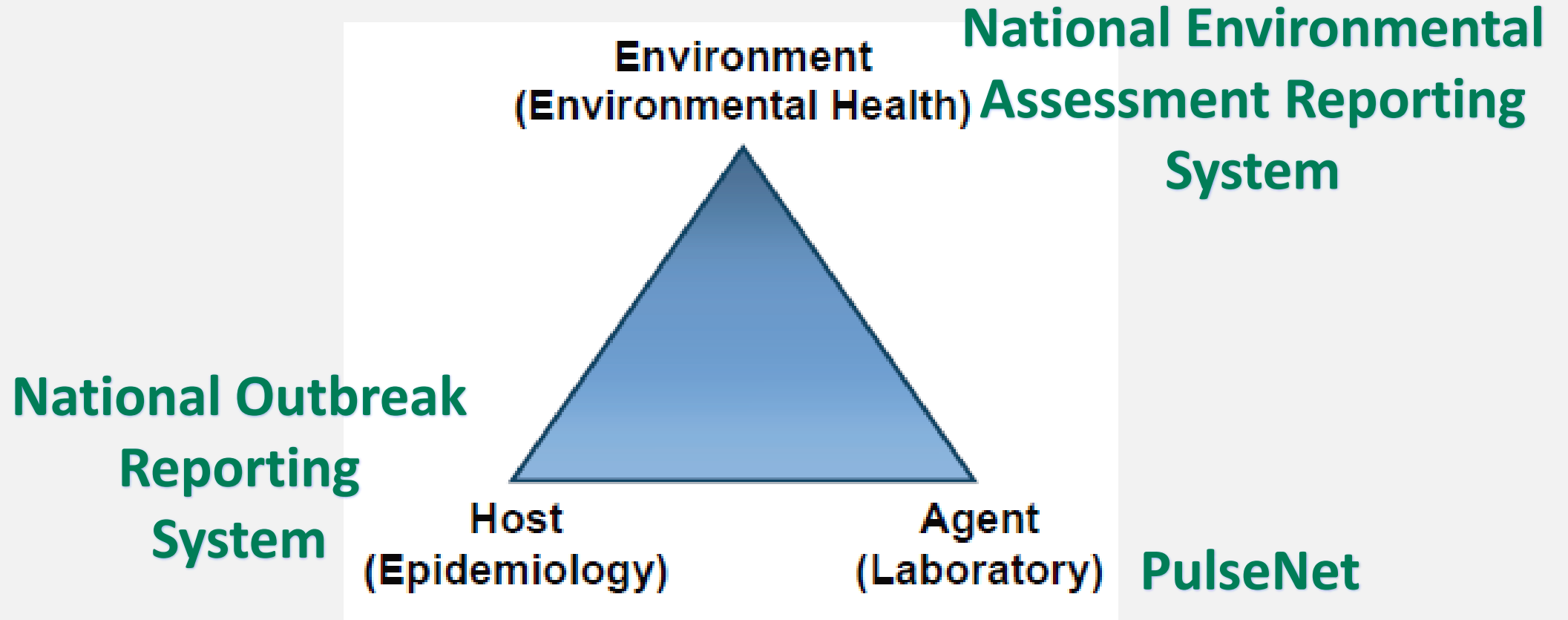
Division of Environmental Health Science and Practice (DEHSP)

MCAFDO

Rogers, Arkansas

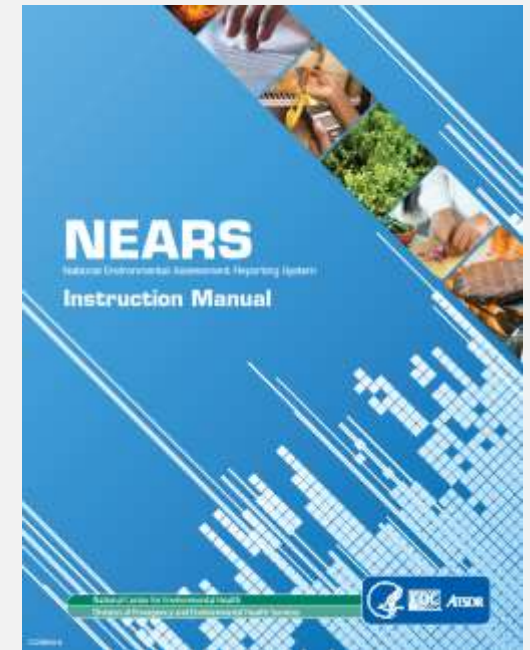
February 25, 2020

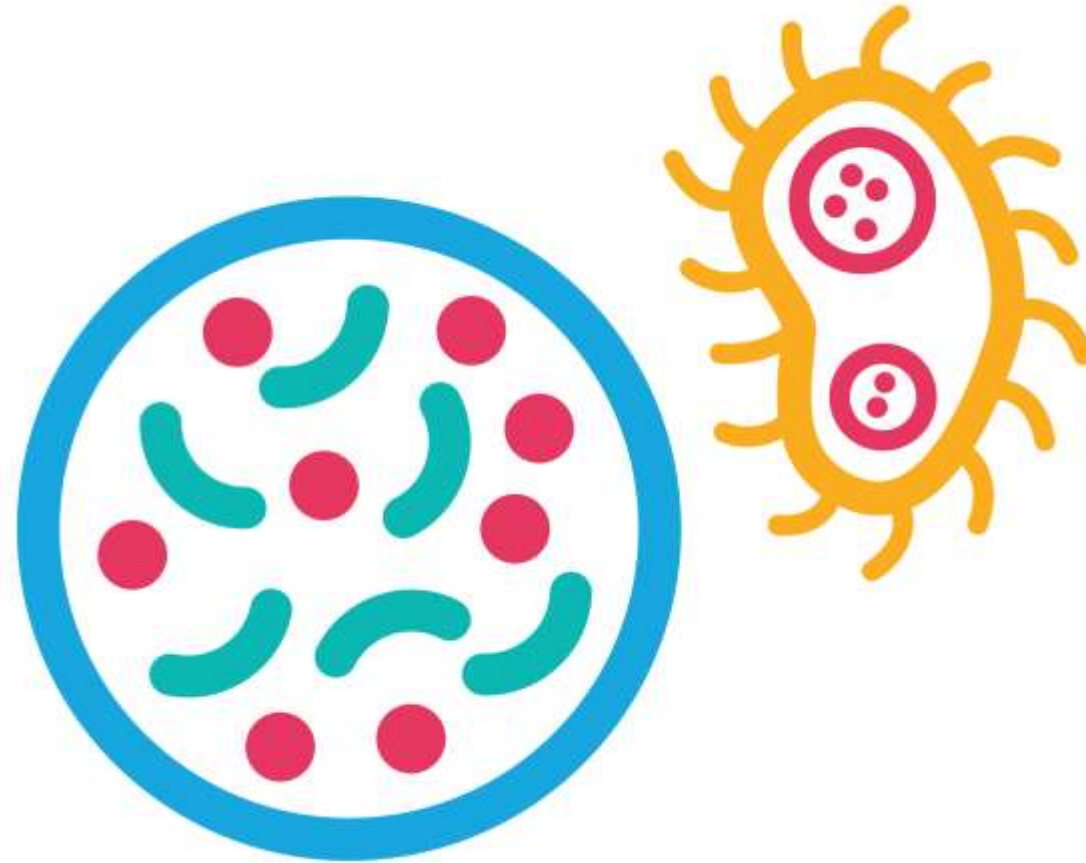
DEHSP supports environmental health programs in their food safety work



National Environmental Assessment Reporting System (NEARS)

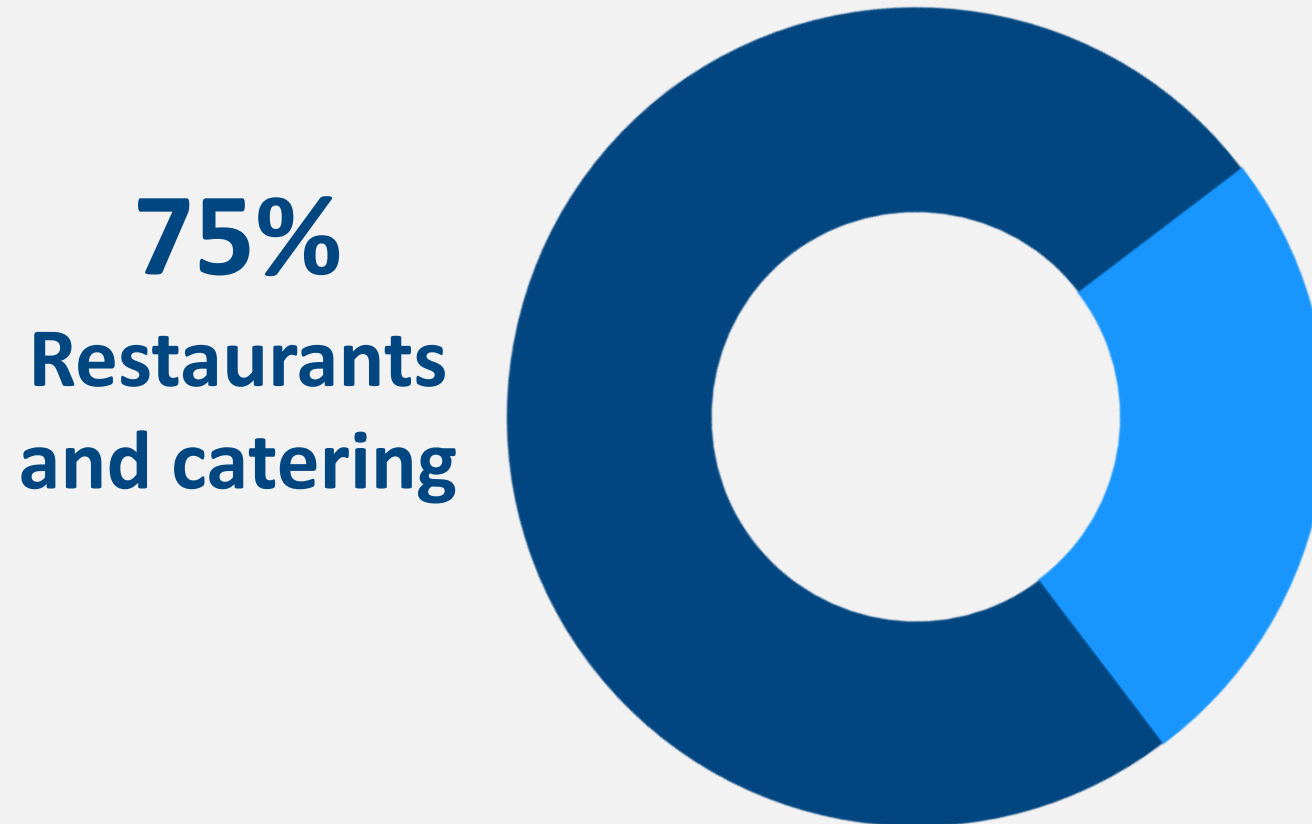
- Launched in 2014
- State and local programs report data to NEARS from their outbreak environmental assessments
 - Contributing factors
 - Outbreak establishment policies and practices
 - Investigation characteristics
- 45 jurisdictions registered to participate in NEARS



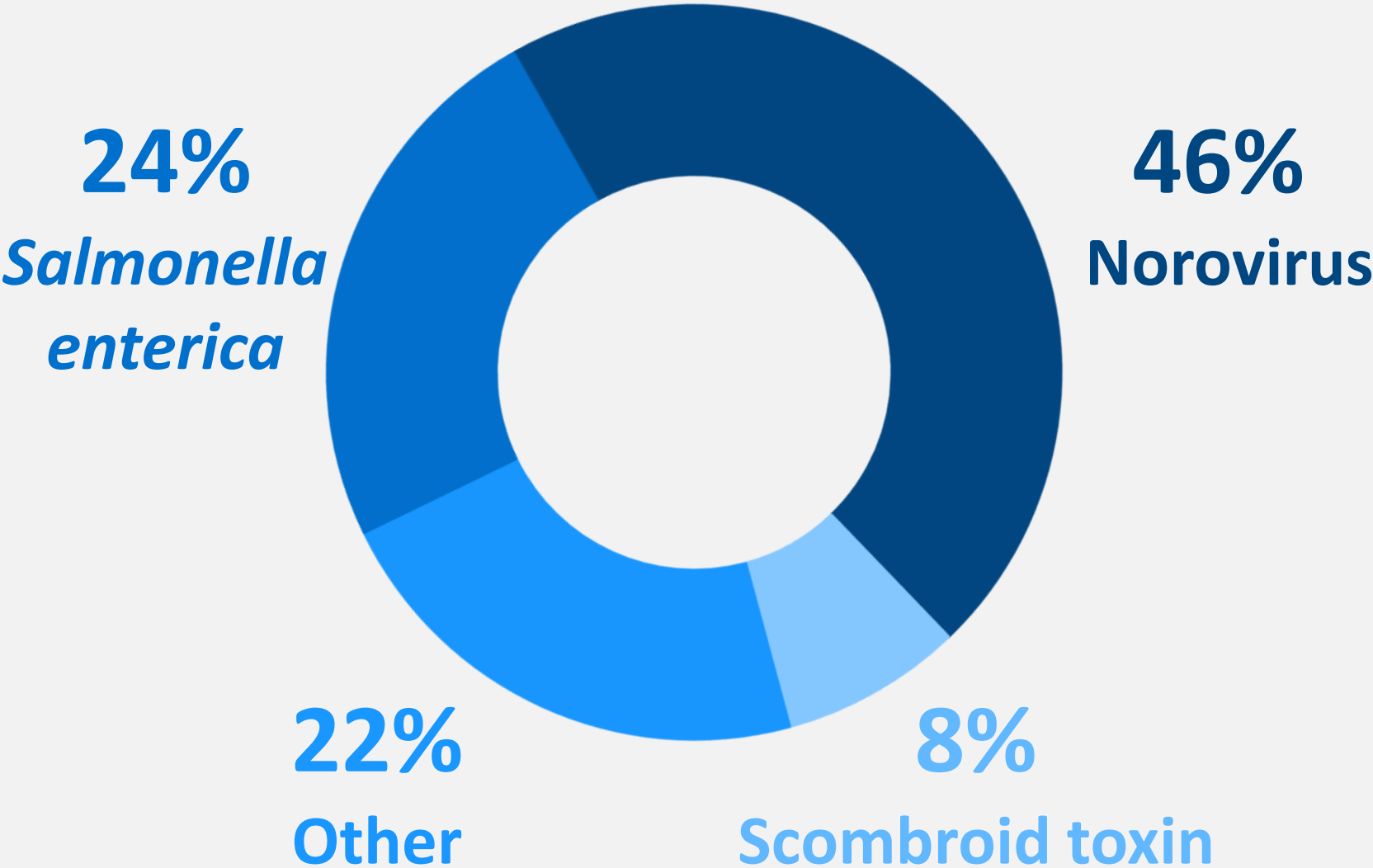


UNDERSTANDING OUTBREAK PATHOGENS AND CONTRIBUTING FACTORS

Restaurants- most common single-setting outbreak location



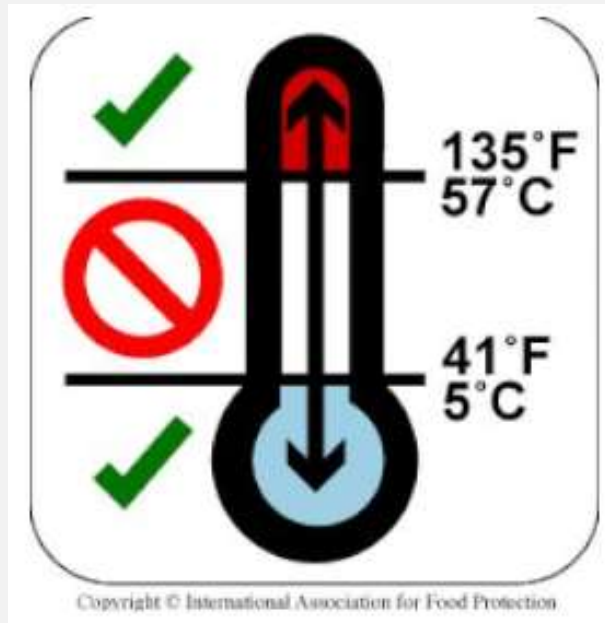
Norovirus- most common restaurant outbreak pathogen



Contributing factors to outbreaks fall into 3 groups



Contamination

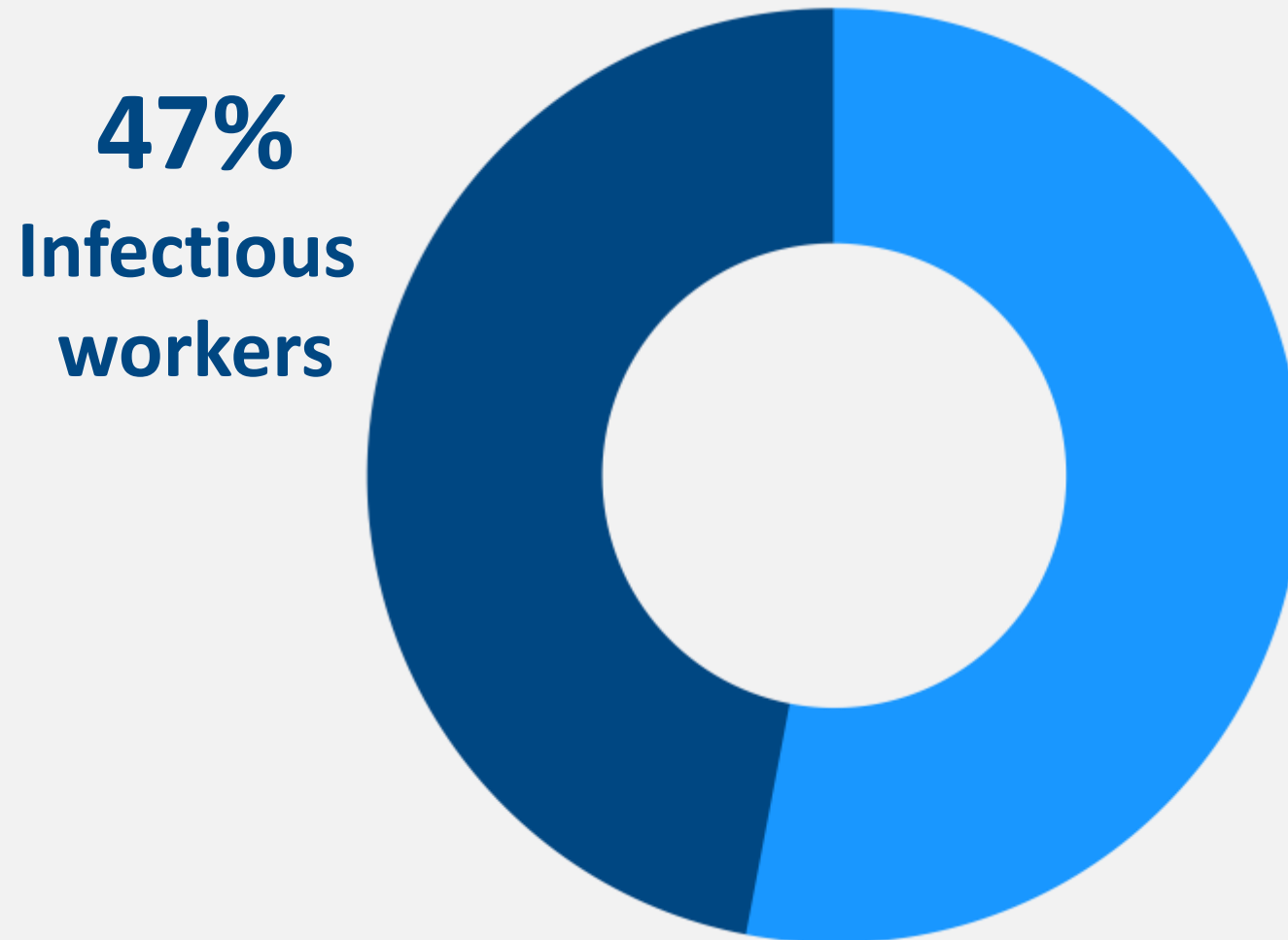


Proliferation



Survival

Contamination by infectious workers- most common restaurant outbreak contributing factors

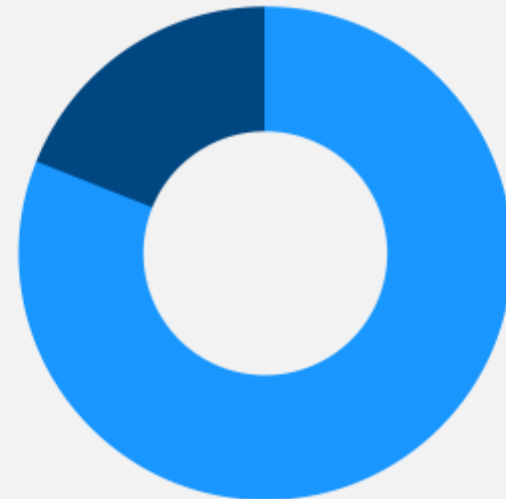


Time and temperature control- common restaurant outbreak contributing factors

19%
**Improper use of time as
a public health control**



19%
**Insufficient thawing,
cooking**

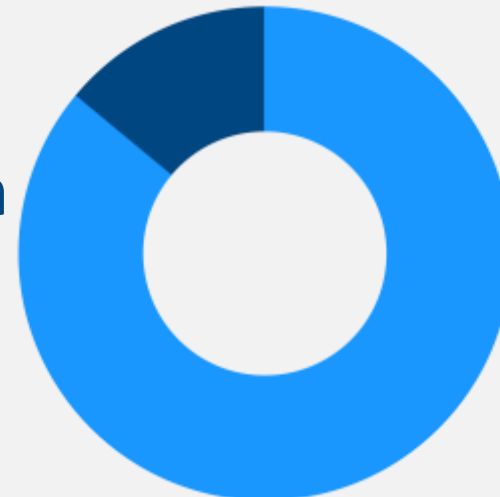


Contamination- common restaurant outbreak contributing factors

15%
Contaminated raw food



14%
Cross-contamination from raw animal product



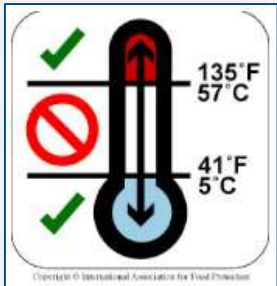
Outbreak contributing factor prevention



Infectious workers contaminating food and environment

- Prevent infectious workers from working
- Prevent bare hand contact with ready-to-eat food
- Practice good hand hygiene
- Clean and sanitize

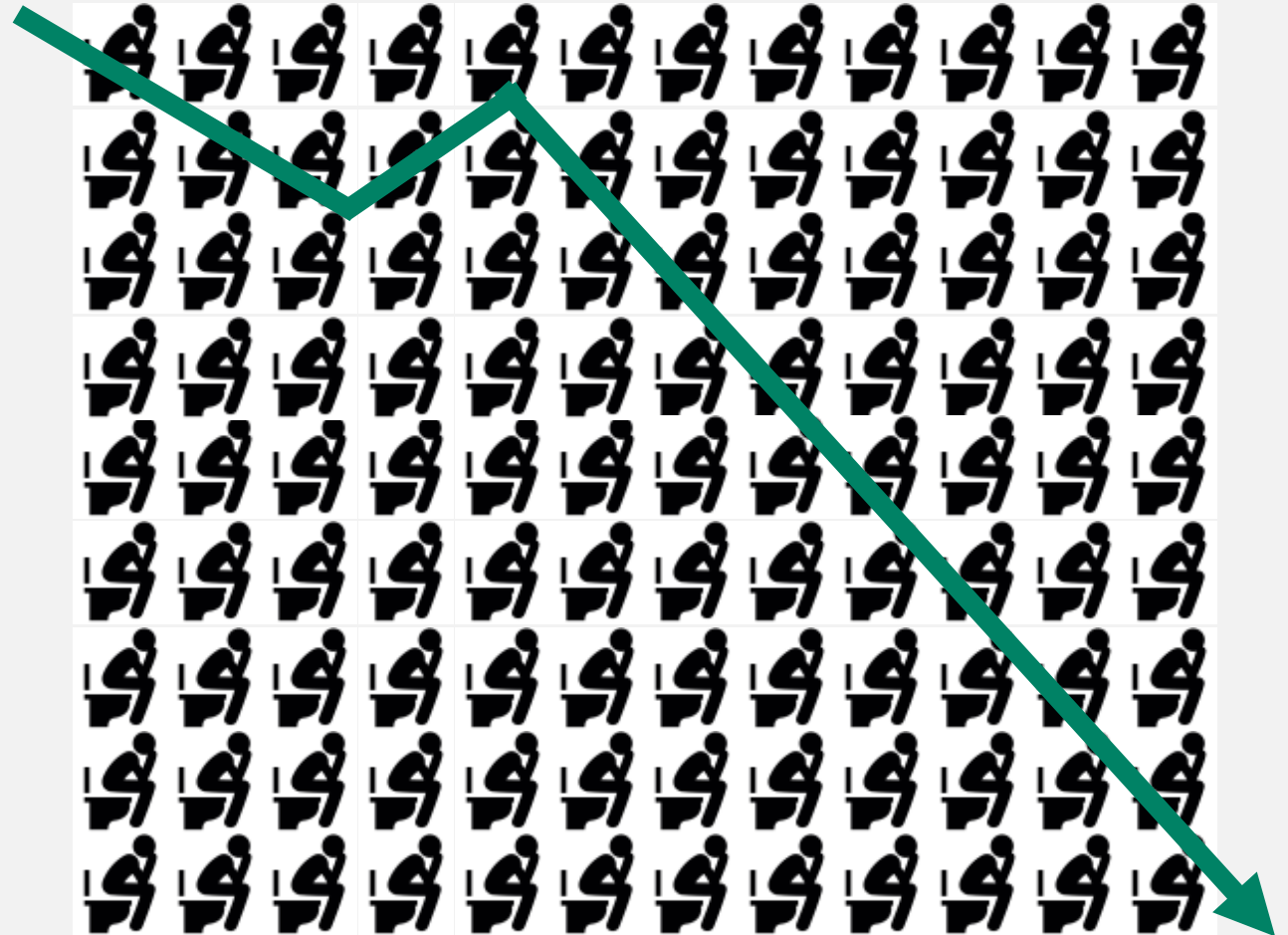
Outbreak contributing factor prevention

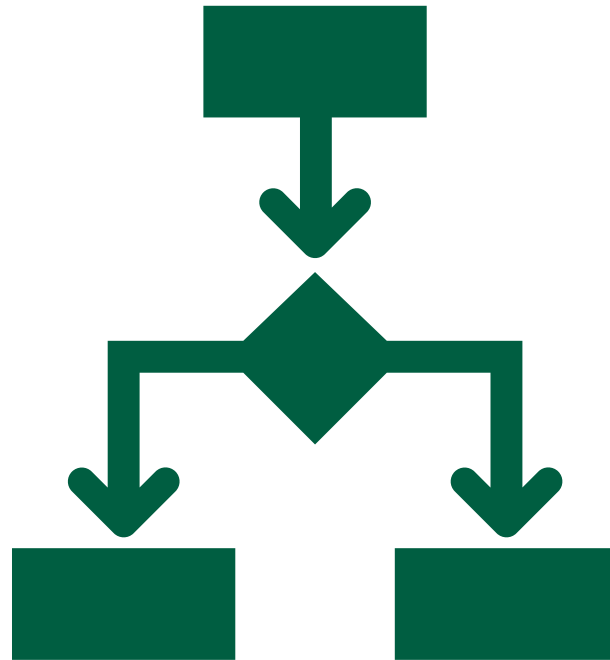


Practices that lead to pathogen contamination, survival, proliferation

- Control time and temperature
- Prevent cross-contamination with good food handling practices
- Prevent cross-contamination- good hand hygiene
- Prevent cross-contamination- cleaning and sanitizing

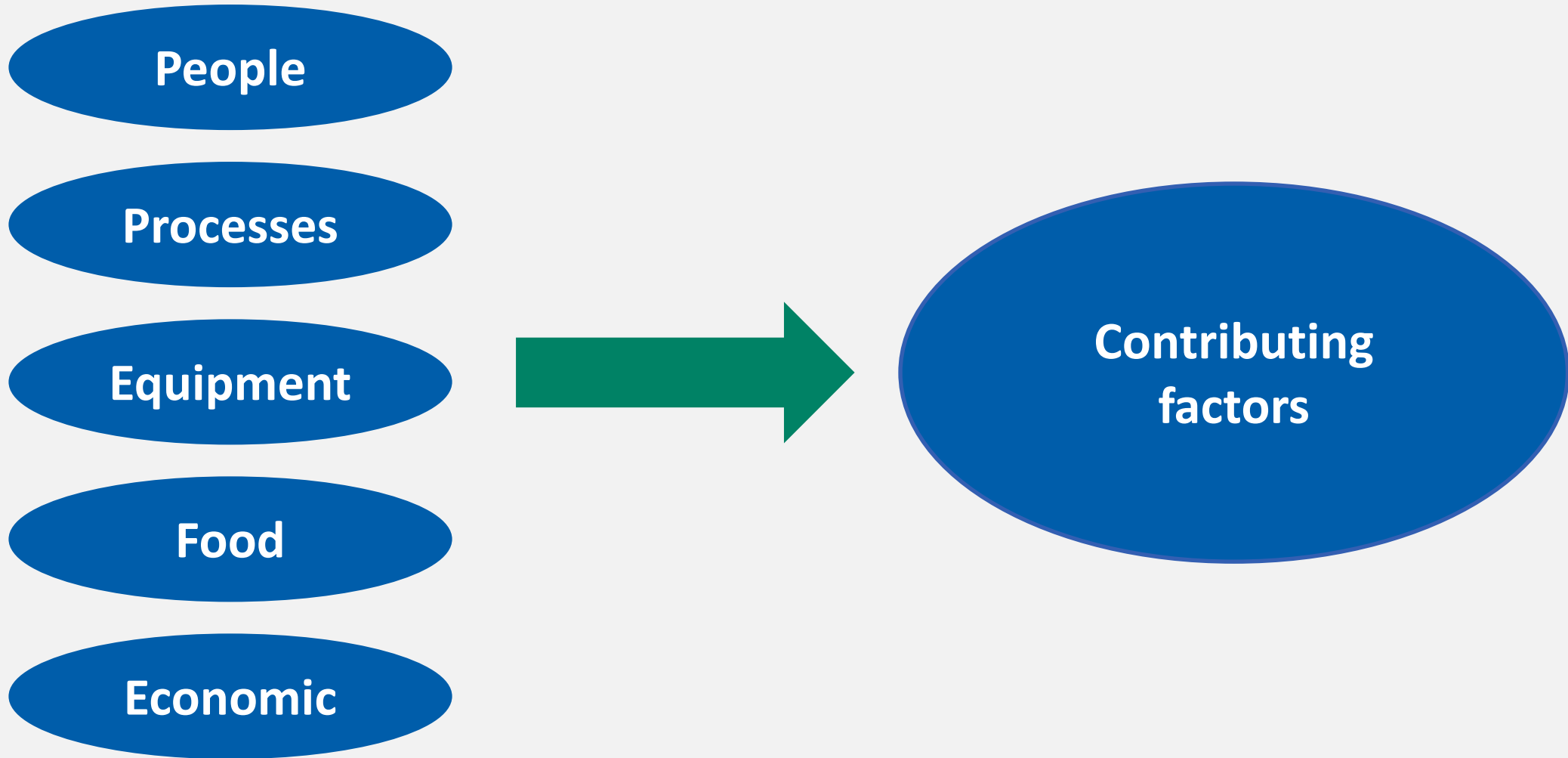
GOAL: Illness & Outbreak Prevention



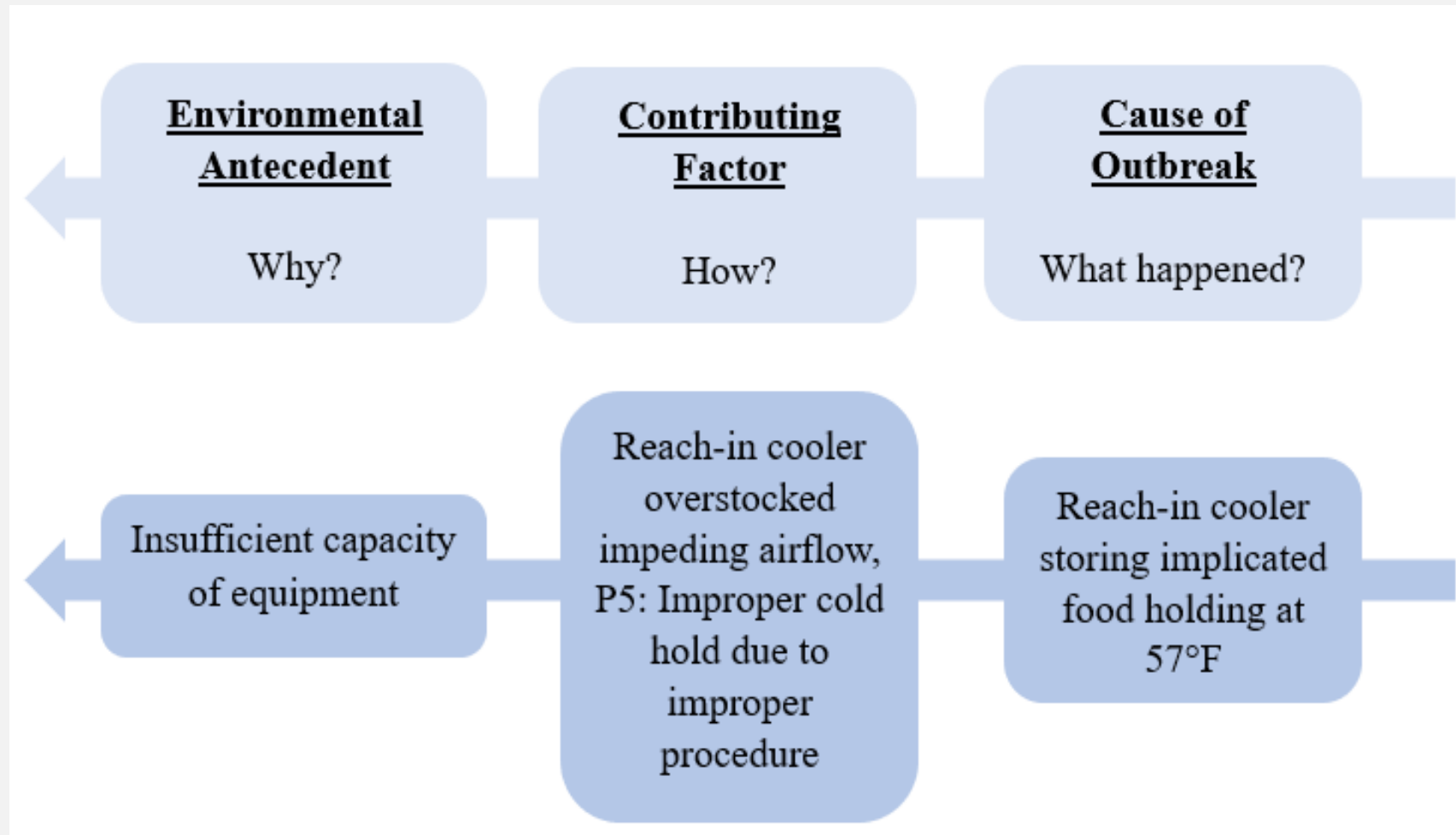


FOOD FOR THOUGHT: USING ROOT CAUSE ANALYSIS

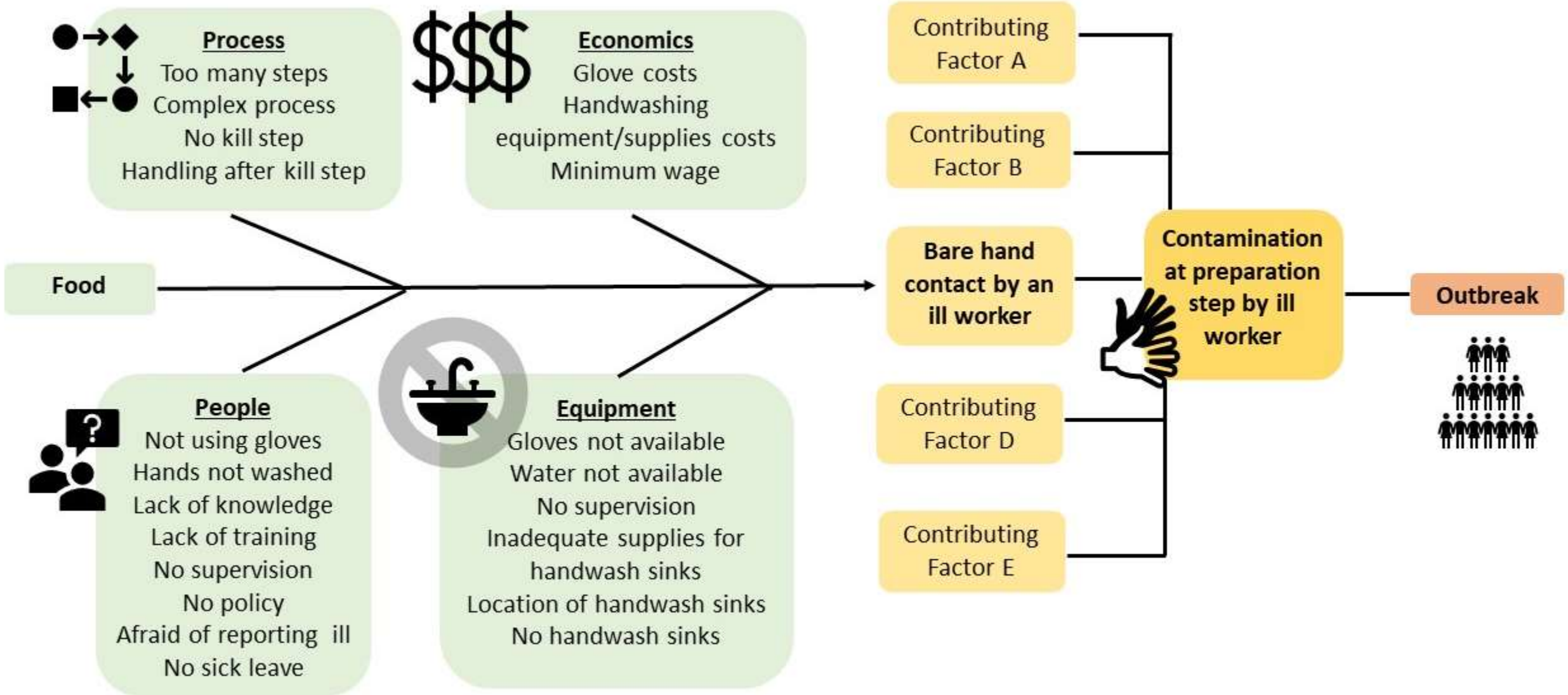
Outbreak Environmental Antecedents



Antecedent example



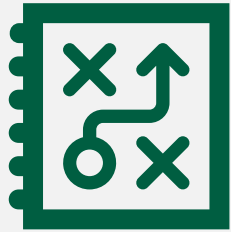
Outbreak example



What can food officials do?



Employ critical thinking



Incorporate environmental assessment concepts into work

Focus on:



- 1) Preventing ill workers from working**
- 2) Ensuring good hand hygiene**
- 3) Controlling time and temperature**



Report outbreaks into NEARS

Thank you

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For more information, contact NCEH
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