In 2014, a total of 110 outbreaks were reported to NEARS. This summary provides information on those outbreaks’ characteristics, investigations, primary agents, contributing factors, and establishment characteristics. The data included in this summary was collected by NEARS participants in California, Connecticut, Minnesota, New York City, New York State, Rhode Island, Tennessee, and Wisconsin.

### Outbreak Characteristics

#### Outbreak investigation

- Outbreak reported to NORS: 87%
- Investigation included an environmental assessment: 86%
- Investigation identified a primary agent: 73%
- Investigation identified a contributing factor: 56%

#### Outbreak primary agents

- Bacillus cereus: 63%
- Campylobacter: 19%
- C. parvum: 1%
- E. coli O157:H7: 1%
- Listeria: 1%
- Norovirus: 1%
- Salmonella: 1%
- S. aureus: 19%
- Toxigenic agent: 2%
- Other agent: 4%
- Chemical hazard: 1%

#### Outbreak contributing factors

- Contamination factors: 68%
- Proliferation factors: 22%
- Survival factors: 10%  

**Most commonly reported contributing factors**

- C10: Bare hand contact by a food worker who is suspected to be infectious: 22%
- C12: Other mode of contamination by a food worker who is suspected to be infectious: 18%
- C11: Glove hand contact by a food worker who is suspected to be infectious: 6%
- C9: Cross-contamination of ingredients: 6%
- S1: Insufficient time and/or temperature during cooking: 5%
Activities used to try to identify contributing factors

- Routine environmental inspection: 36%
- Environmental assessment: 79%
- Other environmental investigation: 10%
- Assumed based on etiology: 20%
- Interview of operator and/or food worker: 78%
- Environment/food sample culture: 11%
- Clinical samples/syndrome: 35%
- Epidemiologic investigation: 65%
- Other: 11%

Note: Percentages do not add up to 100% because this question allowed for multiple responses per outbreak

Identified food vehicles

- Beef: 45%
- Baked goods: 1%
- Beverages and ice: 5%
- Crustaceans: 4%
- Dairy: 1%
- Fish: 7%
- Fruits/nuts: 3%
- Leafy greens: 7%
- Pork: 3%
- Poultry: 8%
- Root vegetables: 1%
- Vegetables from a vine or stalk: 4%
- Other: 1%
- Multi-ingredient: 1%

Outbreak Establishment Characteristics

**General characteristics**

- Establishment Facility Type:
  - Restaurant: 88%
  - Other: 12%

- Establishment Ownership:
  - Chain: 34%
  - Independent: 66%

**Ill worker characteristics**

- Does the establishment have a policy that requires food workers to tell a manager when they are ill?
  - Yes: 87%
  - No: 10%
  - Missing data: 3%

- Does this policy require ill workers to tell managers what their symptoms are?
  - Yes: 75%
  - No: 16%
  - Missing data: 9%

**Hand hygiene characteristics**

- Does the establishment have a disposable glove use policy?
  - Yes: 87%
  - No: 12%
  - Missing data: 1%

- Do food workers handle ready-to-eat foods with bare hands?
  - Yes: 83%
  - No: 17%

**Kitchen manager characteristics**

- Does the establishment require kitchen managers to be certified in food safety?
  - Yes: 77%
  - No: 21%
  - Missing data: 2%

- Are kitchen managers certified in food safety?
  - Yes: 83%
  - No: 12%
  - Missing data: 5%