

IDENTIFYING FOOD SAFETY GAPS USING HEALTH INSPECTION DATA

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PURPOSE

To describe the use of health inspection data to identify food safety violations and actions needed to improve food safety practices.

METHODOLOGY DEVELOPMENT

▪ **Sample Collection:**

- Publicly available health inspection reports were gathered from state health departments or through agency websites.
- Inclusion and exclusion criteria were developed.
 - Type of inspection: Routine vs. follow up
 - Time frame
 - Cross-sectional vs. longitudinal data

▪ **Data Entry Forms:**

- Different states used different inspection forms.
- Based on multiple inspection forms used in different states, a data entry form was developed for each state using a Microsoft Access Form.

▪ **Data Analyses Consolidation Protocol:**

- Based on categories used by the Kansas Department of Health and Environment, 30 violation categories were identified.

METHODOLOGY DEVELOPMENT

- Each code violation on the inspection form was categorized according to:
 - Relevance to one food code violation category.
 - Critical or non-critical violation designation.
 - Behavioral or non-behavioral nature.
- Some food code violations were classified as both behavioral or non-behavioral, due to the nature of the data.
- Frequency of total, behavioral, and non-behavioral violations in each health inspection report were calculated using Microsoft Excel.

Examples of Food Code Violation Categories

- Person in Charge
- Employee Health
- Handwashing & Handwash Sinks
- Personal Cleanliness & Grooming
- Approved Food Sources
- Cooling
- Reheating
- Cooking
- Thawing
- Time & Temperature Control

RESULTS & DISCUSSION

▪ **Advantages of the Methodology:**

- Information from a large number of facilities was gathered and analyzed to determine common operational challenges.

RESULTS & DISCUSSION

▪ **Applications from Four Studies using this Methodology:**

- Predetermining food code violation categories allowed researchers to develop a common form and interpret data similarly.
- Publicly available inspection data provided useful data to identify gaps between safe food handling and violations.
- The number of violations in each category, and total behavioral, non-behavioral, critical, and non-critical violations helped identify key risk factors and training needed.
- The frequency of inspections presented an indicator for the seriousness of the food code violations, because poor performers tended to be inspected more frequently (e.g., follow up inspections).

▪ **Challenges of the Methodology:**

- Very labor intensive.
- Some code violations did not fit in the predetermined categories and violation types.

▪ **Limitations:**

- Using secondary inspection data poses some challenges due to difficulty in determining the nature of violation at the time of inspection.
- Due to missing items on the inspection forms, caution should be used when comparing data from state to state.