

Assessment of Food Safety in Temporary Foodservice Establishments at Louisiana Fairs and Festivals

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Introduction

Background

- Temporary food establishments are very popular in the United States and around the world.
- These establishments may be found in various venues, including fairs and festivals.
- Establishments are temporary sites; hence food storage, preparation, and service can be problematic (Chapman, 2008).

Problem Statements

- Few studies have explored this sector of foodservice, no known research has been conducted on temporary foodservice establishments at fairs and festivals in Louisiana.
- Because of popularity amongst consumers, studies are needed to assess food safety in temporary foodservice establishments (Shumaker et al., 2019).
- Research has shown food safety violations occur in foodservice establishments, research is needed to assess food safety in temporary foodservice establishments at fairs and festivals which has hardly been explored.

Purpose of the study

- The purpose of this study is to assess food safety at temporary foodservice establishments operating at Louisiana fairs and festivals.

Objectives

1. To identify the top three critical and non-critical food safety violations in temporary foodservice establishments at the New Orleans Jazz and Heritage Festival.
2. To evaluate the top three critical and non-critical food safety violations in temporary foodservice establishments at the New Orleans Jazz and Heritage Festival.
3. To compare the top three critical and non-critical food safety violations based on operational characteristics.

Methodology

- Secondary data was obtained from food safety inspection reports for inspections conducted at temporary foodservice establishments serving food at the New Orleans Jazz and Heritage Festival.
- New Orleans Jazz and Heritage Festival is the only festival in Louisiana that requires food safety inspections.
- Inspection reports were obtained from the Louisiana Department of Health.
- Food and beverage vendors participating in the festival in 2017, 2018, and 2019 were included in this study.
- There were 63 vendors in 2017 and 62 vendors in 2018 and 2019.

Data Analysis

- Secondary data was manually compiled into an Excel spreadsheet, then imported into Statistical Package for Social Sciences (SPSS) version 27.0.
- Descriptive statistics (frequencies, counts, percentages) were used to analyze secondary data in SPSS.

Results

Critical Violations

- 2017
 - 34 (5.4%) vendors had inadequate hot food serving temperatures.
 - 31 (12.8%) vendors had inadequate cold food back up temperatures.
 - 21 (15.4%) vendors had inadequate cold food served temperatures.
- 2018
 - 73 (21.1%) vendors had inadequate cold food back up temperatures.
 - 38 (18.0%) vendors had inadequate cold food serving temperatures.
 - 26 (3.7%) vendors had inadequate hot food serving temperatures.
- 2019
 - 32 (7.1%) vendors had inadequate hot food serving temperatures.
 - 30 (19.5%) vendors had inadequate cold back up temperatures.
 - 24 (23.8%) vendors had inadequate cold food serving temperatures.

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Results Cont'd

Non-Critical Violations

- 2017
 - 14 (5.1%) vendors in violation for issues with sanitizer concentration.
 - 13 (4.5%) vendors in violation for no hair/beard restraint.
 - 11 (4.1%) vendors in violation for issues with portable water bucket.
- 2018
 - 25 (7.1%) vendors in violation for no hair/beard restraints.
 - 15 (4.2%) vendors in violation for issues with sanitizer concentration.
 - 14 (5.0%) vendors in violation for issues with indicating thermometers.
- 2019
 - 18 (9.6%) vendors in violation for issues with sanitizer concentration.
 - 11 (7.1%) vendors in violation for product thermometer issues.
 - 7 (4.8%) vendors in violation for indicating thermometer issues.

Conclusions

- Time and temperature management is a commonly observed issue.
- Specific critical violations: hot food serving temperatures, cold food serving temperatures, and cold food back up temperatures.
- Specific non-critical violations: sanitizer concentration issues, lack of employee hair/beard restraints, and issues with clean portable water buckets.

Limitations & Future Research

Limitations

- Few previous studies on food safety at temporary foodservice establishments at fairs and festivals.
- Lack of comparable studies.
- Limited access to data.
- Data was provided by the Louisiana Department of Health. Some data provided to primary investigator may have been missing or excluded.

Future Research

- Future research should focus on food safety culture within individual temporary foodservice establishments, sanitarians presiding over temporary establishments, and the festival organization.

References are available upon request