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IFPTI Fellowship Cohort VIII: Research Presentation

Michael Otzelberger, MPH, RS
Food Safety Risk Factors at the City of Milwaukee, WI, Temporary Events

Michael Otzelberger, MPH, RS
IFPTI 2019-2020 Fellow
City of Milwaukee Health Department
Background

https://www.milwaukeeemag.com/milwaukee-tourist-itinerary/
Background

• Each year there are over 100 separate temporary events in the City of Milwaukee
  – Over 400 inspections done per year

• Challenges with temporary events
  – Different than a brick and mortar (permanent) establishment
  – Knowledge of food safety varies greatly
  – Gaps in regulation

• Over one million people attend
Background

Summerfest US Cellular Stage - 1 of 11 Stages

- 10 Day event
- Over 750,000 people

https://www.summerfest.com
Background

Cross Contamination waiting to happen

Festival Food Workers

Proper Setup

Event Area

FDA TFE Module 4
Problem Statement

The Characterization of Food Safety Risk Factors related to Temporary Food Establishments in the City of Milwaukee is Currently Unknown.
Research Questions

1. Are the food safety risk factors found at temporary events similar to those found at brick and mortar restaurants?

2. What are the most common violations occurring at temporary events in the City of Milwaukee?
Methodology

- Review temporary event inspection reports and match with same number of brick and mortar restaurant reports
  - All temporary event inspections that involved processing potentially hazardous foods
  - Same amount of brick and mortar establishments that process potentially hazardous foods reviewed
  - Create a table of violations found
  - Compare/contrast
## Study Population

<table>
<thead>
<tr>
<th>Year</th>
<th>Inspections Conducted</th>
<th>Details</th>
</tr>
</thead>
</table>
| 2019 | 478                    | Temp inspections conducted  
  • Similar amount of restaurants looked at to compare and contrast |
| 2018 | 529                    | Temp event inspections conducted  
  • Similar amount of restaurants looked at to compare and contrast |
| 2017 | 411                    | Temp event inspections conducted  
  • Similar amount of restaurants looked at to compare and contrast |
Results

Top 3 Temporary Event CDC Risk Factor Violations

Cross Contamination
- 2017: 28
- 2018: 23
- 2019: 13

Improper Holding
- 2017: 106
- 2018: 96
- 2019: 82

Personal Hygiene
- 2017: 53
- 2018: 54
- 2019: 37

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Results

Top 3 Brick and Mortar CDC Risk Factor Violations

<table>
<thead>
<tr>
<th>Risk Factor</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cross Contamination</td>
<td>223</td>
<td>293</td>
<td>229</td>
</tr>
<tr>
<td>Improper Holding</td>
<td>294</td>
<td>294</td>
<td>275</td>
</tr>
<tr>
<td>Personal Hygiene</td>
<td>211</td>
<td>224</td>
<td>227</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>162</td>
</tr>
</tbody>
</table>

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Results

• The most commonly occurring violations for temporary event and brick and mortar establishments are:
  – Cold Holding
  – Hot Holding
  – Handwashing
  – Cross Contamination

https://stopfoodborneillness.org/
Results

Most Common Violations at TFE’s

- Cross Contamination
  - 2017: 10
  - 2018: 17
  - 2019: 22

- Handwashing
  - 2017: 16
  - 2018: 20
  - 2019: 25

- Hot Holding
  - 2017: 25
  - 2018: 27
  - 2019: 26

- Cold Holding
  - 2017: 33
  - 2018: 33
  - 2019: 34

Legend:
- Orange: 2017
- Blue: 2018
- Green: 2019
Results

Most Common Brick and Mortar Violations

- Cross Contamination
  - 2017: 223
  - 2018: 328
  - 2019: 288

- Handwashing
  - 2017: 182
  - 2018: 230
  - 2019: 176

- Hot Holding
  - 2017: 24
  - 2018: 38
  - 2019: 42

- Cold Holding
  - 2017: 198
  - 2018: 190
  - 2019: 209

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Conclusions

• Temporary events show similar amounts of violations for two of the top three categories of risk factors as brick and mortar restaurants.

• Temporary Events have a much lower occurrence of cross contamination due to the smaller footprint and a lot of food is prepped beforehand in a brick and mortar establishment.

• Due to the volume of food they produce, and the amounts of people served, these risk categories should have interventions created for operators in order to reduce their violations.
Recommendations

1. The CEHD should consider requiring that a certified food manager certification be required for any temporary food establishment that processes potentially hazardous food items.

2. The CEHD should hold an annual seminar for temporary food event operators prior to the temporary event season to go over previous year’s most common violations and cover any questions.
Recommendations (continued)

3. The CEHD should distribute current handwashing reminder handout materials, provide handouts and additional information for operators about proper cooking, holding temperatures, setup, proper food handling, and storage of food.

4. The CEHD should examine the current effectiveness of the City of Milwaukee temporary food establishment strategies.
Recommendations (continued)

5. The information and data from this project should be shared with the FDA and other jurisdictions for educational purposes or training of regulators performing TFE inspections.
Acknowledgements

• Claire Evers
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• Fellows for their hard work and impressive projects
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• IFPTI for providing us with this opportunity
Questions?

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Supporting Information
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• Add diagrams or charts that support the presentation/study
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• Add pictures supporting the presentation/study
• Add diagrams or charts that support the presentation/study
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• Add diagrams or charts that support the presentation/study
• Etc.
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