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# IFPTI Fellowship Cohort VII: Research Presentation

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# Survey of Food Handler Training and Knowledge

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# **Background**

# Food borne illness is a major health hazard

61% of outbreaks are reported to occur at a single location of preparation

48% of outbreaks are in restaurants with seating

# **Background**

# **Currently in North Carolina**



Minimum of one employee who is in a supervisor/manager position must be a certified food protection manager.



There is not a requirement for any type of formal training or certification for food handlers.



#### **Problem Statement**

Currently in North Carolina the relationship between the training obtained by a food handler and their knowledge of food safety is unknown.

## **Research Questions**

1. What is the relationship between training and the current knowledge base of food safety in food handlers?

2. What opportunities are there for regulators to address the gaps in training?

# Methodology

#### Phase 1 – Survey developed

- Piloted in Buncombe County
- Multiple choice format and verbally administered
- Surveys were conducted during routine inspections
  - Buncombe County
  - Union
  - Durham

# Methodology

#### **Phase 2 –** Analyze the results of the survey

- Determine the effectiveness of training techniques on basic food safety concepts.
- Identify gaps in training and provide educational opportunities for food handlers.

# **Study Population**



- Employees who are directly involved in activities related to food preparation.
- Employees working in risk category 3 and 4 restaurants.

Breakdown of Scores		
100%	10	
90%	27	
80%	48	
70%	38	
60%	35	
50%	12	
40%	14	
30%	2	
20%	1	

Sample size - 187

Average score – 71%



Type of Training	Number of Food Handlers	Average Score
Informal-On the Job	141	7.2
Continued Training	85	7.6
Written	66	6.4
Video	32	7.6
No Training	19	6.9

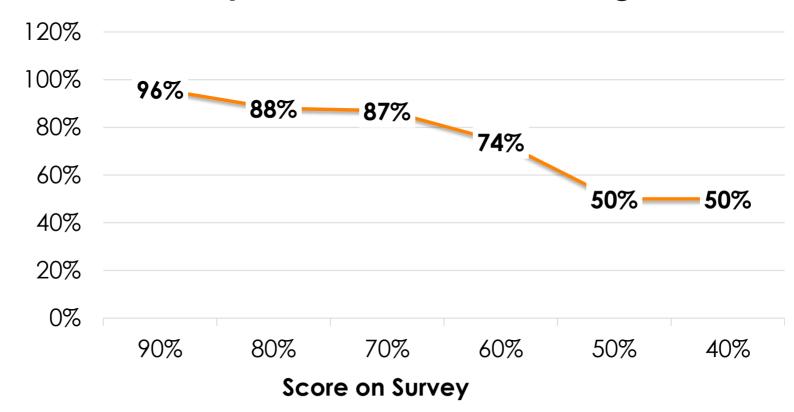
Average score for the PIC was 73%

Average score for **food handler** was **65%** 





#### Survey Results vs. CFPM Training



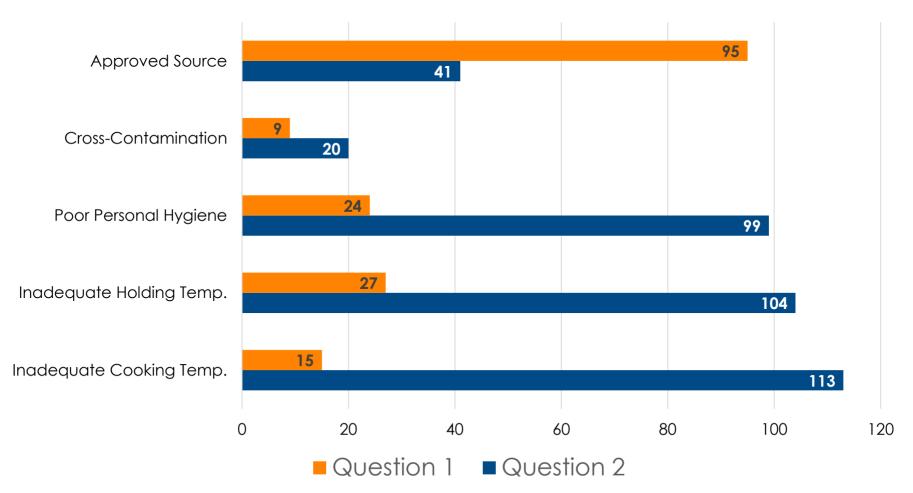
CFPM training average score was 73%

Without CFPM training average score was 58%

- Those who scored 70% or above
  - 89% had CFPM training
  - 51% had continued training
  - 54% had written SOP
- Those who scored 60% or below
  - 62% had CFPM training
  - 37% had continued training
  - 46% had written SOP



#### **Incorrect Answers Based on Risk Factors**



#### **Conclusions**

- Respondents with CFPM training yielded higher results.
- Opportunity for local jurisdictions to offer basic food safety training.
- Future educational campaigns
  - cook temperatures for ground meat products
  - proper hot holding temperatures
  - personal hygiene
  - approved sources

#### Recommendations

- Future educational campaigns should be aimed at addressing the risk factors that were commonly missed.
- 2. Implement risk control plans at food service establishments that are found to have a repeated history of non-compliance associated with one of the five risk factors.
- 3. Offer assistance to establishments on developing SOP's to facilitate training.

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### **Recommendations** (continued)

- 4. Agencies should consider allocating resources for short classes aimed at increasing compliance for out of control risk factors relating to foodborne illness for employees involved in the preparation of food.
- 5. Agencies should offer an ANSI certificate program for a food handler.

### **Recommendations** (continued)

 Additional research should be conducted to evaluate the factors involved for those who had the ANSI-certified food protection manager training but did not score well on the survey.



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# Questions?

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