

Wake County, North Carolina

**Report on the Occurrence of Foodborne Illness
Risk Factors in Selected Institutional Foodservice,
Restaurant and Retail Food Store Facility Types**

2020

Prepared by Wake County Environmental Services, Environmental Health & Safety Division

CONTENTS

I. EXECUTIVE SUMMARY

II. INTRODUCTION

- A. Background
- B. Purpose
- C. Study Design and Objectives

III. METHODOLOGY

- A. Selection of Facilities
- B. Random Selection of Establishments
- C. Selection of Data Collectors
- D. Geographical Locations
- E. Baseline Data Collection Procedure
- F. Base Data Collection Form
- G. Quality Control
- H. Average Time Per Data Collection

IV. RESULTS AND DISCUSSION - SUMMARY

- A. Institutional Food Service - Hospitals
- B. Institutional Food Service - Nursing Homes
- C. Institutional Food Service - Elementary Schools
- D. Restaurants - Fast Food
- E. Restaurants – Full Service
- F. Retail Food Stores – Delis
- G. Retail Food Stores – Meat Markets
- H. Retail Food Stores - Produce
- I. Retail Food Stores - Seafood

V. RECOMMENDATIONS

- A. Recommendation for the Foodservice and Retail Food Store Industries
- B. Recommendation for Regulatory Retail Food Protection Programs

APPENDICES

Appendix A	Data Summary – Hospitals
Appendix B	Data Summary – Nursing Homes
Appendix C	Data Summary – Elementary Schools
Appendix D	Data Summary – Fast Food Restaurants
Appendix E	Data Summary – Full Service Restaurants
Appendix F	Data Summary – Deli Departments/Stores
Appendix G	Data Summary – Meat and Poultry Markets/Departments
Appendix H	Data Summary – Produce Markets/Departments
Appendix I	Data Summary – Seafood Markets/Departments
Appendix J	Data – All Facilities
Appendix K	Data – IN Compliance
Appendix L	Data – OUT Compliance
Appendix M	Risk Categorization of Food Establishments
Appendix N	2020 Reference Sheet
Appendix O	2020 Data Collection Form
Appendix P	Resources – Web Site Locations for Referenced Documents

EXECUTIVE SUMMARY

Wake County 2020 Risk Factor Study: *Report on the Occurrence of Foodborne Illness Risk Factors*

I. Background

Wake County Government's Food Lodging sections (FL) protect the public health through the enforcement of North Carolina's rules and regulations enacted for safe and sanitary construction and operation of regulated food service establishments. There are more than 3,700 regulated food service establishments currently operating in Wake County, an increase of 33% since 2010.

In 2010, as part of the Program Standards, Wake County completed an initial study to assess the frequency of foodborne illness risk factors in food service establishments. The survey identified risk factors based on the most recent FDA Food Code at the time. The 2010 survey provided the baseline assessment of the occurrence of foodborne illness risk factors in the County's regulated food service establishments. Wake County staff completed similar studies in 2015 and 2020 to provide a comparison of foodborne illness risk factors and to measure the effectiveness of their intervention strategies over the period.

I. FDA Voluntary Food Regulatory Program Standards

In Wake County, the regulation of food service establishments is based on the North Carolina Rules for Food Service Establishments. In 2012, the State of North Carolina adopted a food code based on the 2009 FDA Food Code. Wake County Government's Food Lodging sections enrolled in the FDA Voluntary Food Regulatory Program Standards (Program Standards) in 2008. The goal of the Program Standards is to reduce risk factors associated with foodborne illness, and to provide a national benchmark for:

- Retail food program managers to evaluate their own programs; and
- Regulatory agencies to improve and build upon existing programs.

II. 2020 Risk Factor Study

The 2020 risk factor study evaluated 465 randomly selected food service establishments representing nine different types of facilities. The survey focused on food preparation practices and employee behaviors most frequently reported to the Centers for Disease Control and Prevention (CDC) as contributing to foodborne illness outbreaks. The contributing risk factors are:

- Food from unsafe sources
- Inadequate cooking
- Improper holding/time and temperature
- Contaminated equipment/prevention of contamination
- Poor personal hygiene

During the study, Wake County staff talked with managers and made 9,786 observations of practices at 465 kitchen facilities. For each of the nine facility types, evaluators evaluated compliance with the 2013 FDA Food Code.

III. Survey Findings

The 2020 Wake County risk factor survey identified that overall, the percentage of IN compliance observations in five risk factor categories improved from the 2010 baseline risk factor study as shown in the chart below.

Risk Factors IN compliance	AVERAGE		
	2010	2015	2020
Food Source	95%	96%	98%
Inadequate Cooking	91%	94%	95%
Improper Holding	57%	65%	75%
Contamination	87%	88%	86%
Personal Hygiene	82%	90%	92%
Other items of interest			
Certified Food Protection Manager Present	42%	72%	64%
Employee Health Policy	10%	17%	66%
Food Allergy Awareness	NA	NA	18%

*Employee Health Policy compliance improved from 2010 to 2015 (10% to 64%) based on the 2009 Code; however, when compared with the 2017 Code, there was only 17% compliance (non-typhoidal Salmonella)

Overall, compliance has improved since 2010 in most CDC risk factor categories. From 2010 to 2015, we saw more facilities complying with the requirement to have a Certified Food Protection Manager (CFPM) present; however, the rate of compliance fell in 2020. This could be attributed to the relaxation of the CFPM requirement during the COVID-19 pandemic. Although presence of CFPMs and compliance with employee health policy are not risk factors, compliance with these items of interest may attribute to overall improvement in the CDC risk factors.

In 2020, the most commonly observed OUT of compliance risk factors were:

- Improper Holding (25% out of compliance)
- Protection from Contamination (14% out of compliance)

For the improper holding risk factor category, the most common individual OUT of compliance survey items were:

- Time as Public Health Control (Item 9d) (45% out of compliance)
- Improper cold holding of potentially hazardous food (Item 7a) (36% out of compliance)

Based on the survey findings the following individual items, within a risk factor category, should be targeted for priority education and outreach:

Individual Data Item from survey	Risk Factor Category	Percent OUT of compliance with 2009 Food Code
Time as Public Health Control (Item 9d)	Improper Holding	45%
Cold Hold (41°F) (item 7a)	Improper Holding	36%
Hot and Cold Holding (Item 8b)	Improper Holding	33%
Food contact surfaces (item 11a)	Contamination	28%

Food allergen awareness and education were introduced to the 2017 FDA Food Code; however this regulation has not been added in the North Carolina code. As expected, the study found very low compliance with food allergy awareness with 82% of observations for awareness being OUT of compliance.

V. Recommendations

The common goal of industry and regulatory agencies is to protect public health by reducing or eliminating risk factors that contribute to foodborne illness. The study indicates there has been significant improvement over the ten-year period in most risk categories and shows that improper holding remains the most concerning risk factor. Wake County should use the study to develop interventions that address priority OUT of compliance categories and the following specific items:

- Cold Holding – Continue to focus on cold holding compliance, particularly in the restaurant sector (full service and fast food facilities.) Develop print materials to distribute at routine inspections. Provide temperature measuring devices to distribute to facilities.

- Time as a Public Health Control (TPHC) should be considered in situations that could effectively eliminate cold holding non-compliance. Educate staff to use the NC Code Enforcement Strategies Manual which has the tools for TPHC and risk control plans.
- Employee Health Policy – Develop programming to address compliance with Employee Health Policy, especially in the retail sector (delis, meat markets, seafood markets and produce departments.) Distribute employee health materials periodically.
- Food Allergen Awareness and Training – Develop educational materials that support Wake County operators and consumers. Distribute materials to operators.

The County's active participation in the FDA's Program Standards will provide guidance for identifying risk factors that should be given priority for inspection, education, and enforcement. To keep up with the latest science and public health interventions, Wake County should advocate for food policies that are current with the latest FDA Food Code.

II. INTRODUCTION

A. Background

The U.S. Food and Drug Administration (FDA) is responsible for setting standards for safe production of foods and advising state and local governments on food safety standards for institutional food service establishments, restaurants, retail food stores and other food establishments. Adoption of the FDA Food Code at the state, local and tribal level has been a keystone in the effort to promote greater uniformity.

North Carolina's "Rules Governing the Sanitation of Food Establishments," were initially adopted in 1976 and based on the 1976 "Food Service Sanitation Manual Including a Model Food Service Sanitation Ordinance." In 2009, Wake County conducted an assessment of North Carolina rules as compared to the 2005 FDA Food Code. At that time, North Carolina rules addressed 3 of the 11 key public health interventions and controls for risk factors that contribute to foodborne illness. In addition, the general retail practices of North Carolina rules were 46% compliant with Good Retail Practices of the 2005 FDA Food Code. In 2012, the State of North Carolina adopted new rules based on the 2009 FDA Food Code. The 2012 N.C. Food Code addresses eight of the 11 key public health intervention/risk factor categories and is 96% compliant with the Good Retail Practices of the 2013 FDA Food Code. The reduction in risk factors may be attributed to the improvement in regulatory foundation.

Wake County enrolled in the FDA Voluntary National Retail Food Regulatory Program Standards (Program Standards) in February 2008, and currently meets six of the nine standards. Through its involvement with the Program Standards, Wake County is focusing more on identifying and correcting risk factors during routine inspections.

Wake County conducted a baseline risk factor study in 2010. Follow-up risk factor studies were completed in 2015 and 2020. The factors surveyed in each risk factor study included:

- Food from unsafe sources;
- Inadequate cooking;
- Improper holding temperatures;
- Contaminated equipment; and
- Poor personal hygiene.

Data for the 2010 baseline study was obtained from 458 total inspections of institutional food service establishments, restaurants and retail food stores, with a total of 8,861 observations. Data for the 2015 risk factor study was obtained from 447 total inspections of institutional food service establishments, restaurants and retail food stores, with a total of 8,596 observations. Data for the 2020 Risk Factor Study was obtained from 465 total inspections of institutional

food service establishments, restaurants and retail food stores, with a total of 9,786 observations. This report is provided to regulators and industry to focus greater attention on out-of-compliance risk factors.

B. Purpose

The purpose of the Wake County 2020 Risk Factor Study is to compare 2015 and 2020 data to the 2010 baseline study so that industry and regulatory agencies can measure behavioral changes that directly relate to foodborne illness. In addition, the study is comparable to the national risk factor data.

The 2020 Wake County Risk Factor Study serves two purposes:

1. To identify risk factors most in need of priority attention and develop strategies to reduce their occurrence.
2. To evaluate trends over time and determine whether progress is being made toward reducing the occurrence of foodborne illness risk factors.

Based on the design and sample size, the Wake County 2020 study results are valid for comparison with Wake County's 2010 and 2015 baseline study and previous national studies on the "Occurrence of Foodborne Illness Risk Factors."

C. Study Design and Objectives

This study contains nine separate reports of data analyses – one for each of the nine different facility types. The target industry segments for this project are institutional foodservice, restaurants and retail food stores. Of the nine facility types, three were associated with institutional foodservice – hospitals, nursing homes and elementary schools (kindergarten through fifth grade). The restaurant industry segment was comprised of two facility types – fast food and full service. Four facility types were departments of retail food stores and independent specialty operations related to delis, meat and poultry markets, seafood markets and produce departments.

The objective of this study is to improve food preparation practices and employee behaviors within institutional food service establishments, restaurants and food stores.

III. Methodology

In order to detect trends of improvement or regression from the 2010 baseline measurements, it was critical that the methodology used to collect data, as well as the study design, remained consistent for each data collection. The following sections of the report present an overview of the methodology used in this study.

A. Selection of facilities

For this study, nine facility types were chosen from three different segments of the foodservice and retail food industries. The selected industry segment samples provided coverage of general and highly susceptible populations, and also covered most of the industry segments regulated by the retail food inspection program. Highly susceptible populations are defined as a group of persons who are more likely than other individuals to experience foodborne illness because of their current health status or age.

The chart below reflects the three industry segments and nine facility types selected for the survey. Sample sizes (n) for each type are shown. Using FDA's Data Collection Manual (2020), Wake County randomly determined the appropriate sample size to achieve statistical significance for each type facility for each industry segment, and randomly selected 465 facilities for the survey.¹

Industry Segment	Facility Type
Institutions	Hospitals (n=7) Nursing Homes (n=38) Elementary Schools (n=59)
Restaurants	Fast Food Restaurants (n=87) Full Service Restaurants (n=87)
Retail Food Stores	Delis (n=57) Meat Markets (n=63) Produce Departments (n=53) Seafood Markets (n=14)

Selection Criteria: Using the list of operating facilities in the county, each facility was categorized according to type and risk category (Appendix M). Using the definitions on the following pages, each establishment was categorized as a facility type. For each facility type, the following logic was used to select the group for consideration in the sample:

- **Hospital** food service establishments (n=7) were selected from those facilities that served each of the County's six hospitals. Hospital cafeterias in Wake County are

¹ FDA Data Collection Manual, "Developing a Baseline on the Occurrence of Foodborne Illness Risk Factors," page 12.

classified by the North Carolina Department of Environment and Natural Resources (N.C. DHHS) types #01 or #16. Because of the low sample size, all hospital cafeterias were included in the study.

- **Nursing Home** food establishments (n=38) were selected based on the N.C. DHHS type #16. Each of these food establishments serves clients from nursing facilities.
- **Elementary School** food establishments (n=59) were selected from the list of private and public school lunchrooms with a risk category of 4. These facilities served school children from kindergarten through fifth grade.
- **Fast Food Restaurants** (n=87) were selected from N.C. DHHS types #01 and #02 that had a risk category of 2 or 3. The sample did not consider the type of service provided by the fast food establishment, such as counter, wait or drive-through service.
- **Full Service Restaurants** (n=87) were selected from N.C. DHHS types #01 and #02 that had a risk category of 4.
- **Delis** (n=57) were selected from the raw data by considering the word “deli” in the name of the establishment. These were most often associated with a retail grocery store. In addition, other facilities were selected based on the definition used in Annex 1.² Delis typically slice meats and cheeses; however, they may serve cooked foods and deli salads.
- **Meat Markets** (n=63) were selected from the N.C. DHHS type #30. Other facilities that sold raw meat or poultry directly to consumers were also considered.³
- **Produce Departments** (n=53) were selected from facilities that cut, prepare, store or display produce. These facilities were often associated with retail grocery stores. Facilities were flagged for consideration if they had “produce” or “salad bar” in their names.
- **Seafood Markets** (n=14) were selected from facilities that sell seafood directly to the consumer, including raw and ready-to-eat products. Seafood restaurants were not considered for this category, but were considered for fast food or full service restaurants.

Risk categories: Studies have shown that the types of food served, the food preparation processes used, the volume of food and the populations served all have a bearing on the occurrence of foodborne illness risk factors in retail and foodservice establishments. The 2020 Wake County baseline survey used the State’s category flow chart in Appendix M.

² FDA Data Collection Manual, “Developing a Baseline on the Occurrence of Foodborne Illness Risk Factors,” page 43.

³ Ibid.

B. Random Selection of Establishments

The project manager generated a list of facility types, and then randomized it in a Microsoft Excel spreadsheet. A sample number was assigned to each facility, including the first 10 substitutes, which were numbered sequentially. Data collectors were assigned facilities to evaluate. If a facility had gone out of business, the surveyor would be assigned the next substitute on the list.

Staff completed the surveys for each facility type before proceeding to the next facility type. This allowed staff to focus on similar process associated with a facility type.

C. Selection of Data Collectors

The same survey team from 2015 returned to conduct the surveys in this study. Staff was trained by the FDA regional retail food specialist who initially accompanied staff to several facilities to perform surveys.

Staff met weekly to discuss the process, clarify questions and review colleagues' data collection forms. Throughout the process, staff consulted with the FDA regional retail food specialist.

D. Geographical Locations

To minimize travel costs, staff was assigned facilities in a particular geographic area. Staff surveyed the sample in the following order: Institutional (Hospitals, Nursing Home Kitchens, Elementary School Cafeterias), Restaurants (Fast Food and Full Service) and Retail Food Stores (Deli, Meat, Produce and Seafood). Retail food stores were grouped by address, and all types located at that address were surveyed at a single visit.

E. Baseline Data Collection Procedure

The five major risk factors contributing to foodborne illness identified by the CDC provided the foundation for the data collection inspection form. See Appendix O, "2015 Data Collection Form". For each risk factor, Food Code requirements were identified and grouped into individual data items on the inspection form. See Appendix N, "2020 Reference Sheet." An additional risk factor, "Other," was used to capture the potential food safety risks related to possible contamination by toxic or unapproved chemicals in the establishment. Data related to Certified Food Protection Manager (CFPM) was also captured.

Unannounced visits to selected establishments were designed to be observational rather than regulatory. The surveyor was not the regularly assigned staff person for that facility. If observations merited regulatory action, the survey representative would ask for correction of the condition and follow up with the environmental health specialist (EHS) assigned to that facility to ensure long term correction.

F. Baseline Data Collection Form

The 2020 Data Collection inspection form (Appendix O) contained 46 individual data items. For each of the 46 observations, the EHS determined whether the item was:

- IN=Item found “in compliance” with 2017 FDA Food Code provisions.
- OUT=Item found “out of compliance” with 2017 FDA Food Code provisions. An explanation was provided in the comment section on the data collection form for each “out of compliance” observation.
- NO=Item was “not observed.” The “NO” notation was used when an item was a usual practice in the food service operation, but the practice was not observed during the time of the inspection.
- NA=Item was “not applicable.” The “NA” notation was used when an item was not part of the food service operation.

The same data collection form was used at each establishment. The completed data collection inspection forms were sent to a project manager. Before data entry, the project manager thoroughly reviewed each form to ensure reporting consistency.

G. Quality Control

To ensure quality control, staff met weekly to discuss issues and to ask questions. Staff consulted with the FDA regional retail food specialist frequently for interpretation. Emails have been archived for future reference.

After the data sheets were collected and reviewed, the project managers cross-referenced the entries on the raw data sheets with the electronically entered data to ensure they had been entered accurately. An outside staff person audited the final tabulations to confirm the results of the study.

H. Average Time per Data Collection

During data collection, Wake County tracked the actual time spent in each of the inspected establishments. Table 6, which appears on the following page, presents the average data collection time, in minutes, for each of the facility types and compares the 2020 study and 2015 study and the 2010 baseline study. Travel time and off-site report preparation were not included in the time assessment.

Table 6

**Average Inspection Time per Establishment for Each of the Nine Facility Types
(Measured in Minutes)**

		Average Inspection Time (In Minutes)		
Facility Type	2020 Wake County	2015 Wake County	2010 Wake County	2008 FDA
Hospitals	60	64	79	138
Nursing Homes	46	58	56	81
Elementary Schools	42	33	40	91
Fast Food Restaurants	51	35	39	73
Full Service Restaurants	72	51	55	106
Deli	57	46	50	80
Meat & Poultry	45	30	28	36
Produce	47	29	26	33
Seafood	53	32	29	41

IV - A. Institutional Food Service - Hospitals

Introduction

In 2020, all hospital cafeterias were assessed for food safety risk factors. For the 46 possible individual data items on the survey instrument, 175 observations were made at seven hospital kitchens. See Appendix A for complete data related to hospitals.

Certified Food Protection Managers (CFPM) (100%): For this survey, a CFPM had to be present. A CFPM is defined as an employee who has supervisory responsibility and the authority to direct and control food preparation. The CFPM must have passed an American National Standards Institute (ANSI) accredited program and present a certificate during the assessment. A CFPM was present at all seven facilities (100% IN compliance).

Employee Health Policy (0%): There was 0% compliance with the most current employee health policy at the 7 surveyed hospitals. Staff should target education related to this important intervention.

Results and Discussion

The following chart represents IN compliance risk factors by category as a percentage of total observations. It also shows other individual items and intervention compliance.

Foodborne Illness Risk Factor Risk Factor IN Compliance:	Hospital Cafeterias								
	2010			2015			2020		
	% IN	# IN observations	Total observations	% IN	# IN observations	Total observations	% IN	# IN observations	Total observations
Approved Source	100%	14	14	100%	12	12	100%	16	16
Inadequate Cooking	100%	10	10	75%	9	12	83%	5	6
Improper Holding	67%	31	46	84%	36	43	71%	24	34
Contamination	94%	33	35	83%	25	30	77%	27	35
Personal Hygiene	91%	31	34	90%	27	30	97%	33	34
Risk Factor Totals	86%	119	139	86%	109	127	84%	105	125
Other interventions	% IN	# IN observations	Total Observations	% IN	# IN observations	Total Observations	% IN	# IN observations	Total Observations
CFPM Present	71%	5	7	100%	6	6	100%	7	7
Employee Health Policy	43%	3	7	17%	1	6	0%	0	7
Highly Susceptible Populations	100%	21	21	100%	18	18	100%	21	21
Food Allergy Awareness (19a)	NA	NA	NA	NA	NA	NA	43%	3	7

The overall compliance with CDC risk factors at hospital cafeterias has remained mostly unchanged over the ten-year period, showing reductions in compliance with holding and contamination. Personal hygiene risk factors are trending toward greater compliance. The small population and number of observations may inflate percentage changes, so be aware of the actual number of observations when interpreting the data. See Appendix A for detailed observation data.

IV - B. Institutional Food Service - Nursing Homes

Introduction

In 2020, nursing home kitchens were assessed for food safety risk factors. For the 46 possible individual data items on the survey instrument, 891 observations were made at thirty-eight nursing homes. See Appendix B for complete data related to nursing homes.

Certified Food Protection Managers (CFPM) (63%): For this survey, a CFPM had to be present. A CFPM is defined as an employee who has supervisory responsibility and the authority to direct and control food preparation. The CFPM must have passed an American National Standards Institute (ANSI) accredited program and present a certificate during the assessment. A CFPM was present at 25 of the 38 surveyed facilities (63% IN compliance).

Employee Health Policy (34%): Only 34% of the respondent could demonstrate an employee health policy that was compliant with the 2017 FDA Food Code.

Results and Discussion

The following chart represents IN compliance risk factors by category as a percentage of total observations. It also shows other individual items and intervention compliance.

Foodborne Illness Risk Factor Risk Factor IN Compliance:	Nursing Homes								
	2010			2015			2020		
	% IN	# IN observations	Total observations	% IN	# IN observations	Total observations	% IN	# IN observations	Total observations
Approved Source	100%	66	66	100%	66	66	99%	74	75
Inadequate Cooking	83%	34	41	97%	32	33	100%	11	11
Improper Holding	71%	135	189	65%	111	170	74%	127	171
Contamination	86%	139	162	88%	144	164	85%	150	177
Personal Hygiene	83%	134	161	92%	150	163	90%	167	186
Risk Factor Totals	82%	508	619	84%	503	596	85%	529	620
Other interventions	% IN	# IN observations	Total Observations	% IN	# IN observations	Total Observations	% IN	# IN observations	Total Observations
CFPM Present	55%	18	33	70%	23	33	63%	24	38
Employee Health Policy	0%	0	33	3%	1	33	34%	13	38
Highly Susceptible Populations	96%	95	99	98%	97	99	100%	111	111
Food Allergy Awareness (19a)	NA	NA	NA	NA	NA	NA	26%	10	38

The overall compliance with CDC risk factors at nursing home kitchens has improved slightly over the ten-year period. See Appendix B for detailed observational data.

IV - C. Institutional Food Service - Elementary Schools

Introduction

In 2020, elementary school kitchens were assessed for food safety risk factors. For the 46 possible individual data items on the survey instrument, 1,281 observations were made at 59 elementary schools. See Appendix C for complete data related to elementary schools.

Certified Food Protection Managers (CFPM) (97%): For this survey, a CFPM had to be present. A CFPM is defined as an employee who has supervisory responsibility and the authority to direct and control food preparation. The CFPM must have passed an American National Standards Institute (ANSI) accredited program and present a certificate during the assessment. A CFPM was present at 59 facilities (97% IN compliance).

Employee Health Policy (95%): The Elementary School Cafeteria segment continue to lead compliance with employee health policy with only three of the schools surveyed not complying.

Results and Discussion

The following chart represents IN compliance risk factors by category as a percentage of total observations. It also shows other individual items and intervention compliance.

Foodborne Illness Risk Factor Risk Factor IN Compliance:	Elementary Schools								
	2010			2015			2020		
	% IN	# IN observations	Total observations	% IN	# IN observations	Total observations	% IN	# IN observations	Total observations
Approved Source	100%	115	115	99%	110	111	100%	118	118
Inadequate Cooking	94%	50	53	100%	37	37	96%	23	24
Improper Holding	59%	183	309	72%	185	258	84%	217	259
Contamination	96%	168	175	93%	164	177	99%	180	181
Personal Hygiene	94%	267	285	96%	273	283	98%	290	295
Risk Factor Totals	84%	783	937	89%	769	866	94%	828	877
Other interventions	% IN	# IN observations	Total Observations	% IN	# IN observations	Total Observations	% IN	# IN observations	Total Observations
CFPM Present	82%	47	57	91%	52	57	97%	57	59
Employee Health Policy	0%	0	57	89%	51	57	95%	56	59
Highly Susceptible Populations	100%	171	171	100%	168	168	100%	168	168
Food Allergy Awareness (19a)	NA	NA	NA	NA	NA	NA	17%	10	59

The overall compliance with CDC risk factors at elementary school cafeterias has shown solid and continued improvement. The holding/time and temperature category might be improved by exploring options of time as a public health control (TPHC) to mitigate this risk factor. Appendix C for complete data related to elementary school lunchrooms.

IV - D. Restaurants - Fast Food

Introduction

In 2020, fast food restaurants were assessed for food safety risk factors. For the 46 possible individual data items on the survey instrument, 1,806 observations were made at 87 fast food restaurants. See Appendix D for complete data related to fast food restaurants.

Certified food protection managers (CFPM) (70% compliant): For this survey, a CFPM had to be present. A CFPM is defined as an employee who has supervisory responsibility and the authority to direct and control food preparation. The CFPM must have passed an American National Standards Institute (ANSI) accredited program and present a certificate during the assessment. A CFPM was present at 61 facilities of the 87 facilities (70% IN compliance). CFPM compliance has improved significantly over the ten-year period.

Employee Health Policy (62%): 62% of surveyed facilities showed compliance with the 2017 FDA Food Code.

Results and Discussion

The following diagram represents IN compliance risk factors by category as a percentage of total observations.

Foodborne Illness Risk Factor Risk Factor IN Compliance:	Fast Food								
	2010			2015			2020		
	% IN	# IN observations	Total observations	% IN	# IN observations	Total observations	% IN	# IN observations	Total observations
Approved Source	99%	177	179	99%	175	177	99%	177	179
Inadequate Cooking	89%	76	85	90%	53	59	97%	58	60
Improper Holding	52%	224	430	58%	219	376	72%	303	423
Contamination	87%	303	349	87%	306	351	85%	303	356
Personal Hygiene	76%	308	406	90%	392	435	88%	380	433
Risk Factor Totals	75%	1088	1449	82%	1145	1398	84%	1221	1451
Other interventions	% IN	# IN observations	Total Observations	% IN	# IN observations	Total Observations	% IN	# IN observations	Total Observations
CFPM Present	28%	24	87	54%	47	87	70%	61	87
Employee Health Policy	9%	8	87	0%	0	87	62%	54	87
Food Allergy Awareness (19a)	NA	NA	NA	NA	NA	NA	20%	17	87

The overall compliance with CDC risk factors at fast food establishments has improved over the ten-year period with a minor decline in the contamination risk factor between 2015 and 2020. This may be attributed to less staff present during the pandemic. The study shows that operators are poorly trained to handle requests from food allergic customers. See Appendix D for complete data related to fast food restaurants.

IV - E. Restaurants - Full Service

Introduction

In 2020, full-service restaurants were assessed for food safety risk factors. For the 46 possible individual data items on the survey instrument, 1,969 observations were made at 87 full-service restaurants. See Appendix E for complete data related to full-service restaurants.

Certified Food Protection Managers (CFPM) (84%): For this survey, a CFPM had to be present. A CFPM is defined as an employee who has supervisory responsibility and the authority to direct and control food preparation. The CFPM must have passed an American National Standards Institute (ANSI) accredited program and present a certificate during the assessment. A CFPM was present at 73 surveyed facilities (84% IN compliance).

Employee Health Policy (59%): Operators at over half the survey facilities could produce an employee health policy that is compliant with the 2017 FDA Food Code.

Results and Discussion

The following table represents IN compliance risk factors by category as a percentage of total observations. It also shows other individual items and intervention compliance.

Foodborne Illness Risk Factor Risk Factor IN Compliance:	Restaurants								
	2010			2015			2020		
	% IN	# IN observations	Total observations	% IN	# IN observations	Total observations	% IN	# IN observations	Total observations
Approved Source	90%	194	216	92%	186	203	97%	197	203
Inadequate Cooking	92%	121	132	92%	72	78	90%	55	61
Improper Holding	42%	209	501	54%	268	500	69%	327	475
Contamination	79%	339	429	84%	360	428	81%	343	426
Personal Hygiene	71%	297	421	82%	358	435	89%	387	435
Risk Factor Totals	68%	1160	1699	76%	1244	1644	82%	1309	1600
Other interventions	% IN	# IN observations	Total Observations	% IN	# IN observations	Total Observations	% IN	# IN observations	Total Observations
CFPM Present	46%	40	87	72%	63	87	84%	73	87
Employee Health Policy	1%	1	87	1%	1	87	59%	51	87
Food Allergy Awareness	NA	NA	NA	NA	NA	NA	9%	8	87
Totals (include individual items)	64%	1201	1873	72%	1308	1818	77%	1441	1861

The overall compliance of CDC risk factors at the full-service restaurant industry segment have improved over the ten-year period. There is some lag related to the contamination risk factor. Of note, only 9% of operators could demonstrate a good working knowledge of allergen awareness.

IV - F. Retail Food - Delis

Introduction

In 2020, delis were assessed for food safety risk factors. For the 46 possible individual data items on the survey instrument, 1,272 observations were made at 57 delis. See Appendix F for complete data related to delis.

Certified Food Protection Managers (CFPM) (47%): For this survey, a CFPM had to be present. A CFPM is defined as an employee who has supervisory responsibility and the authority to direct and control food preparation. The CFPM must have passed an American National Standards Institute (ANSI) accredited program and present a certificate during the assessment. A CFPM was present at 27 of the 57 surveyed facilities (47% IN compliance).

Employee Health Policy (77%): There was a significant improvement over the ten-year period for compliance with Employee Health Policy, from 21% compliance in 2010 to 77% compliance in 2020.

Results and Discussion

The following chart represents IN compliance risk factors by category as a percentage of total observations. It also shows other individual items and intervention compliance.

Foodborne Illness Risk Factor Risk Factor IN Compliance:	Deli								
	2010			2015			2020		
	% IN	# IN observations	Total observations	% IN	# IN observations	Total observations	% IN	# IN observations	Total observations
Approved Source	91%	125	137	93%	139	149	99%	143	144
Inadequate Cooking	95%	40	42	100%	35	35	100%	40	40
Improper Holding	64%	191	297	73%	225	310	82%	251	306
Contamination	93%	236	253	90%	225	249	88%	222	252
Personal Hygiene	85%	233	273	88%	252	285	93%	263	284
Risk Factor Totals	82%	825	1002	85%	876	1028	90%	919	1026
Other interventions	% IN	# IN observations	Total Observations	% IN	# IN observations	Total Observations	% IN	# IN observations	Total Observations
CFPM Present	46%	26	57	74%	42	57	47%	27	57
Employee Health Policy	21%	12	57	16%	9	57	77%	44	57
Food Allergy Awareness (19a)	NA	NA	NA	NA	NA	NA	19%	11	57

The overall compliance with CDC risk factors in deli operations has improved significantly over the ten-year period. Only the contamination risk factor showed some lag in improvement. This may be attributed to lack over oversight during the pandemic when staff resources were stretched. Note also, there presence of a CFPM declined as well. See Appendix F for complete data related to delis.

IV - G. Retail Food - Meat Markets

Introduction

In 2020, meat markets were assessed for food safety risk factors. For the 46 possible individual data items on the survey instrument, 1,152 observations were made at 63 meat markets. See Appendix G for complete data related to meat markets.

Certified Food Protection Managers (CFPM) (41%): For this survey, a CFPM had to be present. A CFPM is defined as an employee who has supervisory responsibility and the authority to direct and control food preparation. The CFPM must have passed an American National Standards Institute (ANSI) accredited program and present a certificate during the assessment. A CFPM was present at 26 of the 63 surveyed facilities (41% IN compliance).

Employee Health Policy (70%): Health Policy compliance was observed to be at the highest over the 10-year period. In 2010, only 10% of Wake County delis were compliant with employee health policy, whereas 70% were compliant during the 2020 study.

Results and Discussion

The following chart represents IN compliance risk factors by category as a percentage of total observations. It also shows other individual items and intervention compliance.

Foodborne Illness Risk Factor Risk Factor IN Compliance:	Meat Market								
	2010			2015			2020		
	% IN	# IN observations	Total observations	% IN	# IN observations	Total observations	% IN	# IN observations	Total observations
Approved Source	96%	124	129	100%	151	151	97%	162	167
Inadequate Cooking	NA	0	0	100%	2	2	100%	2	2
Improper Holding	71%	63	89	90%	73	81	74%	104	141
Contamination	84%	224	266	90%	256	285	82%	247	300
Personal Hygiene	90%	200	222	95%	247	259	95%	275	289
Risk Factor Totals	87%	611	706	94%	729	778	88%	790	899
Other interventions	% IN	# IN observations	Total Observations	% IN	# IN observations	Total Observations	% IN	# IN observations	Total Observations
CFPM Presence	25%	15	59	78%	46	59	41%	26	63
Employee Health Policy	14%	8	59	17%	10	59	70%	44	63
Food Allergy Awareness (19a)	NA	NA	NA	NA	NA	NA	16%	10	63

The overall compliance with CDC risk factors in meat markets has not significantly improved over the 10-year period. Holding and contamination compliance declined over the last five years which may be attributed to staffing resources during the pandemic, when we also observed less compliance with the presence of a CFPM.

IV - H. Retail Food - Produce

Introduction

In 2020, produce departments were assessed for food safety risk factors. For the 46 possible individual data items on the survey instrument, 950 observations were made at 53 produce establishments. See Appendix H for complete data related to produce.

Certified Food Protection Managers (CFPM) (38%): For this survey, a CFPM had to be present. A CFPM is defined as an employee who has supervisory responsibility and the authority to direct and control food preparation. The CFPM must have passed an American National Standards Institute (ANSI) accredited program and present a certificate during the assessment. A CFPM was present at 20 of the surveyed facilities (38% IN compliance), notably lower than in 2015.

Employee Health Policy (75%): There was significant improvement in compliance with Employee Health Policy over the 10-year period, from 14% in 2010 to 75% in 2020.

Results and Discussion

The following chart represents IN compliance risk factors by category as a percentage of total observations. It also shows other individual items and intervention compliance.

Foodborne Illness Risk Factor Risk Factor IN Compliance:	Produce								
	2010			2015			2020		
	% IN	# IN observations	Total observations	% IN	# IN observations	Total observations	% IN	# IN observations	Total observations
Approved Source	100%	87	87	100%	76	76	100%	106	106
Inadequate Cooking	NA	0	0	NA	0	0	NA	0	0
Improper Holding	62%	76	123	80%	111	139	81%	127	157
Contamination	92%	116	126	88%	100	114	93%	150	162
Personal Hygiene	84%	130	154	93%	166	178	97%	248	256
Risk Factor Totals	83%	409	490	89%	453	507	93%	631	681
Other interventions	% IN	# IN observations	Total Observations	% IN	# IN observations	Total Observations	% IN	# IN observations	Total Observations
CFPM Presence	29%	12	42	79%	30	38	38%	20	53
Employee Health Policy	14%	6	42	3%	1	38	75%	40	53
Chemicals Stored Properly (Retail) (16c)	71%	30	42	68%	25	37	91%	48	53
Food Allergy Awareness	NA	NA	NA	NA	NA	NA	23%	12	53

The overall compliance with CDC risk factors has made steady improvement over the 10-year period. Holding continues to be the individual item of priority concern. We observed a significantly lower presence of a CFPM during our 2020 visits, which may be associated with staff resources during the pandemic. See Appendix H for complete data related to produce.

IV - I. Retail Food - Seafood

Introduction

In 2020, seafood markets were assessed for food safety risk factors. For the 46 possible individual data items on the survey instrument, 290 observations were made at 14 seafood establishments. See Appendix I for complete data related to seafood.

Certified Food Protection Managers (CFPM) (29%): For this survey, a CFPM had to be present. A CFPM is defined as an employee who has supervisory responsibility and the authority to direct and control food preparation. The CFPM must have passed an American National Standards Institute (ANSI) accredited program and present a certificate during the assessment. Compliance declined significantly since 2015 for this item.

Employee Health Policy (43%): There was significant improvement in compliance with Employee Health Policy since our last study in 2015; however more than half the sites surveyed could not satisfy this requirement.

Results and Discussion The following chart represents IN compliance risk factors by category as a percentage of total observations. It also shows other individual items and intervention compliance.

Foodborne Illness Risk Factor Risk Factor IN Compliance:	Seafood								
	2010			2015			2020		
	% IN	# IN observations	Total observations	% IN	# IN observations	Total observations	% IN	# IN observations	Total observations
Approved Source	92%	88	96	92%	84	91	95%	59	62
Inadequate Cooking	NA	0	0	NA	0	0	100%	1	1
Improper Holding	66%	65	98	65%	43	66	85%	34	40
Contamination	89%	121	136	88%	84	95	90%	56	62
Personal Hygiene	92%	99	108	92%	106	115	96%	66	69
Risk Factor Totals	85%	373	438	86%	317	367	92%	216	234
Other interventions	% IN	# IN observations	Total Observations	% IN	# IN observations	Total Observations	% IN	# IN observations	Total Observations
CFPM Presence	24%	7	29	61%	14	23	29%	4	14
Employee Health Policy	21%	6	29	0%	0	23	43%	6	14
Food Allergy Awareness (19a)	NA	NA	NA	NA	NA	NA	29%	4	14

The overall compliance with CDC risk factors has made steady improvement over the 10-year period. See Appendix I for complete data related to seafood markets.

IV. Results and Discussion - Summary

The results of this study highlight foodborne illness risk factors associated with food preparation procedures and employee behaviors. A common goal for industry and regulators is to reduce the occurrence of foodborne illness risk factors. Industry achieves this goal through education and active managerial control. Recommended intervention strategies for both regulatory and industry food safety professionals are presented in Section V, “Recommendations.”

The 2020 Wake County study instrument consisted of 46 individual data items that are grouped into the five CDC risk factor categories and sections for chemicals, employee health policy and food preparation for highly susceptible populations. The individual data items on the study form are grouped as follows:

Risk Factor	Individual Data Items	Number of items
Food source	1a-3c	7
Inadequate cooking	4a-5d	12
Improper holding	6a-9d	10
Contamination	10a-11a	5
Personal hygiene	12a-15b	5
Other/chemical	16a-18c	7
Food Allergy Awareness	19a-19b	2

The study instrument is available at Appendix O “2020 Data Collection Form.”

Certified Food Protection Manager (CFPM) Presence

Designation of a person in charge during all hours of operation ensures the continuous presence of someone who is responsible for monitoring and managing all food establishment operations and who is authorized to take actions to ensure that public health objectives are fulfilled. During the day-to-day operation of a food establishment, a person who is immediately available and knowledgeable in both operational and regulatory requirements is needed to respond to questions and concerns and to resolve problems. During the 2020 Wake County risk factor study, staff surveyed whether a Certified Food Protection Manager (CFPM) was present and could present a state-approved course certificate. If the conditions were met, the observation was marked IN compliance.

The table above shows the incidence of CFPMs present in each facility type, as well as total. The cells are shaded when the values show a decline over time. In general, Wake County saw an increase in presence of a CFPM in the first five years, but these gains declined during the 2020 study, perhaps due to limited staffing resources during the pandemic. Also, the state relaxed the training requirement for managers to accommodate the unprecedented times.

	2010	2015	2020
Facility Type	% CFPM presence	% CFPM presence	% CFPM presence
Hospitals	71%	100%	100%
Nursing Homes	55%	70%	63%
Elementary Schools	82%	91%	97%
Fast Food Restaurants	28%	54%	70%
Full-Service Restaurants	46%	72%	84%
Deli	46%	74%	47%
Meat	25%	78%	41%
Produce	29%	79%	38%
Seafood	24%	61%	70%
Overall (Total)	42%	72%	64%

Presentation of the data results

A summary of the overall percentage of IN compliance individual data items (Appendix K) per facility type is presented in Table 1 of this section. The data reflects the overall percentage of observable and applicable data items found to be IN compliance.

Table 1

Overall percent (%) of Observable and Applicable Data Items found IN compliance by facility type						
		2010 Wake County Study % IN Compliance	2015 Wake County Study % IN Compliance	2020 Wake County Study % IN Compliance	FDA National 2008 study	FDA National 2003 study
Institutions	Hospital	84%	86%	84%	81%	80%
	Nursing Home	82%	84%	85%	83%	80%
	Elementary School	84%	89%	94%	84%	83%
Restaurants	Fast Food	75%	81%	84%	78%	74%
	Full Service	68%	76%	82%	64%	62%
Retail Store Departments	Deli	82%	85%	90%	74%	70%
	Meat Markets	87%	94%	88%	88%	80%
	Produce	83%	89%	93%	86%	79%
	Seafood	85%	86%	92%	84%	80%

2020 Wake County Risk Factor Study calculation: Percentage IN compliance=all applicable, observable, IN COMPLIANCE data items within all risk factor categories(IN) / total number of observations (IN and OUT) *Note: The data in Table 1 represents the percentages of observations found IN compliance with the 2013 Food Code.*

Percentage of IN compliance observations for each risk factor category for each of the nine facility types is presented in Appendix K. The table provides the percent of IN compliance observations for each of the nine facility types as they pertain to controlling the five risk factors contributing to foodborne illness. The “Other” risk factor is included to collect data on the storage and use of chemicals.

Percentage of OUT of compliance observations for each risk factor category for each of the nine facility types is presented in Appendix L. The table provides the percentage of OUT of compliance observations for each of the nine facility types as they pertain to controlling the five risk factors contributing to foodborne illness. The “Other” risk factor is included to collect data on the storage and use of chemicals. This table provides the basis of directing priority attention to specific risk factors for each facility type.

Immediately following this section, the results are presented separately for each of the nine facility types, as independent reports.

These sections are:

- A. Institutional Food Service - Hospitals
- B. Institutional Food Service - Nursing Homes
- C. Institutional Food Service - Elementary Schools
- D. Restaurants - Fast Food
- E. Restaurants - Full Service
- F. Retail Food Stores - Delis
- G. Retail Food Stores - Meat Markets
- H. Retail Food Stores - Produce
- I. Retail Food Stores - Seafood

V. Recommendations

The following recommendations are based on the findings in this report and are intended to enhance the effectiveness of regulatory and industry retail food protection programs. Each of the foodborne illness risk factors comprises food safety practices and employee behaviors. These practices and behaviors are captured by the individual data items in this report and are based on the food safety provisions of the 2017 FDA Food Code.

The results of the 2020 risk factor study indicate that overall, we observed improved compliance overall but still have targeted work to do.

Foodborne Illness Risk Factor Risk Factor IN Compliance:	All Facilities								
	2010			2015			2020		
	% IN	# IN observations	Total observations	% IN	# IN observations	Total observations	% IN	# IN observations	Total observations
Approved Source	95%	990	1039	96%	999	1036	98%	1052	1070
Inadequate Cooking	91%	331	363	94%	240	256	95%	195	205
Improper Holding	57%	1177	2082	65%	1271	1943	75%	1514	2006
Contamination	87%	1679	1931	88%	1664	1893	86%	1678	1951
Personal Hygiene	82%	1699	2064	90%	1971	2183	92%	2109	2281
Risk Factor Totals	79%	5876	7479	84%	6145	7311	87%	6548	7513
Other interventions	% IN	# IN observations	Total Observations	% IN	# IN observations	Total Observations	% IN	# IN observations	Total Observations
CFPM Presence	42%	194	458	72%	323	447	64%	299	465
Employee Health Policy	10%	44	458	17%	74	447	66%	308	465
Food Allergy Awareness (19a)	NA	NA	NA	NA	NA	NA	18%	85	465

Wake County should use the study to develop interventions that address priority OUT of compliance categories and the following specific items:

- Cold Holding – Continue to focus on cold holding compliance, particularly in the restaurant sector (full service and fast-food facilities.) Develop print materials to distribute at routine inspections. Provide temperature measuring devices to distribute to facilities.
- Time as a Public Health Control (TPHC) should be considered in situations that could effectively eliminate cold holding non-compliance. Educate staff to use the NC Code Enforcement Strategies Manual which has the tools for TPHC and risk control plans.
- Employee Health Policy – Develop programming to address compliance with Employee Health Policy, especially in the retail sector (delis, meat markets, seafood markets and produce departments.) Distribute employee health materials periodically.
- Food Allergen Awareness and Training – Develop educational materials that support Wake County operators and consumers. Distribute materials to operators.

The County's active participation in the FDA's Program Standards will provide guidance for identifying risk factors that should be given priority for inspection, education, and enforcement. To keep up with the latest science and public health interventions, Wake County should advocate for food policies that are current with the latest FDA Food Code.

Summary of Findings by Facility Type

Facility Type=Hospitals

			Added Totals		n= 7							
			In+out	IN	% IN	OUT	% OUT	NA	% NA	NO	% NO	TOTAL %
		Certified Food Protection Manager Present	7	7	100%	0	0%	0	0%	0	0%	100%
1	A	Approved Source	7	7	100%	0	0%	0	0%	0	0%	100%
1	B	Approved Source	1	1	0%	0	0%	6	86%	0	0%	100%
1	C	Approved Source	1	1	0%	0	0%	6	86%	0	0%	100%
2	A	Receiving/Sound Condition	7	7	100%	0	0%	0	0%	0	0%	100%
3	A	Records	0	0	0%	0	0%	7	100%	0	0%	100%
3	B	Records	0	0	0%	0	0%	7	100%	0	0%	100%
3	C	Records	0	0	0%	0	0%	7	100%	0	0%	100%
4	A	Proper Cooking Temp	0	0	0%	0	0%	5	71%	2	29%	100%
4	B	Proper Cooking Temp	1	1	100%	0	0%	0	0%	6	86%	100%
4	C	Proper Cooking Temp	0	0	0%	0	0%	3	43%	4	57%	100%
4	D	Proper Cooking Temp	2	1	50%	1	50%	0	0%	5	71%	100%
4	E	Proper Cooking Temp	0	0	0%	0	0%	7	100%	0	0%	100%
4	F	Proper Cooking Temp	0	0	0%	0	0%	7	100%	0	0%	100%
4	G	Proper Cooking Temp	0	0	0%	0	0%	7	100%	0	0%	100%
4	H	Proper Cooking Temp	2	2	100%	0	0%	0	0%	5	71%	100%
5	A	Rapid Reheating/Hot Hold	0	0	0%	0	0%	0	0%	7	100%	100%
5	B	Rapid Reheating/Hot Hold	0	0	0%	0	0%	4	57%	3	43%	100%
5	C	Rapid Reheating/Hot Hold	1	1	100%	0	0%	0	0%	6	86%	100%
5	D	Rapid Reheating/Hot Hold	0	0	0%	0	0%	4	57%	3	43%	100%
6	A	Proper Cooling	0	0	0%	0	0%	0	0%	7	100%	100%
6	B	Proper Cooling	1	1	100%	0	0%	1	14%	5	71%	100%
6	C	Proper Cooling	0	0	0%	0	0%	0	0%	7	100%	100%
7	A	Cold Hold	7	5	71%	2	29%	0	0%	0	0%	100%
8	A	Hot Hold	6	3	50%	3	50%	0	0%	1	14%	100%
8	B	Hot Hold	1	0	0%	1	100%	3	43%	3	43%	100%
9	A	Time	6	4	67%	2	33%	0	0%	1	14%	100%
9	B	Time	7	5	71%	2	29%	0	0%	0	0%	100%
9	C	Time	6	6	100%	0	0%	0	0%	1	14%	100%
9	D	Time	0	0	0%	0	0%	5	71%	2	29%	100%
10	A	Separation	7	4	57%	3	43%	0	0%	0	0%	100%
10	B	Separation	7	6	86%	1	14%	0	0%	0	0%	100%
10	C	Separation	7	6	86%	1	14%	0	0%	0	0%	100%
10	D	Separation	7	7	100%	0	0%	0	0%	0	0%	100%
11	A	Food Contact Surfaces	7	4	57%	3	43%	0	0%	0	0%	100%
12	A	Proper Handwashing (2017 FDA Code)	7	7	100%	0	0%	0	0%	0	0%	100%
13	A	Good Hygienic Practices	7	7	100%	0	0%	0	0%	0	0%	100%
14	B	Prevention Hand Contamination (2013 Food Code)	6	6	100%	0	0%	0	0%	1	14%	100%
15	A	Handwash Facilities	7	6	86%	1	14%	0	0%	0	0%	100%
15	B	Handwash Facilities	7	7	100%	0	0%	0	0%	0	0%	100%
16	A	Chemicals	1	1	0%	0	0%	6	86%	0	0%	100%
16	B	Chemicals	7	7	100%	0	0%	0	0%	0	0%	100%
16	C	Chemicals	0	0	0%	0	0%	7	100%	0	0%	100%
17	A	Employee Health Policy (2017 Food Code)	7	0	0%	7	100%	0	0%	0	0%	100%
18	A	Highly Susceptible Populations	7	7	100%	0	0%	0	0%	0	0%	100%
18	B	Highly Susceptible Populations	7	7	100%	0	0%	0	0%	0	0%	100%
18	C	Highly Susceptible Populations	7	7	100%	0	0%	0	0%	0	0%	100%
19	A	Food Allergy Awareness	7	3	43%	4	57%	0	0%	0	0%	100%
19	B	Food Allergy Awareness	7	3	43%	4	57%	0	0%	0	0%	100%
		TOTAL (does not include CFPM, 16, 17, 18, 19)	125	105	84%	20	16%	79		69		

Summary of Findings by Facility Type
Facility Type=Nursing Homes

			Added									
			Totals	n=	38							
			In+out	IN	% IN	OUT	% OUT	NA	% NA	NO	% NO	TOTAL %
		Certified Food Protection Manager Present	38	24	63%	14	37%	0	0%	0	0%	100%
1	A	Approved Source	38	38	100%	0	0%	0	0%	0	0%	100%
1	B	Approved Source	0	0	0%	0	0%	38	100%	0	0%	100%
1	C	Approved Source	1	1	0%	0	0%	37	97%	0	0%	100%
2	A	Receiving/Sound Condition	36	35	97%	1	3%	2	5%	0	0%	100%
3	A	Records	0	0	0%	0	0%	38	100%	0	0%	100%
3	B	Records	0	0	0%	0	0%	38	100%	0	0%	100%
3	C	Records	0	0	0%	0	0%	38	100%	0	0%	100%
4	A	Proper Cooking Temp	0	0	0%	0	0%	30	79%	8	21%	100%
4	B	Proper Cooking Temp	0	0	0%	0	0%	7	18%	31	82%	100%
4	C	Proper Cooking Temp	0	0	0%	0	0%	15	39%	23	61%	100%
4	D	Proper Cooking Temp	1	1	100%	0	0%	7	18%	30	79%	100%
4	E	Proper Cooking Temp	0	0	0%	0	0%	38	100%	0	0%	100%
4	F	Proper Cooking Temp	0	0	0%	0	0%	38	100%	0	0%	100%
4	G	Proper Cooking Temp	0	0	0%	0	0%	30	79%	8	21%	100%
4	H	Proper Cooking Temp	4	4	100%	0	0%	6	16%	28	74%	100%
5	A	Rapid Reheating/Hot Hold	1	1	100%	0	0%	12	32%	25	66%	100%
5	B	Rapid Reheating/Hot Hold	0	0	0%	0	0%	32	84%	6	16%	100%
5	C	Rapid Reheating/Hot Hold	4	4	100%	0	0%	7	18%	27	71%	100%
5	D	Rapid Reheating/Hot Hold	1	1	0%	0	0%	28	74%	9	24%	100%
6	A	Proper Cooling	11	5	45%	6	55%	10	26%	17	45%	100%
6	B	Proper Cooling	6	5	83%	1	17%	6	16%	26	68%	100%
6	C	Proper Cooling	1	1	100%	0	0%	4	11%	33	87%	100%
7	A	Cold Hold	37	26	70%	11	30%	0	0%	1	3%	100%
8	A	Hot Hold	24	19	79%	5	21%	1	3%	13	34%	100%
8	B	Hot Hold	2	2	1%	0	0%	17	45%	19	50%	100%
9	A	Time	29	27	93%	2	7%	8	21%	1	3%	100%
9	B	Time	32	21	66%	11	34%	6	16%	0	0%	100%
9	C	Time	28	20	71%	8	29%	7	18%	3	8%	100%
9	D	Time	1	1	0%	0	0%	37	97%	0	0%	100%
10	A	Separation	32	27	84%	5	16%	6	16%	0	0%	100%
10	B	Separation	31	24	77%	7	23%	6	16%	1	3%	100%
10	C	Separation	38	32	84%	6	16%	0	0%	0	0%	100%
10	D	Separation	38	38	100%	0	0%	0	0%	0	0%	100%
11	A	Food Contact Surfaces	38	29	76%	9	24%	0	0%	0	0%	100%
12	A	Proper Handwashing (2017 FDA Code)	37	28	76%	9	24%	0	0%	1	3%	100%
13	A	Good Hygienic Practices	38	34	89%	4	11%	0	0%	0	0%	100%
14	B	Prevention Hand Contamination (2013 Food Code)	35	35	100%	0	0%	0	0%	3	8%	100%
15	A	Handwash Facilities	38	37	97%	1	3%	0	0%	0	0%	100%
15	B	Handwash Facilities	38	33	87%	5	13%	0	0%	0	0%	100%
16	A	Chemicals	8	8	100%	0	0%	30	79%	0	0%	100%
16	B	Chemicals	38	35	92%	3	8%	0	0%	0	0%	100%
16	C	Chemicals	0	0	0%	0	0%	38	100%	0	0%	100%
17	A	Employee Health Policy (2017 Food Code)	38	13	34%	25	66%	0	0%	0	0%	100%
18	A	Highly Susceptible Populations	38	38	100%	0	0%	0	0%	0	0%	100%
18	B	Highly Susceptible Populations	37	37	100%	0	0%	1	3%	0	0%	100%
18	C	Highly Susceptible Populations	36	36	100%	0	0%	2	5%	0	0%	100%
19	A	Food Allergy Awareness	38	10	26%	28	74%	0	0%	0	0%	100%
19	B	Food Allergy Awareness	38	8	21%	30	79%	0	0%	0	0%	100%
		TOTAL (does not include CFPM)	891	714	80%	177	20%	620		313		

Summary of Findings by Facility Type
Facility Type=Elementary Lunchrooms

			Added									
			Totals	n=	59							
			In+out	IN	% IN	OUT	% OUT	NA	% NA	NO	% NO	TOTAL %
		Certified Food Protection Manager Present	59	57	97%	2	3%	0	0%	0	0%	100%
1	A	Approved Source	59	59	100%	0	0%	0	0%	0	0%	100%
1	B	Approved Source	0	0	0%	0	0%	59	100%	0	0%	100%
1	C	Approved Source	0	0	0%	0	0%	59	100%	0	0%	100%
2	A	Receiving/Sound Condition	59	59	100%	0	0%	0	0%	0	0%	100%
3	A	Records	0	0	0%	0	0%	59	100%	0	0%	100%
3	B	Records	0	0	0%	0	0%	59	100%	0	0%	100%
3	C	Records	0	0	0%	0	0%	59	100%	0	0%	100%
4	A	Proper Cooking Temp	0	0	0%	0	0%	58	98%	1	2%	100%
4	B	Proper Cooking Temp	0	0	0%	0	0%	57	97%	2	3%	100%
4	C	Proper Cooking Temp	0	0	0%	0	0%	58	98%	1	2%	100%
4	D	Proper Cooking Temp	0	0	0%	0	0%	58	98%	1	2%	100%
4	E	Proper Cooking Temp	0	0	0%	0	0%	59	100%	0	0%	100%
4	F	Proper Cooking Temp	0	0	0%	0	0%	59	100%	0	0%	100%
4	G	Proper Cooking Temp	0	0	0%	0	0%	59	100%	0	0%	100%
4	H	Proper Cooking Temp	0	0	0%	0	0%	57	97%	2	3%	100%
5	A	Rapid Reheating/Hot Hold	2	1	50%	1	50%	10	17%	47	80%	100%
5	B	Rapid Reheating/Hot Hold	0	0	0%	0	0%	58	98%	1	2%	100%
5	C	Rapid Reheating/Hot Hold	22	22	100%	0	0%	0	0%	37	63%	100%
5	D	Rapid Reheating/Hot Hold	0	0	0%	0	0%	59	100%	0	0%	100%
6	A	Proper Cooling	2	2	100%	0	0%	8	14%	49	83%	100%
6	B	Proper Cooling	8	8	100%	0	0%	4	7%	47	80%	100%
6	C	Proper Cooling	4	4	100%	0	0%	0	0%	55	93%	100%
7	A	Cold Hold	59	52	88%	7	12%	0	0%	0	0%	100%
8	A	Hot Hold	48	37	77%	11	23%	0	0%	11	19%	100%
8	B	Hot Hold	0	0	1%	0	0%	58	98%	1	2%	100%
9	A	Time	28	24	86%	4	14%	3	5%	28	47%	100%
9	B	Time	57	44	77%	13	23%	0	0%	2	3%	100%
9	C	Time	53	46	87%	7	13%	0	0%	6	10%	100%
9	D	Time	0	0	0%	0	0%	58	98%	1	2%	100%
10	A	Separation	3	3	100%	0	0%	55	93%	1	2%	100%
10	B	Separation	1	1	100%	0	0%	57	97%	1	2%	100%
10	C	Separation	59	58	98%	1	2%	0	0%	0	0%	100%
10	D	Separation	59	59	100%	0	0%	0	0%	0	0%	100%
11	A	Food Contact Surfaces	59	59	100%	0	0%	0	0%	0	0%	100%
12	A	Proper Handwashing (2017 FDA Code)	59	58	98%	1	2%	0	0%	0	0%	100%
13	A	Good Hygienic Practices	59	59	100%	0	0%	0	0%	0	0%	100%
14	B	Prevention Hand Contamination (2013 Food Code)	59	59	100%	0	0%	0	0%	0	0%	100%
15	A	Handwash Facilities	59	57	97%	2	3%	0	0%	0	0%	100%
15	B	Handwash Facilities	59	57	97%	2	3%	0	0%	0	0%	100%
16	A	Chemicals	0	0	0%	0	0%	59	100%	0	0%	100%
16	B	Chemicals	59	58	98%	1	2%	0	0%	0	0%	100%
16	C	Chemicals	0	0	0%	0	0%	59	100%	0	0%	100%
17	A	Employee Health Policy (2017 Food Code)	59	56	95%	3	5%	0	0%	0	0%	100%
18	A	Highly Susceptible Populations	57	57	100%	0	0%	2	3%	0	0%	100%
18	B	Highly Susceptible Populations	54	54	100%	0	0%	5	8%	0	0%	100%
18	C	Highly Susceptible Populations	57	57	100%	0	0%	2	3%	0	0%	100%
19	A	Food Allergy Awareness	59	10	17%	49	83%	0	0%	0	0%	100%
19	B	Food Allergy Awareness	59	14	24%	45	76%	0	0%	0	0%	100%
		TOTAL (does not include CFPM)	1281	1134	89%	147	11%	1257		294		

			Added									
			Totals	n=	87							
			In+out	IN	% IN	OUT	% OUT	NA	% NA	NO	% NO	TOTAL %
		Certified Food Protection Manager Present	87	61	70%	26	30%	0	0%	0	0%	100%
1	A	Approved Source	86	86	100%	0	0%	1	1%	0	0%	100%
1	B	Approved Source	2	2	0%	0	0%	85	98%	0	0%	100%
1	C	Approved Source	1	1	0%	0	0%	86	99%	0	0%	100%
2	A	Receiving/Sound Condition	86	86	100%	0	0%	1	1%	0	0%	100%
3	A	Records	1	0	0%	1	0%	86	99%	0	0%	100%
3	B	Records	2	1	0%	1	0%	85	98%	0	0%	100%
3	C	Records	1	1	0%	0	0%	86	99%	0	0%	100%
4	A	Proper Cooking Temp	6	6	0%	0	0%	58	67%	23	26%	100%
4	B	Proper Cooking Temp	13	13	0%	0	0%	49	56%	25	29%	100%
4	C	Proper Cooking Temp	0	0	0%	0	0%	85	98%	2	2%	100%
4	D	Proper Cooking Temp	16	15	94%	1	6%	41	47%	30	34%	100%
4	E	Proper Cooking Temp	0	0	0%	0	0%	87	100%	0	0%	100%
4	F	Proper Cooking Temp	0	0	0%	0	0%	87	100%	0	0%	100%
4	G	Proper Cooking Temp	0	0	0%	0	0%	84	97%	3	3%	100%
4	H	Proper Cooking Temp	7	7	100%	0	0%	49	56%	31	36%	100%
5	A	Rapid Reheating/Hot Hold	7	6	86%	1	14%	48	55%	32	37%	100%
5	B	Rapid Reheating/Hot Hold	2	2	0%	0	0%	74	85%	11	13%	100%
5	C	Rapid Reheating/Hot Hold	9	9	100%	0	0%	34	39%	44	51%	100%
5	D	Rapid Reheating/Hot Hold	0	0	0%	0	0%	85	98%	2	2%	100%
6	A	Proper Cooling	14	9	64%	5	36%	39	45%	34	39%	100%
6	B	Proper Cooling	9	7	78%	2	22%	32	37%	46	53%	100%
6	C	Proper Cooling	0	0	0%	0	0%	28	32%	59	68%	100%
7	A	Cold Hold	87	47	54%	40	46%	0	0%	0	0%	100%
8	A	Hot Hold	61	51	84%	10	16%	19	22%	7	8%	100%
8	B	Hot Hold	0	0	1%	0	0%	85	98%	2	2%	100%
9	A	Time	67	53	79%	14	21%	19	22%	1	1%	100%
9	B	Time	81	60	74%	21	26%	6	7%	0	0%	100%
9	C	Time	75	59	79%	16	21%	9	10%	3	3%	100%
9	D	Time	29	17	0%	12	0%	57	66%	1	1%	100%
10	A	Separation	53	44	83%	9	17%	34	39%	0	0%	100%
10	B	Separation	42	38	90%	4	10%	45	52%	0	0%	100%
10	C	Separation	87	76	87%	11	13%	0	0%	0	0%	100%
10	D	Separation	87	87	100%	0	0%	0	0%	0	0%	100%
11	A	Food Contact Surfaces	87	58	67%	29	33%	0	0%	0	0%	100%
12	A	Proper Handwashing (2017 FDA Code)	87	67	77%	20	23%	0	0%	0	0%	100%
13	A	Good Hygienic Practices	87	71	82%	16	18%	0	0%	0	0%	

Summary of Findings by Facility Type
Facility Type=Full Service Restaurants

			Added									
			Totals	n=	87							
			In+out	IN	% IN	OUT	% OUT	NA	% NA	NO	% NO	TOTAL %
		Certified Food Protection Manager Present	87	73	84%	14	16%	0	0%	0	0%	100%
1	A	Approved Source	87	87	100%	0	0%	0	0%	0	0%	100%
1	B	Approved Source	11	11	0%	0	0%	76	87%	0	0%	100%
1	C	Approved Source	1	1	0%	0	0%	86	99%	0	0%	100%
2	A	Receiving/Sound Condition	87	87	100%	0	0%	0	0%	0	0%	100%
3	A	Records	2	2	0%	0	0%	83	95%	2	2%	100%
3	B	Records	14	8	0%	6	0%	71	82%	2	2%	100%
3	C	Records	1	1	0%	0	0%	86	99%	0	0%	100%
4	A	Proper Cooking Temp	7	5	0%	2	0%	28	32%	52	60%	100%
4	B	Proper Cooking Temp	5	4	80%	1	20%	22	25%	60	69%	100%
4	C	Proper Cooking Temp	1	1	0%	0	0%	69	79%	17	20%	100%
4	D	Proper Cooking Temp	25	23	92%	2	8%	6	7%	56	64%	100%
4	E	Proper Cooking Temp	0	0	0%	0	0%	86	99%	1	1%	100%
4	F	Proper Cooking Temp	0	0	0%	0	0%	87	100%	0	0%	100%
4	G	Proper Cooking Temp	1	1	100%	0	0%	83	95%	3	3%	100%
4	H	Proper Cooking Temp	16	16	100%	0	0%	9	10%	62	71%	100%
5	A	Rapid Reheating/Hot Hold	6	5	83%	1	17%	18	21%	63	72%	100%
5	B	Rapid Reheating/Hot Hold	0	0	0%	0	0%	78	90%	9	10%	100%
5	C	Rapid Reheating/Hot Hold	0	0	0%	0	0%	43	49%	44	51%	100%
5	D	Rapid Reheating/Hot Hold	0	0	0%	0	0%	82	94%	5	6%	100%
6	A	Proper Cooling	31	24	77%	7	23%	2	2%	54	62%	100%
6	B	Proper Cooling	10	10	100%	0	0%	8	9%	69	79%	100%
6	C	Proper Cooling	0	0	0%	0	0%	6	7%	81	93%	100%
7	A	Cold Hold	87	35	40%	52	60%	0	0%	0	0%	100%
8	A	Hot Hold	76	62	82%	14	18%	3	3%	8	9%	100%
8	B	Hot Hold	2	2	1%	0	0%	79	91%	6	7%	100%
9	A	Time	87	68	78%	19	22%	0	0%	0	0%	100%
9	B	Time	87	56	64%	31	36%	0	0%	0	0%	100%
9	C	Time	74	59	80%	15	20%	10	11%	3	3%	100%
9	D	Time	21	11	52%	10	48%	61	70%	5	6%	100%
10	A	Separation	84	59	70%	25	30%	3	3%	0	0%	100%
10	B	Separation	81	72	89%	9	11%	5	6%	1	1%	100%
10	C	Separation	87	74	85%	13	15%	0	0%	0	0%	100%
10	D	Separation	87	87	100%	0	0%	0	0%	0	0%	100%
11	A	Food Contact Surfaces	87	51	59%	36	41%	0	0%	0	0%	100%
12	A	Proper Handwashing (2017 FDA Code)	87	74	85%	13	15%	0	0%	0	0%	100%
13	A	Good Hygienic Practices	87	71	82%	16	18%	0	0%	0	0%	100%
14	B	Prevention Hand Contamination (2013 Food Code)	87	84	97%	3	3%	0	0%	0	0%	100%
15	A	Handwash Facilities	87	80	92%	7	8%	0	0%	0	0%	100%
15	B	Handwash Facilities	87	78	90%	9	10%	0	0%	0	0%	100%
16	A	Chemicals	20	18	90%	2	10%	67	77%	0	0%	100%
16	B	Chemicals	87	72	83%	15	17%	0	0%	0	0%	100%
16	C	Chemicals	1	0	0%	1	100%	86	99%	0	0%	100%
17	A	Employee Health Policy (2017 Food Code)	87	51	59%	36	41%	0	0%	0	0%	100%
18	A	Highly Susceptible Populations	0	0	0%	0	0%	87	100%	0	0%	100%
18	B	Highly Susceptible Populations	0	0	0%	0	0%	87	100%	0	0%	100%
18	C	Highly Susceptible Populations	0	0	0%	0	0%	87	100%	0	0%	100%
19	A	Food Allergy Awareness	87	8	9%	79	91%	0	0%	0	0%	100%
19	B	Food Allergy Awareness	87	19	22%	68	78%	0	0%	0	0%	100%
		TOTAL (does not include CFPM)	1969	1477	75%	492	25%	1604		603		

			Added										
			Totals	n=	57								
			In+out	IN	% IN	OUT	% OUT	NA	% NA	NO	% NO	TOTAL %	
		Certified Food Protection Manager Present	57	27	47%	30	53%	0	0%	0	0%	100%	
1	A	Approved Source	57	57	100%	0	0%	0	0%	0	0%	100%	
1	B	Approved Source	3	3	0%	0	0%	54	95%	0	0%	100%	
1	C	Approved Source	0	0	0%	0	0%	57	100%	0	0%	100%	
2	A	Receiving/Sound Condition	57	57	100%	0	0%	0	0%	0	0%	100%	
3	A	Records	0	0	0%	0	0%	57	100%	0	0%	100%	
3	B	Records	13	13	0%	0	0%	44	77%	0	0%	100%	
3	C	Records	14	13	0%	1	0%	43	75%	0	0%	100%	
4	A	Proper Cooking Temp	0	0	0%	0	0%	55	96%	2	4%	100%	
4	B	Proper Cooking Temp	0	0	0%	0	0%	45	79%	12	21%	100%	
4	C	Proper Cooking Temp	0	0	0%	0	0%	53	93%	4	7%	100%	
4	D	Proper Cooking Temp	33	33	100%	0	0%	0	0%	24	42%	100%	
4	E	Proper Cooking Temp	0	0	0%	0	0%	57	100%	0	0%	100%	
4	F	Proper Cooking Temp	0	0	0%	0	0%	57	100%	0	0%	100%	
4	G	Proper Cooking Temp	0	0	0%	0	0%	55	96%	2	4%	100%	
4	H	Proper Cooking Temp	0	0	0%	0	0%	41	72%	16	28%	100%	
5	A	Rapid Reheating/Hot Hold	4	4	100%	0	0%	45	79%	8	14%	100%	
5	B	Rapid Reheating/Hot Hold	0	0	0%	0	0%	57	100%	0	0%	100%	
5	C	Rapid Reheating/Hot Hold	3	3	100%	0	0%	15	26%	39	68%	100%	
5	D	Rapid Reheating/Hot Hold	0	0	0%	0	0%	57	100%	0	0%	100%	
6	A	Proper Cooling	15	15	100%	0	0%	0	0%	42	74%	100%	
6	B	Proper Cooling	7	6	86%	1	14%	6	11%	44	77%	100%	
6	C	Proper Cooling	1	1	100%	0	0%	33	58%	23	40%	100%	
7	A	Cold Hold	57	34	60%	23	40%	0	0%	0	0%	100%	
8	A	Hot Hold	49	36	73%	13	27%	1	2%	7	12%	100%	
8	B	Hot Hold	1	0	1%	1	0%	54	95%	2	4%	100%	
9	A	Time	54	51	94%	3	6%	3	5%	0	0%	100%	
9	B	Time	56	50	89%	6	11%	1	2%	0	0%	100%	
9	C	Time	53	52	98%	1	2%	3	5%	1	2%	100%	
9	D	Time	13	6	0%	7	0%	43	75%	1	2%	100%	
10	A	Separation	57	50	88%	7	12%	0	0%	0	0%	100%	
10	B	Separation	24	24	100%	0	0%	32	56%	1	2%	100%	
10	C	Separation	57	54	95%	3	5%	0	0%	0	0%	100%	
10	D	Separation	57	57	100%	0	0%	0	0%	0	0%	100%	
11	A	Food Contact Surfaces	57	37	65%	20	35%	0	0%	0	0%	100%	
12	A	Proper Handwashing (2017 FDA Code)	57	52	91%	5	9%	0	0%	0	0%	100%	
13	A	Good Hygienic Practices	57	53	93%	4	7%	0	0%	0	0%	100%	
14	B	Prevention Hand Contamination (2013 Food Code)	56	56	100%	0	0%	0	0%	1	2%	100%	
15	A	Handwash Facilities	57	52	91%	5	9%	0	0%	0	0%	100%	
15	B	Handwash Facilities	57	50	88%	7	12%	0	0%	0	0%	100%	
16	A	Chemicals	18	18	100%	0	0%	39	68%	0	0%	100%	
16	B	Chemicals	57	46	81%	11	19%	0	0%	0	0%	100%	
16	C	Chemicals	0	0	0%	0	0%	57	100%	0	0%	100%	
17	A	Employee Health Policy (2017 Food Code)	57	44	77%	13	23%	0	0%	0	0%	100%	
18	A	Highly Susceptible Populations	0	0	0%	0	0%	57	100%	0	0%	100%	
18	B	Highly Susceptible Populations	0	0	0%	0	0%	57	100%	0	0%	100%	
18	C	Highly Susceptible Populations	0	0	0%	0	0%	57	100%	0	0%	100%	
19	A	Food Allergy Awareness	57	11	19%	46	81%	0	0%	0	0%	100%	
19	B	Food Allergy Awareness	57	11	19%	46	81%	0	0%	0	0%	100%	
		TOTAL (does not include CFPM)	1272	1049	82%	223	18%	1235		229			

Summary of Findings by Facility Type
Facility Type=Meat

			Added										
			Totals	n=	63								
			In+out	IN	% IN	OUT	% OUT	NA	% NA	NO	% NO	TOTAL %	
		Certified Food Protection Manager Present	63	26	41%	37	59%	0	0%	0	0%	100%	
1	A	Approved Source	63	63	100%	0	0%	0	0%	0	0%	100%	
1	B	Approved Source	19	19	0%	0	0%	44	70%	0	0%	100%	
1	C	Approved Source	1	1	0%	0	0%	62	98%	0	0%	100%	
2	A	Receiving/Sound Condition	63	63	100%	0	0%	0	0%	0	0%	100%	
3	A	Records	18	14	0%	4	0%	42	67%	3	5%	100%	
3	B	Records	1	1	0%	0	0%	61	97%	1	2%	100%	
3	C	Records	2	1	0%	1	0%	61	97%	0	0%	100%	
4	A	Proper Cooking Temp	0	0	0%	0	0%	63	100%	0	0%	100%	
4	B	Proper Cooking Temp	1	1	100%	0	0%	59	94%	3	5%	100%	
4	C	Proper Cooking Temp	0	0	0%	0	0%	60	95%	3	5%	100%	
4	D	Proper Cooking Temp	0	0	0%	0	0%	58	92%	5	8%	100%	
4	E	Proper Cooking Temp	0	0	0%	0	0%	63	100%	0	0%	100%	
4	F	Proper Cooking Temp	0	0	0%	0	0%	58	92%	5	8%	100%	
4	G	Proper Cooking Temp	0	0	0%	0	0%	62	98%	1	2%	100%	
4	H	Proper Cooking Temp	0	0	0%	0	0%	48	76%	15	24%	100%	
5	A	Rapid Reheating/Hot Hold	0	0	0%	0	0%	61	97%	2	3%	100%	
5	B	Rapid Reheating/Hot Hold	0	0	0%	0	0%	63	100%	0	0%	100%	
5	C	Rapid Reheating/Hot Hold	1	1	100%	0	0%	60	95%	2	3%	100%	
5	D	Rapid Reheating/Hot Hold	0	0	0%	0	0%	62	98%	1	2%	100%	
6	A	Proper Cooling	3	2	67%	1	33%	57	90%	3	5%	100%	
6	B	Proper Cooling	3	2	67%	1	33%	9	14%	51	81%	100%	
6	C	Proper Cooling	0	0	0%	0	0%	33	52%	30	48%	100%	
7	A	Cold Hold	63	55	87%	8	13%	0	0%	0	0%	100%	
8	A	Hot Hold	3	1	33%	2	67%	59	94%	1	2%	100%	
8	B	Hot Hold	0	0	1%	0	0%	62	98%	1	2%	100%	
9	A	Time	15	13	87%	2	13%	48	76%	0	0%	100%	
9	B	Time	29	17	59%	12	41%	34	54%	0	0%	100%	
9	C	Time	25	14	56%	11	44%	37	59%	1	2%	100%	
9	D	Time	0	0	0%	0	0%	62	98%	1	2%	100%	
10	A	Separation	51	37	73%	14	27%	11	17%	1	2%	100%	
10	B	Separation	60	46	77%	14	23%	3	5%	0	0%	100%	
10	C	Separation	63	59	94%	4	6%	0	0%	0	0%	100%	
10	D	Separation	63	63	100%	0	0%	0	0%	0	0%	100%	
11	A	Food Contact Surfaces	63	42	67%	21	33%	0	0%	0	0%	100%	
12	A	Proper Handwashing (2017 FDA Code)	62	60	97%	2	3%	0	0%	1	2%	100%	
13	A	Good Hygienic Practices	62	60	97%	2	3%	0	0%	1	2%	100%	
14	B	Prevention Hand Contamination (2013 Food Code)	39	39	100%	0	0%	22	35%	2	3%	100%	
15	A	Handwash Facilities	63	57	90%	6	10%	0	0%	0	0%	100%	
15	B	Handwash Facilities	63	59	94%	4	6%	0	0%	0	0%	100%	
16	A	Chemicals	1	1	100%	0	0%	62	98%	0	0%	100%	
16	B	Chemicals	63	54	86%	9	14%	0	0%	0	0%	100%	
16	C	Chemicals	0	0	0%	0	0%	63	100%	0	0%	100%	
17	A	Employee Health Policy (2017 Food Code)	63	44	70%	19	30%	0	0%	0	0%	100%	
18	A	Highly Susceptible Populations	0	0	0%	0	0%	63	100%	0	0%	100%	
18	B	Highly Susceptible Populations	0	0	0%	0	0%	63	100%	0	0%	100%	
18	C	Highly Susceptible Populations	0	0	0%	0	0%	63	100%	0	0%	100%	
19	A	Food Allergy Awareness	63	10	16%	53	84%	0	0%	0	0%	100%	
19	B	Food Allergy Awareness	63	10	16%	53	84%	0	0%	0	0%	100%	
		TOTAL (does not include CFPM)	1152	909	79%	243	21%	1738		134			

			Added										
			Totals	n=	53								
			In+out	IN	% IN	OUT	% OUT	NA	% NA	NO	% NO	TOTAL %	
		Certified Food Protection Manager Present	53	20	38%	33	62%	0	0%	0	0%	100%	
1	A	Approved Source	52	52	100%	0	0%	1	2%	0	0%	100%	
1	B	Approved Source	1	1	0%	0	0%	52	98%	0	0%	100%	
1	C	Approved Source	1	1	0%	0	0%	52	98%	0	0%	100%	
2	A	Receiving/Sound Condition	52	52	100%	0	0%	1	2%	0	0%	100%	
3	A	Records	0	0	0%	0	0%	53	100%	0	0%	100%	
3	B	Records	0	0	0%	0	0%	53	100%	0	0%	100%	
3	C	Records	0	0	0%	0	0%	53	100%	0	0%	100%	
4	A	Proper Cooking Temp	0	0	0%	0	0%	53	100%	0	0%	100%	
4	B	Proper Cooking Temp	0	0	0%	0	0%	53	100%	0	0%	100%	
4	C	Proper Cooking Temp	0	0	0%	0	0%	53	100%	0	0%	100%	
4	D	Proper Cooking Temp	0	0	0%	0	0%	53	100%	0	0%	100%	
4	E	Proper Cooking Temp	0	0	0%	0	0%	53	100%	0	0%	100%	
4	F	Proper Cooking Temp	0	0	0%	0	0%	53	100%	0	0%	100%	
4	G	Proper Cooking Temp	0	0	0%	0	0%	53	100%	0	0%	100%	
4	H	Proper Cooking Temp	0	0	0%	0	0%	53	100%	0	0%	100%	
5	A	Rapid Reheating/Hot Hold	0	0	0%	0	0%	53	100%	0	0%	100%	
5	B	Rapid Reheating/Hot Hold	0	0	0%	0	0%	53	100%	0	0%	100%	
5	C	Rapid Reheating/Hot Hold	0	0	0%	0	0%	53	100%	0	0%	100%	
5	D	Rapid Reheating/Hot Hold	0	0	0%	0	0%	53	100%	0	0%	100%	
6	A	Proper Cooling	0	0	0%	0	0%	53	100%	0	0%	100%	
6	B	Proper Cooling	7	5	71%	2	29%	2	4%	44	83%	100%	
6	C	Proper Cooling	0	0	0%	0	0%	45	85%	8	15%	100%	
7	A	Cold Hold	53	31	58%	22	42%	0	0%	0	0%	100%	
8	A	Hot Hold	0	0	0%	0	0%	53	100%	0	0%	100%	
8	B	Hot Hold	0	0	1%	0	0%	53	100%	0	0%	100%	
9	A	Time	48	45	94%	3	6%	4	8%	1	2%	100%	
9	B	Time	46	43	93%	3	7%	6	11%	1	2%	100%	
9	C	Time	3	3	100%	0	0%	44	83%	6	11%	100%	
9	D	Time	0	0	0%	0	0%	53	100%	0	0%	100%	
10	A	Separation	2	2	100%	0	0%	51	96%	0	0%	100%	
10	B	Separation	1	1	100%	0	0%	52	98%	0	0%	100%	
10	C	Separation	53	52	98%	1	2%	0	0%	0	0%	100%	
10	D	Separation	53	53	100%	0	0%	0	0%	0	0%	100%	
11	A	Food Contact Surfaces	53	42	79%	11	21%	0	0%	0	0%	100%	
12	A	Proper Handwashing (2017 FDA Code)	50	49	98%	1	2%	0	0%	3	6%	100%	
13	A	Good Hygienic Practices	53	53	100%	0	0%	0	0%	0	0%	100%	
14	B	Prevention Hand Contamination (2013 Food Code)	47	47	100%	0	0%	0	0%	6	11%	100%	
15	A	Handwash Facilities	53	49	92%	4	8%	0	0%	0	0%	100%	
15	B	Handwash Facilities	53	50	94%	3	6%	0	0%	0	0%	100%	
16	A	Chemicals	4	4	100%	0	0%	49	92%	0	0%	100%	
16	B	Chemicals	53	45	85%	8	15%	0	0%	0	0%	100%	
16	C	Chemicals	53	48	91%	5	9%	0	0%	0	0%	100%	
17	A	Employee Health Policy (2017 Food Code)	53	40	75%	13	25%	0	0%	0	0%	100%	
18	A	Highly Susceptible Populations	0	0	0%	0	0%	53	100%	0	0%	100%	
18	B	Highly Susceptible Populations	0	0	0%	0	0%	53	100%	0	0%	100%	
18	C	Highly Susceptible Populations	0	0	0%	0	0%	53	100%	0	0%	100%	
19	A	Food Allergy Awareness	53	12	23%	41	77%	0	0%	0	0%	100%	
19	B	Food Allergy Awareness	53	9	17%	44	83%	0	0%	0	0%	100%	
		TOTAL (does not include CFPM)	950	789	83%	161	17%	1525		69			

			Added									
			Totals	n=	14							
			In+out	IN	% IN	OUT	% OUT	NA	% NA	NO	% NO	TOTAL %
		Certified Food Protection Manager Present	14	4	29%	10	71%	0	0%	0	0%	100%
1	A	Approved Source	14	14	100%	0	0%	0	0%	0	0%	100%
1	B	Approved Source	13	13	0%	0	0%	1	7%	0	0%	100%
1	C	Approved Source	0	0	0%	0	0%	14	100%	0	0%	100%
2	A	Receiving/Sound Condition	14	14	100%	0	0%	0	0%	0	0%	100%
3	A	Records	12	10	0%	2	0%	1	7%	1	7%	100%
3	B	Records	5	4	0%	1	0%	9	64%	0	0%	100%
3	C	Records	4	4	0%	0	0%	10	71%	0	0%	100%
4	A	Proper Cooking Temp	0	0	0%	0	0%	14	100%	0	0%	100%
4	B	Proper Cooking Temp	0	0	0%	0	0%	14	100%	0	0%	100%
4	C	Proper Cooking Temp	0	0	0%	0	0%	14	100%	0	0%	100%
4	D	Proper Cooking Temp	0	0	0%	0	0%	14	100%	0	0%	100%
4	E	Proper Cooking Temp	0	0	0%	0	0%	14	100%	0	0%	100%
4	F	Proper Cooking Temp	0	0	0%	0	0%	14	100%	0	0%	100%
4	G	Proper Cooking Temp	0	0	0%	0	0%	14	100%	0	0%	100%
4	H	Proper Cooking Temp	1	1	100%	0	0%	3	21%	10	71%	100%
5	A	Rapid Reheating/Hot Hold	0	0	0%	0	0%	14	100%	0	0%	100%
5	B	Rapid Reheating/Hot Hold	0	0	0%	0	0%	14	100%	0	0%	100%
5	C	Rapid Reheating/Hot Hold	0	0	0%	0	0%	14	100%	0	0%	100%
5	D	Rapid Reheating/Hot Hold	0	0	0%	0	0%	14	100%	0	0%	100%
6	A	Proper Cooling	0	0	0%	0	0%	11	79%	3	21%	100%
6	B	Proper Cooling	0	0	0%	0	0%	5	36%	9	64%	100%
6	C	Proper Cooling	0	0	0%	0	0%	0	0%	14	100%	100%
7	A	Cold Hold	14	12	86%	2	14%	0	0%	0	0%	100%
8	A	Hot Hold	0	0	0%	0	0%	14	100%	0	0%	100%
8	B	Hot Hold	0	0	1%	0	0%	14	100%	0	0%	100%
9	A	Time	6	6	100%	0	0%	8	57%	0	0%	100%
9	B	Time	10	8	80%	2	20%	4	29%	0	0%	100%
9	C	Time	10	8	80%	2	20%	4	29%	0	0%	100%
9	D	Time	0	0	0%	0	0%	14	100%	0	0%	100%
10	A	Separation	14	13	93%	1	7%	0	0%	0	0%	100%
10	B	Separation	6	5	83%	1	17%	8	57%	0	0%	100%
10	C	Separation	14	12	86%	2	14%	0	0%	0	0%	100%
10	D	Separation	14	14	100%	0	0%	0	0%	0	0%	100%
11	A	Food Contact Surfaces	14	12	86%	2	14%	0	0%	0	0%	100%
12	A	Proper Handwashing (2017 FDA Code)	14	13	93%	1	7%	0	0%	0	0%	100%
13	A	Good Hygienic Practices	14	14	100%	0	0%	0	0%	0	0%	100%
14	B	Prevention Hand Contamination (2013 Food Code)	13	13	100%	0	0%	0	0%	1	7%	100%
15	A	Handwash Facilities	14	12	86%	2	14%	0	0%	0	0%	100%
15	B	Handwash Facilities	14	14	100%	0	0%	0	0%	0	0%	100%
16	A	Chemicals	0	0	0%	0	0%	14	100%	0	0%	100%
16	B	Chemicals	14	11	79%	3	21%	0	0%	0	0%	100%
16	C	Chemicals	0	0	0%	0	0%	14	100%	0	0%	100%
17	A	Employee Health Policy (2017 Food Code)	14	6	43%	8	57%	0	0%	0	0%	100%
18	A	Highly Susceptible Populations	0	0	0%	0	0%	14	100%	0	0%	100%
18	B	Highly Susceptible Populations	0	0	0%	0	0%	14	100%	0	0%	100%
18	C	Highly Susceptible Populations	0	0	0%	0	0%	14	100%	0	0%	100%
19	A	Food Allergy Awareness	14	4	29%	10	71%	0	0%	0	0%	100%
19	B	Food Allergy Awareness	14	4	29%	10	71%	0	0%	0	0%	100%
		TOTAL (does not include CFPM)	290	241	83%	49	17%	344		38		

Summary of Findings by Facility Type

Facility Type=All Facilities

		Totals	n=	465						
		In+out	IN	% IN	OUT	% OUT	NA	% NA	NO	%NO
	Certified Food Protection Manager Present	465	299	64%	166	36%	0	0%	0	0%
1	A Approved Source	463	463	100%	0	0%	2	0%	0	0%
1	B Approved Source	50	50	100%	0	0%	415	89%	0	0%
1	C Approved Source	6	6	100%	0	0%	459	99%	0	0%
2	A Receiving/Sound Condition	461	460	100%	1	0%	4	1%	0	0%
3	A Records	33	26	79%	7	21%	426	92%	6	1%
3	B Records	35	27	77%	8	23%	427	92%	3	1%
3	C Records	22	20	91%	2	9%	443	95%	0	0%
4	A Proper Cooking Temp	13	11	85%	2	15%	364	78%	88	19%
4	B Proper Cooking Temp	20	19	95%	1	5%	306	66%	139	30%
4	C Proper Cooking Temp	1	1	100%	0	0%	410	88%	54	12%
4	D Proper Cooking Temp	77	73	95%	4	5%	237	51%	151	32%
4	E Proper Cooking Temp	0	0	0%	0	0%	464	100%	1	0%
4	F Proper Cooking Temp	0	0	0%	0	0%	460	99%	5	1%
4	G Proper Cooking Temp	1	1	100%	0	0%	447	96%	17	4%
4	H Proper Cooking Temp	30	30	100%	0	0%	266	57%	169	36%
5	A Rapid Reheating/Hot Hold	20	17	85%	3	15%	261	56%	184	40%
5	B Rapid Reheating/Hot Hold	2	2	100%	0	0%	433	93%	30	6%
5	C Rapid Reheating/Hot Hold	40	40	100%	0	0%	226	49%	199	43%
5	D Rapid Reheating/Hot Hold	1	1	100%	0	0%	444	95%	20	4%
6	A Proper Cooling	76	57	75%	19	25%	180	39%	209	45%
6	B Proper Cooling	51	44	86%	7	14%	73	16%	341	73%
6	C Proper Cooling	6	6	100%	0	0%	149	32%	310	67%
7	A Cold Hold	464	297	64%	167	36%	0	0%	1	0%
8	A Hot Hold	267	209	78%	58	22%	150	32%	48	10%
8	B Hot Hold	6	4	67%	2	33%	425	91%	34	7%
9	A Time	340	291	86%	49	14%	93	20%	32	7%
9	B Time	405	304	75%	101	25%	57	12%	3	1%
9	C Time	327	267	82%	60	18%	114	25%	24	5%
9	D Time	64	35	55%	29	45%	390	84%	11	2%
10	A Separation	303	239	79%	64	21%	160	34%	2	0%
10	B Separation	253	217	86%	36	14%	208	45%	4	1%
10	C Separation	465	423	91%	42	9%	0	0%	0	0%
10	D Separation	465	465	100%	0	0%	0	0%	0	0%
11	A Food Contact Surfaces	465	334	72%	131	28%	0	0%	0	0%
12	A Proper Handwashing (2017 FDA Code)	460	408	89%	52	11%	0	0%	5	1%
13	A Good Hygienic Practices	464	422	91%	42	9%	0	0%	1	0%
14	B Prevention Hand Contamination (2013 Food Code)	428	422	99%	6	1%	22	5%	15	3%
15	A Handwash Facilities	464	427	92%	37	8%	1	0%	0	0%
15	B Handwash Facilities	465	430	92%	35	8%	0	0%	0	0%
16	A Chemicals	59	57	97%	2	3%	406	87%	0	0%
16	B Chemicals	465	396	85%	69	15%	0	0%	0	0%
16	C Chemicals	54	48	89%	6	11%	411	88%	0	0%
17	A Employee Health Policy (2017 Food Code)	465	308	66%	157	34%	0	0%	0	0%
18	A Highly Susceptible Populations	102	102	100%	0	0%	363	78%	0	0%
18	B Highly Susceptible Populations	98	98	100%	0	0%	367	79%	0	0%
18	C Highly Susceptible Populations	100	100	100%	0	0%	365	78%	0	0%
19	A Food Allergy Awareness	465	85	18%	380	82%	0	0%	0	0%
19	B Food Allergy Awareness	465	104	22%	361	78%	0	0%	0	0%
	TOTAL (does not include CFPM)	9786	7846	80%	1940	20%	10428		2106	

2020 Wake County Risk Factor Study

Percentage (%) of IN compliance observations for each risk factor

Risk Factor (IN compliance)	Hospitals			Nursing Homes			Elementary Schools			Fast Food Restaurants			Full Service Restaurants		
	%	in	Total Obs	%	in	Total Obs	%	in	Total Obs	%	in	Total Obs	%	in	Total Obs
Food Source	100%	16	16	99%	74	75	100%	118	118	99%	177	179	97%	197	203
Inadequate Cooking	83%	5	6	100%	11	11	96%	23	24	97%	58	60	90%	55	61
Improper Holding	71%	24	34	74%	127	171	84%	217	259	72%	303	423	69%	327	475
Contamination	77%	27	35	85%	150	177	99%	180	181	85%	303	356	81%	343	426
Personal Hygiene	97%	33	34	90%	167	186	98%	290	295	88%	380	433	89%	387	435
Risk Factor Totals	84%	105	125	85%	529	620	94%	828	877	84%	1221	1451	82%	1309	1600
Other Interventions	%	in	Total Obs	%	in	Total Obs	%	in	Total Obs	%	in	Total Obs	%	in	Total Obs
Certified Food Protection Manager Present	100%	7	7	63%	24	38	97%	57	59	70%	61	87	84%	73	87
Other/Chemical	100%	8	8	93%	43	46	98%	58	59	80%	75	94	83%	90	108
Employee Health Policy	0%	0	7	34%	13	38	95%	56	59	62%	54	87	59%	51	87
Highly Susceptible Populations	100%	21	21	100%	111	111	100%	168	168	0%	0	0	0%	0	0
Food Allergy Awareness (19a)	43%	3	7	26%	10	38	17%	10	59	20%	17	87	9%	8	87

Risk Factor (IN compliance)	Delis			Meat			Produce			Seafood		
	%	in	Total Obs	%	in	Total Obs	%	in	Total Obs	%	in	Total Obs
Food Source	99%	143	144	97%	162	167	100%	106	106	95%	59	62
Inadequate Cooking	100%	40	40	100%	2	2	NA	0	0	100%	1	1
Improper Holding	82%	251	306	74%	104	141	81%	127	157	85%	34	40
Contamination	88%	222	252	82%	247	300	93%	150	162	90%	56	62
Personal Hygiene	93%	263	284	95%	275	289	97%	248	256	96%	66	69
Risk Factor Totals	90%	919	1026	88%	790	899	93%	631	681	92%	216	234
Other Interventions	%	in	Total Obs	%	in	Total Obs	%	in	Total Obs	%	in	Total Obs
Certified Food Protection Manager Present	47%	27	57	41%	26	63	38%	20	53	29%	4	14
Other/Chemical	85%	64	75	86%	55	64	88%	97	110	79%	11	14
Employee Health Policy	77%	44	57	70%	44	63	75%	40	53	43%	6	14
Highly Susceptible Populations	0%	0	0	0%	0	0	0%	0	0	0%	0	0
Food Allergy Awareness (19a)	0%	11	57	0%	10	63	0%	12	53	29%	4	14

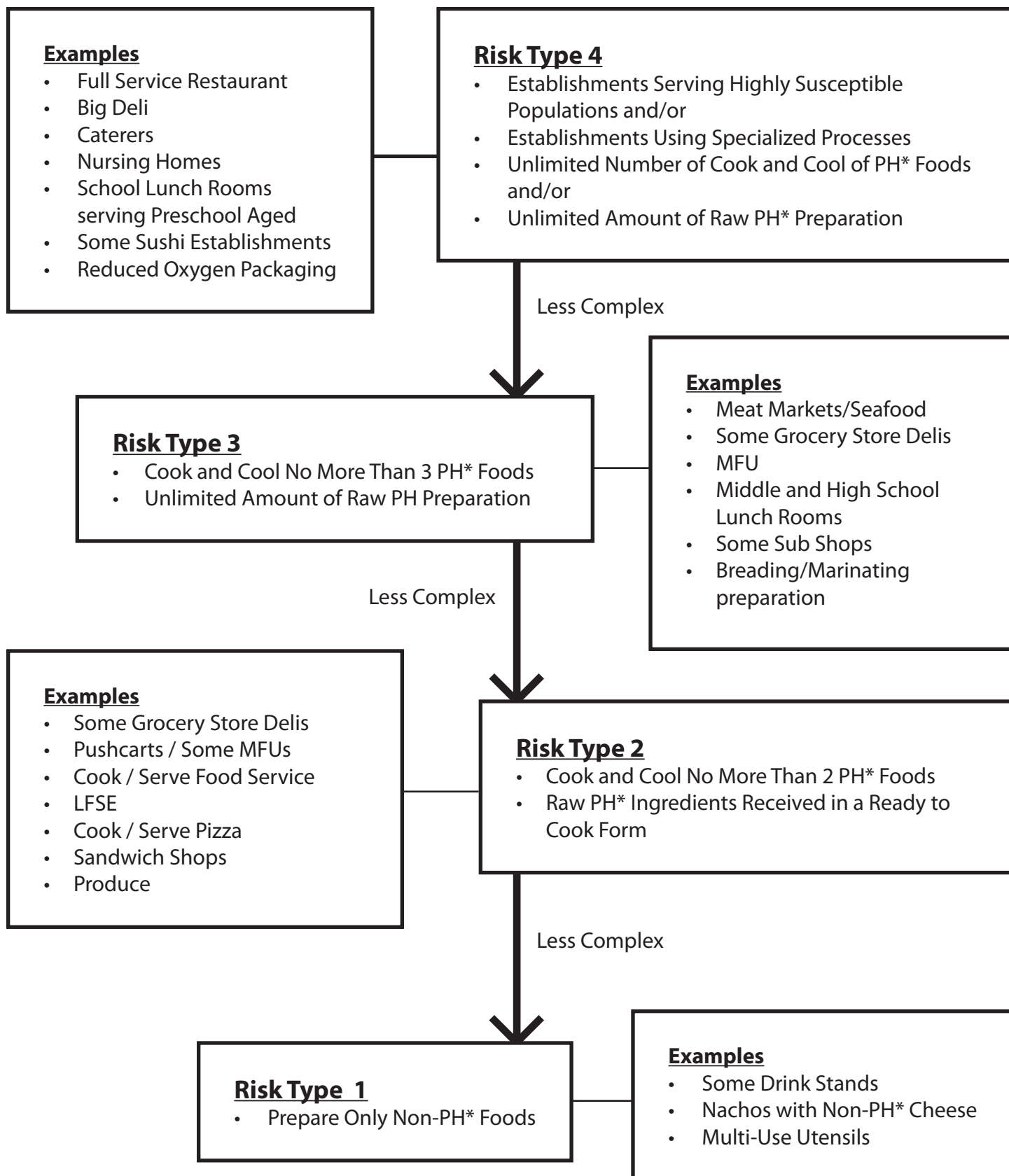
2020 Wake County Risk Factor Study

Percentage (%) of OUT of compliance observations for each risk factor

Risk Factor OUT of compliance	Hospitals			Nursing Homes			Elementary Schools			Fast Food Restaurants			Full Service Restaurants		
	%	out	Total Obs	%	out	Total Obs	%	out	Total Obs	%	out	Total Obs	%	out	Total Obs
Food Source	0%	0	16	1%	1	75	0%	0	118	1%	2	179	3%	6	203
Inadequate Cooking	17%	1	6	0%	0	11	4%	1	24	3%	2	60	10%	6	61
Improper Holding	29%	10	34	26%	44	171	16%	42	259	28%	120	423	31%	148	475
Contamination	23%	8	35	15%	27	177	1%	1	181	15%	53	356	19%	83	426
Personal Hygiene	3%	1	34	10%	19	186	2%	5	295	12%	53	433	11%	48	435
Risk Factor Totals	16%	20	125	15%	91	620	6%	49	877	16%	230	1451	18%	291	1600
Other Interventions	%	out	Total Obs	%	out	Total Obs	%	out	Total Obs	%	out	Total Obs	%	out	Total Obs
Certified Food Protection Manager Present	0%	0	7	37%	14	38	3%	2	59	30%	26	87	16%	14	87
Other/Chemical	0%	0	8	7%	3	46	2%	1	59	20%	19	94	17%	18	108
Employee Health Policy	100%	7	7	66%	25	38	5%	3	59	38%	33	87	41%	36	87
Highly Susceptible Populations	0%	0	21	0%	0	111	0%	0	168	0%	0	0	0%	0	0
Food Allergy Awareness (19a)	57%	4	7	74%	28	38	83%	49	59	80%	70	87	91%	79	87

Risk Factor OUT of compliance	Deli's			Meat			Produce			Seafood		
	%	out	Total Obs	%	out	Total Obs	%	out	Total Obs	%	out	Total Obs
Food Source	1%	1	144	3%	5	167	0%	0	106	5%	3	62
Inadequate Cooking	0%	0	40	0%	0	2	NA	0	0	0%	0	1
Improper Holding	18%	55	306	26%	37	141	19%	30	157	15%	6	40
Contamination	12%	30	252	18%	53	300	7%	12	162	10%	6	62
Personal Hygiene	7%	21	284	5%	14	289	3%	8	256	4%	3	69
Risk Factor Totals	10%	107	1026	12%	109	899	7%	50	681	8%	18	234
Other Interventions	%	out	Total Obs	%	out	Total Obs	%	out	Total Obs	%	out	Total Obs
Certified Food Protection Manager Present	53%	30	57	59%	37	63	62%	33	53	71%	10	14
Other/Chemical	15%	11	75	14%	9	64	12%	13	110	21%	3	14
Employee Health Policy	23%	13	57	30%	19	63	25%	13	53	57%	8	14
Highly Susceptible Populations	0%	0	0	0%	0	0	0%	0	0	0%	0	0
Food Allergy Awareness (19a)	81%	46	57	84%	53	63	77%	41	53	71%	10	14

Risk Categorization of Food Establishments



* Potentially Hazardous

2020 REFERENCE SHEET

CDC Risk Factor FOODS FROM UNSAFE SOURCES Food Source	CDC Risk Factor INADEQUATE COOK Pathogen Destruction
<p>1. Approved Source</p> <p style="text-align: center;"><u>Data Item - 1A</u></p> <p>3-201.11* Compliance with Food Law 3-201.12* Food in A Hermetically Sealed Container. 3-201.13* Fluid Milk and Milk Products 3-201.14* Fish</p> <p style="text-align: center;"><u>Data Item – 1B</u></p> <p>3-201.15* Molluscan Shellfish 3-202.18* Shellstock Identification</p> <p style="text-align: center;"><u>Data Item – 1C</u></p> <p>3-201.16* Wild Mushrooms 3-201.17* Game Animals</p>	<p>4. Proper Cooking Temperature per TCS</p> <p style="text-align: center;"><u>Data Item – 4A</u></p> <p>3-401.11(A)(1)(a)* Raw Animal Foods 3-401.11(A)(2)* Raw Animal Foods</p> <p style="text-align: center;"><u>Data Item – 4B</u></p> <p>3-401.11(A)(2)* Raw Animal Foods</p> <p style="text-align: center;"><u>Data Item – 4C</u></p> <p>3-401.11(B)(1)(2)* Raw Animal Foods</p> <p style="text-align: center;"><u>Data Item – 4D</u></p> <p>3-401.11(A)(3)* Raw Animal Foods</p> <p style="text-align: center;"><u>Data Item – 4E</u></p> <p>3-401.11(A)(3)* Raw Animal Foods</p> <p style="text-align: center;"><u>Data Item – 4F</u></p> <p>3-401.12* Microwave Cooking</p> <p style="text-align: center;"><u>Data Item – 4G</u></p> <p>3-401.11(A)(2)* Raw Animal Foods</p> <p style="text-align: center;"><u>Data Item – 4H</u></p> <p>3-401.11(A)(1)(b)* Raw Animal Foods</p>
<p>2. Receiving/Sound Condition</p> <p style="text-align: center;"><u>Data Item – 2A</u></p> <p>3-202.11* Temperature 3-202.15* Package Integrity 3-101.11* Safe, Unadulterated, and Honestly Presented</p>	<p>5. Rapid Reheating for Hot Holding</p> <p style="text-align: center;"><u>Data Item 5A</u></p> <p>3-403.11(A)* Reheating for Hot Holding</p> <p style="text-align: center;"><u>Data Item 5B</u></p> <p>3-403.11(B)* Reheating for Hot Holding - Microwave</p> <p style="text-align: center;"><u>Data Item 5C</u></p> <p>3-403.11(C)* Reheating for Hot Holding – Commercially Processed RTE Food</p> <p style="text-align: center;"><u>Data Item 5D</u></p> <p>3-403.11(E)* Reheating for Hot Holding – Remaining unsliced portion of Meat Roasts</p>
<p>3. Records</p> <p style="text-align: center;"><u>Data Item – 3A</u></p> <p>3-202.18* Shellfish Identification 3-203.12* Shellfish Maintaining Identification</p> <p style="text-align: center;"><u>Data Item – 3B</u></p> <p>3.402.11* Parasite Destruction 3.402.12* Records, Creation and Retention</p> <p style="text-align: center;"><u>Data Item – 3C</u></p> <p>3-502.12* Reduced Oxygen Packaging, Criteria 8-103.12* Conformance with Approved Procedures</p>	

2020 REFERENCE SHEET

<p style="text-align: center;">CDC Risk Factor IMPROPER HOLDING Limitation of Growth of Organisms of Public Health Concern</p>	<p style="text-align: center;">CDC Risk Factor CONTAMINATED EQUIPMENT Protection from Contamination</p>
<p>6. Proper Cooling Procedure</p> <p style="text-align: center;"><u>Data Item 6A</u></p> <p>3-501.14(A)* Cooling – Cooked TCS</p> <p style="text-align: center;"><u>Data Item 6B</u></p> <p>3-501.14(B)* Cooling – TCS prepared from ingredients at ambient temperature</p> <p style="text-align: center;"><u>Data Item 6C</u></p> <p>3-501.14(C)* Cooling – TCS receipt of foods allowed at >41° F. (5° C.) during shipment</p>	<p>10. Separation / Segregation /Protection</p> <p style="text-align: center;"><u>Data Item 10A</u></p> <p>3-302.11(A)(1)* Packaged and Unpackaged Food – Separation, Packaging, and Segregation <i>(Separate raw animal foods from raw RTE and cooked RTE foods)</i></p> <p style="text-align: center;"><u>Data Item 10B</u></p> <p>3-302.11(A)(2)* Packaged and Unpackaged Food – Separation, Packaging, and Segregation <i>(Separate raw animal foods by using separate equipment, special arrangement of food in equipment to avoid cross contamination of one type with another, or by preparing different types of food at different time or in separate areas)</i></p> <p style="text-align: center;"><u>Data Item 10C</u></p> <p>3-302.11(A)(4-6)* Packaged and Unpackaged Food – Separation, Packaging, and Segregation</p> <p>3-304.11(B)* Food Contact with Equipment and Utensils</p> <p style="text-align: center;"><u>Data Item 10D</u></p> <p>3-306.14(A)(B)* Returned Food, Reservice or Sale</p>
<p>7. Cold Hold (41° F. (5° C.))</p> <p style="text-align: center;"><u>Data Item 7A</u></p> <p>3-501.16(A)* TCS, Hot and Cold Holding <i>(For the purposes of this Baseline, 41° F. (5° C.) or below will be used as the criteria for assessing <u>all</u> TCS that are maintained/held cold.)</i></p>	<p>11. Food Contact Surfaces</p> <p style="text-align: center;"><u>Data Item 11A</u></p> <p>4-601.11(A)&(B)* Equipment, Food Contact Surfaces and Utensils</p> <p>4-602.11* Equipment Food – Contact Surfaces and Utensils – Frequency</p> <p>4-701.10* Sanitation of Equipment and Utensils – Food Contact Surfaces and Utensils</p> <p>4-702.11* Sanitization of Equipment and Utensils – Before Use After Cleaning</p>
<p>8. Hot Hold (135° F. (57° C.))</p> <p style="text-align: center;"><u>Data Item 8A</u></p> <p>3-501.16(A)* TCS, Hot and Cold Holding</p> <p style="text-align: center;"><u>Data Item 8B</u></p> <p>3-501.16(A)* TCS, Hot and Cold Holding</p>	
<p>9. Time as Public Health Control (TPHC)/Date Marking</p> <p style="text-align: center;"><u>Data Item 9A</u></p> <p>3-501.17(A)(C)* Ready-to-Eat, TCS, Date Marking – On-premises Preparation <i>7 calendar days at 41° F. (5° C.) or less</i></p> <p style="text-align: center;"><u>Data Item 9B</u></p> <p>3-501.18* Ready-to-Eat, TCS, Disposition <i>(Food shall be discarded if not consumed within ≤ 7 calendar days at 41° F. (5° C.) or less</i></p> <p style="text-align: center;"><u>Data Item 9C</u></p> <p>3-501.17(B)(F)* Ready-to-Eat, TCS, Date Marking</p> <p style="text-align: center;"><u>Data Item 9D</u></p> <p>3-501.19* Time as a Public Health Control</p>	

2020 REFERENCE SHEET

<p style="text-align: center;">CDC Risk Factor POOR PERSONAL HYGIENE Personnel</p>	<p>16. Chemical</p>
<p>12. Proper, Adequate Handwashing</p> <p style="text-align: center;"><u>Data Item 12A (2009 Food Code)</u></p> <p>2-301.11* Clean Condition 2-301.12* Cleaning Procedure 2-301.14* When to Wash 2-301.15* Where to Wash</p> <p style="text-align: center;"><u>Data Item 12B (2013 Food Code)</u></p> <p>2-301.11* Clean Condition 2-301.12* Cleaning Procedure 2-301.14* When to Wash 2-301.15* Where to Wash</p>	<p style="text-align: center;"><u>Data Item 16A</u></p> <p>3-202.12* Additives 3-302.14* Protection from Unapproved Additives <i>(NOTE: Regarding SULFITES – Refers to any sulfites added in the food establishment, not to foods processed by a commercial processor or that come into the food establishment already on foods)</i></p> <p style="text-align: center;"><u>Data Item 16B</u></p> <p>7-101.11* Identifying Information, Prominence-Original Containers</p> <p>7-102.11* Common Name-Working Containers</p>
<p>13. Good Hygiene Practices</p> <p style="text-align: center;"><u>Data Item 13A</u></p> <p>2-401.11* Eating, Drinking, or Using Tobacco 2-401.12* Discharges from the Eyes, Nose and Mouth 2-403.11* Handling Prohibition – Animals 3-301.12* Preventing Contamination when Tasting</p>	<p><i>Operational Suppliers and Applications</i></p> <p>7-201.11* Separation-Storage 7-202.11* Restriction-Presence and Use 7-202.12* Conditions of Use 7-203.11* Poisonous or Toxic Material Containers – Prohibitions 7-204.11* Sanitizers, Criteria-Chemicals 7-204.12* Chemicals for Washing Fruits And Vegetables</p>
<p>14. Prevention of Contamination from Hands</p> <p style="text-align: center;"><u>Data Item 14A (2009 Food Code)</u></p> <p>3-301.11* Preventing Contamination from Hands</p> <p style="text-align: center;"><u>Data Item 14B (2013 Food Code)</u></p> <p>3-301.11* Preventing Contamination from Hands</p>	<p>7-204.13* Boiler Water Additives, Criteria 7-204.14* Drying Agents, Criteria 7-205.11* Incidental Food Contact, Criteria-Lubricants 7-206.11* Restricted Use Pesticides, Criteria 7-206.12* Rodent Bait Stations 7-206.13* Tracking Powders, Pest Control And Monitoring 7-207.11* Restriction and Storage-Medicines</p>
<p style="text-align: center;">15. Handwash Facilities</p> <p style="text-align: center;"><u>Data Item 15A</u></p> <p>5-203.11* Handwashing Lavatory-Numbers and Capacity 5-204.11* Handwashing Lavatory-Location and Placement 5-205.11* Using a Handwashing Lavatory-Operation and Maintenance</p> <p style="text-align: center;"><u>Data Item 15B</u></p> <p>6-301.11* Handwashing Cleanser, Availability 6-301.12* Hand Drying Provision</p>	<p>7-207.12* Refrigerated Medicines, Storage 7-208.11* Storage-First Aid Supplies 7-209.11* Storage-Other Personal Care Items</p> <p style="text-align: center;"><u>Data Item 16C</u></p> <p><i>Stock and Retail Sale of Poisonous or Toxic Material INCLUDE ON PRODUCE ONLY</i></p> <p>7-301.11* Separation-Storage and Display <i>(Separation is to be by spacing or partitioning)</i></p>

2020 REFERENCE SHEET

17. Employee Health Policy

Data Item 17A (2009 Food Code)

- 2-201.11* Responsibility of Person in Charge
- 2-201.12* Exclusions and Restrictions
- 2-201.13* Removal of Exclusions and Restrictions

Data Item 17B (2013 Food Code)

- 2-201.11* Responsibility of Person in Charge
- 2-201.12* Exclusions and Restrictions
- 2-201.13* Removal of Exclusions and Restrictions

18. Food & Food Preparation for Highly Susceptible Populations – HSP's ONLY

Data Item 18A

- 3-801.11(A)(2)* Prohibited Foods

Data Item 18B

- 3-801.11(B)* Prohibited Foods
- 3-801.11(E)* Prohibited Foods

Data Item 18C

- 3-801.11(C)* Prohibited Foods

**FDA
Foodborne Illness Risk Factor Study
Data Collection Form**

Date: _____ Time In: _____ Time Out: _____ Inspector: _____

Establishment: _____ Manager: _____

Physical Address: _____

City: _____ State: NC Zip: _____ County: Wake Facility Type: _____**STATUS OF OBSERVATIONS:****IN** = Item found in compliance (**IN** Compliance marking must be based on actual observations)**OUT** = Item found out of compliance (**OUT** of Compliance marking must be based on actual observations)**NO** = Not observable (**NO** marking is made when the data item is part of the establishment's operation or procedures, OR is seasonal and is not occurring at the time of the inspection).**NA** = Not applicable (**NA** marking is made when the data item is NOT part of the establishment's operation or procedures)**IN OUT*******Certified Food Protection Manager Present*******CDC RISK FACTORS*******CDC RISK FACTOR – FOODS FROM UNSAFE SOURCE******FOOD SOURCE****STATUS** **1. Approved Source****IN OUT** A. All food from Regulated Food Processing Plants/ No home prepared/canned foods**IN OUT NA** B. All Molluscan Shellfish from NSSP listed sources. No recreationally caught shellfish received or sold**IN OUT NA NO** C. Game, wild mushrooms harvested with approval of Regulatory Authority**STATUS** **2. Receiving / Sound Condition****IN OUT** A. Food received at proper temperatures/ protected from contamination during transportation and receiving/food is safe, unadulterated **Eggs, milk, and shellfish can be received at 45°F***STATUS** **3. Records****IN OUT NA NO** A. Shellstock tags/labels retained for 90 days from the date the container is emptied and chronological**IN OUT NA NO** B. As required, written documentation of parasite destruction maintained for 90 days for Fish products **NA for roe/Shellfish – aquaculture fish requirements (letter)***IN OUT NA** C. CCP monitoring records maintained in accordance with HACCP plan when required

Notes: _____

ROP for less than 48 hours; HACCP plan is not required; mark NA**CDC RISK FACTORS*******CDC RISK FACTOR – INADEQUATE COOK******PATHOGEN DESTRUCTION****STATUS** **4. Proper Cooking Temperature Per Potentially Hazardous Food (TCS)***(NOTE: Cooking temperatures must be taken to make a determination of compliance or non-compliance. Do not rely upon discussions with managers or cooks to make a determination of compliance or non-compliance. If one food item is found out of temperature, that TCS category must be marked as OUT of compliance.)*

- | | |
|--------------|---|
| IN OUT NA NO | A. Raw shell eggs broken for immediate service cooked to 145°F. (63°C) for 15 seconds. Raw shell eggs broken but not prepared for immediate service cooked to 155°F. (68°C) for 15 seconds <i>*pasteurized SHELL eggs are non-TCS</i> |
| IN OUT NA NO | B. Comminuted Fish, Meats, Game animals cooked to 155°F. (68°C) for 17 seconds |
| IN OUT NA NO | C. Roasts, including formed meat roasts, are cooked to 130°F. (54°C) for 112 minutes or as Chart specified and according to oven parameters per Chart (<i>NOTE: This data item includes beef roasts, corned beef roasts, pork roasts, and cured pork roasts such as ham.</i>) |
| IN OUT NA NO | D. Poultry; stuffed fish, stuffed meat, stuffed pasta, stuffed poultry, stuffed ratites, or stuffing containing fish, meat, poultry or ratites cooked to 165°F. (74°C) instantaneously . |
| IN OUT NA NO | E. Wild game animals cooked to 165°F. (74°C) for instantaneously . |
| IN OUT NA NO | F. Raw animal foods cooked in microwave are rotated, stirred, covered, and heated to 165°F. (74°C). Food is allowed to stand covered for 2 minutes after cooking. |
| IN OUT NA NO | G. Ratites, injected meats are cooked to 155°F. (68°C) for 17 seconds . Specify product and temperature in the space Below |
| IN OUT NA NO | H. All other TCS cooked to 145°F. (63°C) for 15 seconds (<i>including pork and fish</i>) |

Notes: _____

STATUS 5. Rapid Reheating For Hot Holding

- | | |
|--------------|--|
| IN OUT NA NO | A. TCS that is cooked and cooled on premises is rapidly reheated to 165°F. (74°C.) for 15 seconds for hot holding |
| IN OUT NA NO | B. Food reheated in a microwave is heated to 165°F. (74°C.) or higher for hot holding |
| IN OUT NA NO | C. Commercially processed ready to eat food, reheated to 135°F. (60°C.) or above for hot holding |
| IN OUT NA NO | D. Remaining unsliced portions of meat roasts are reheated for hot holding using minimum oven parameters |

Notes: _____

****CDC RISK FACTOR – IMPROPER HOLD****

LIMITATION OF GROWTH OF ORGANISMS OF PUBLIC HEALTH CONCERN

STATUS 6. Proper Cooling Procedure

(NOTE: Record any temperature above 41°F. (5°C) on blank lines. Production documents as well as statements from managers, person-in-charge (PIC), and employees, regarding the time the cooling process was initiated, may be used to supplement actual observations.)

- | | |
|--------------|--|
| IN OUT NA NO | A. Cooked TCS is cooled from 135°F. (60°C.) to 70°F. (21°C.) within 2 hours and from 135°F. (60°C.) to 41°F. (5°C.) or below within 6 hours |
| IN OUT NA NO | B. TCS (prepared from ingredients at ambient temperature) is cooled to 41°F. (5°C.) or below within 4 hours |
| IN OUT NA NO | C. Foods received at a temperature according to Law are cooled to 41°F. (5°C.) within 4 hours (milk, shellfish, eggs) |

Notes: _____

**if not seen within 4 hours after arrival – mark it NO; if fridge is >41° it is OUT (eggs, milk, or shellfish)*

STATUS 7. Cold Hold (41°F. (5°C.))

(NOTE: For the purposes of this Baseline, 41° F. (5°C) or below will be used as the criteria for assessing **all TCS** that are maintained/held cold.) If one product is found out of temperature the item is marked **OUT** of compliance.

- | | |
|--------|---|
| IN OUT | A. TCS is maintained at 41°F. (5°C.) or below, except during preparation, cooking, cooling or when time is used as a public health control. (Record products and temperatures in the space below). |
|--------|---|

Notes: _____

STATUS 8. Hot Hold (135° F. (60°C.))

- | | |
|--------------|--|
| IN OUT NA NO | A. TCS is maintained at 135°F. (60°C.) or above, except during preparation, cooking, or cooling or when time is used as a public health control. |
| IN OUT NA NO | B. Roasts are held at a temperature of 130°F. (54°C.) or above |

Notes: _____

STATUS **9. Time as Public Health Control (TPHC)/Date Marking**

- IN OUT NA NO** A. Ready-to-eat TCS held for more than 24 hours is date marked as required (**prepared on-site**)
IN OUT NA NO B. Discard RTE TCS and/or opened commercial container exceeding 7 days at ≤ 41°F. (5°C.)
IN OUT NA NO C. Opened **Commercial** container of prepared ready-to-eat TCS is date marked as required
IN OUT NA NO D. When time only is used as a public health control, food is cooked and served within 4 hours as required

Notes: _____

**if either A or C is OUT – B is OUT*

****CDC RISK FACTOR – CONTAMINATED EQUIPMENT****

PROTECTION FROM CONTAMINATION

STATUS **10. Separation / Segregation / Protection**

- IN OUT NA NO** A. Food is protected from cross contamination by separating raw animal foods from raw ready-to-eat food and by separating raw animal foods from cooked ready-to-eat food (**Raw from RTE**)
IN OUT NA NO B. Raw animal foods are separated from each other during storage, preparation, holding, and display (**Raw from Raw**)
IN OUT C. Food is protected from environmental contamination – critical items – **excludes food on floor*
IN OUT D. After being served or sold to a consumer, food is not re-served

Notes: _____

**fish – must do wash-rinse-sanitize of prep surface regardless of species order (3-302.11)*

10B is NA if only one raw animal food

STATUS **11. Food-Contact Surfaces**

*(NOTE: This item will require some judgment to be used when marking this item **IN** or **OUT** of compliance. This item should be marked **OUT** of compliance if observations are made that supports a pattern of non-compliance with this item. One dirty utensil, food contact surface or one sanitizer container without sanitizer would not necessarily support an **OUT** of compliance mark. You must provide notes concerning an **OUT** of compliance mark on this item).*

- IN OUT** A. Food-contact surfaces and utensils are clean to sight and touch and sanitized before use (Including frequency of cleaning/sanitizing).

Notes: _____

****CDC RISK FACTOR – POOR PERSONAL HYGIENE****

PERSONNEL

STATUS **12. Proper, Adequate Handwashing**

- IN OUT NO** A. Hands are clean and properly washed when and as required (2017 FDA Code) **glove changes same task OK w/o handwash*

Notes: _____

STATUS **13. Good Hygienic Practices**

- IN OUT NO** A. Food Employees eat, drink, and use tobacco only in designated areas / do not use a utensil more than once to taste food that is sold or served / do not handle or care for animals present. Food employees experiencing persistent sneezing, coughing, or runny nose do not work with exposed food, clean equipment, utensils, linens, unwrapped single-service or single-use articles

Notes: _____

STATUS **14. Prevention of Contamination From Hands**

- IN OUT NA NO** A. Employees do not contact exposed, ready-to-eat food with their bare hands. (2009 FDA Code: RTE foods contacted

— ~~with bare hands must reach 165°F~~
IN OUT NA NO B. Employees do not contact exposed, ready-to-eat food with their bare hands. (2013 FDA Code: RTE foods contacted with bare hands must reach 145°F)

Notes: _____

STATUS 15. Handwash Facilities

IN OUT A. Handwash facilities conveniently located and accessible for employees
IN OUT B. Handwash facilities supplied with hand cleanser / sanitary towels / hand drying devices **signage not required*

Notes: _____

****CDC RISK FACTOR – OTHER****
FOREIGN SUBSTANCES

STATUS 16. Chemicals

IN OUT NA A. If used, only approved food or color additives. Sulfites are not applied to fresh fruits & vegetables intended for raw consumption **bottled lemon juice with sulfites added to fruits/veg is OUT*
IN OUT B. Poisonous or toxic materials, chemicals, lubricants, pesticides, medicines, first aid supplies, and other personal care items are properly identified, stored and used
IN OUT NA* C. Poisonous or toxic materials held for retail sale are properly stored (***Assess only for produce – all others NA**)

Notes: _____

**FD&C #s and English on the container to be IN, and OK if from an approved supplier*

SUPPLEMENTAL ITEMS

STATUS 17 Employee Health Policy

IN OUT A. Facility has a **policy** that is consistent with 2-201 of the Food Code for excluding and restricting employees on the basis of their health and activities as they relate to diseases that are transmissible through food. **Policy** includes employee's responsibility to notify management of symptoms and illnesses identified in the **2017** Food Code.

Notes: _____

STATUS 18 Food & food preparation for highly susceptible populations

(NOTE: These items pertain specifically to those facilities that serve Highly Susceptible Populations as defined in the Food Code. Establishments would include such facility types as Hospitals, Nursing Homes and Elementary Schools.)

IN OUT NA A. Prepackaged juice/beverage containing juice with a warning label (21 CFR, Section 101.17(g)) not served.
IN OUT NA B. Pasteurized eggs or egg products substitutes for raw shell eggs in preparation of foods that are cooked to minimum required temperatures, (specified in Section 4.0 of this Baseline Form), unless cooked to order & immediately served; broken immediately before baking and thoroughly cooked: or included as an ingredient for a recipe supported by a HACCP plan that controls Salmonella Enteritidis.
IN OUT NA C. Raw or partially cooked animal food and raw seed sprouts not served.

Notes: _____

STATUS 19 Management and food employees are trained in food allergy awareness related to assigned duties

IN OUT A. The person in charge accurately describes foods identified as major food allergens and the symptoms associated with major food allergens
IN OUT B. Food employees are trained in food allergy awareness as it relates to their assigned duties

Notes: _____

APPENDIX P – RESOURCES

WEB SITE LOCATIONS FOR REFERENCED DOCUMENTS

2009 FDA Food Code

<https://www.fda.gov/food/fda-food-code/food-code-2009>

2017 FDA Food Code

<https://www.fda.gov/media/110822/download>