Wake County 2010 Baseline Survey:
Report on the Occurrence of Foodborne Illness Risk Factors

I. Background

Wake County Government's Food Lodging Institution Section protects the public health through the enforcement of State rules and regulations enacted for safe and sanitary construction and operation of regulated food service establishments. Nearly 3,000 regulated food service establishments currently operate in Wake County, increasing by 12% since 2007.[1] These facilities generate approximately $140 million in food and beverage sales each month.

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. North Carolina rules are based on previous versions of the U.S. Food and Drug Administration (FDA) Food Code, although North Carolina has not adopted the Food Code. However, the State of North Carolina has proposed to regulate food service establishments based on the 2009 FDA Food Code by reference with subsequent amendments starting in 2012.

In anticipation of this possible regulatory change Wake County Government's Food Lodging Institution Section enrolled in the FDA Voluntary Food Regulatory Program Standards (Program Standards) in 2008[2]. The purpose of the Program Standards is 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.

In 2010, as part of the Program Standards, Wake County completed a survey to assess the frequency of foodborne illness risk factors in food service establishments. The survey identified risk factors based on the 2009 FDA Food Code, and provides a baseline assessment of the occurrence of foodborne illness risk factors in the County's regulated food service establishments. The survey serves two purposes:

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

[1] Facility count includes: restaurants, food stands, mobile food units, pushcarts, private/public school lunchrooms, elderly nutrition sites, limited food services, and nursing home kitchens.
[2] http://www.fda.gov/Food/FoodSafety/RetailFoodProtection/ProgramStandards/

With this information, the County will direct attention to the risk factors that are most frequently observed in food service establishments, and implement programs to reduce or eliminate the frequency of the risk factors.

II. Baseline Survey Approach

The baseline survey evaluated 458 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

To assess risk factors, Wake County staff used a combination of direct observations at each restaurant and responses from restaurant management and food preparation staff. For each of the nine facility types, the number of items recorded as non-compliant with the current FDA Food Code was recorded. Each facility type's priority risk factors (those OUT of compliance) are reported in Section III of the report.

III. Survey Findings

The findings of the baseline survey of risk factors in Wake County establishments were found to be similar to the findings of previous national FDA risk factor studies[3]. The 2010 Wake County baseline survey identified the following risk factors as the most commonly observed that were OUT of compliance:

- Improper holding/time and temperature
- Poor personal hygiene

Section III of the report identifies specific risk factors by facility type that need priority attention. Currently North Carolina food rules do not identify cold holding, datemarking, and employee health policy as it is identified in the 2009 FDA Food Code.

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3 http://www.fda.gov/Food/FoodSafety/RetailFoodProtection/FoodborneIllnessandRiskFactorReduction/RetailFoodRiskFactorStudies/default.htm

Improper holding/time and temperature was the risk factor found to be most often out of compliance. The highest percentage of OUT of compliance values were most commonly associated with:

- Improper cold holding of potentially hazardous food (PHF) (Item 8a) and
- Inadequate date marking of refrigerated ready-to-eat PHF (Items 10a, 10b, and 10c).

Poor personal hygiene was the risk factor with the second highest incidence of OUT of compliance values. The OUT of compliance values were most commonly associated with:

- Non-compliant employee health policy (Item 17a) and
- Improper handwashing (Item 13a).

Based on the baseline survey findings the following risk factors should be targeted for priority education and outreach:

Individual Data Item from the baseline survey	Risk Factor Category	Percent OUT of compliance with 2009 Food Code
Employee health policy	Poor personal hygiene	90% (item 17a)
Datemarking ready-to-eat PHF	Improper holding/time and temperature	42% (item 10a) 56% (item 10b) 56% (item 10c)
Cold Holding at 41°F	Improper holding/time and temperature	52% (item 9a)
Proper cooling procedure for cooked foods	Improper holding/time and temperature	35% (item 7a)

The survey also collected data on certified food protection managers in Wake County, using North Carolina criteria. This data has not been analyzed at this time. The data are available for future analysis to compare the effectiveness of onsite certified food protection managers in reducing or eliminating risks factors that contribute to foodborne illness.

The detailed findings of the survey are presented in Section III of this report.

IV. Recommendations

The results of the 2010 baseline survey indicate that many of the risk factors observed in Wake county food service establishments are not currently regulated by the North Carolina rules. The North Carolina Department of Environment and Natural Resources has been working with stakeholders to adopt the 2009 Food Code by reference with subsequent amendments to better address risk factors identified as OUT of compliance and to remain current with national food protection standards. The State's current plan is to adopt the Food Code effective July 2012.

Moving forward, Wake County staff recommends that food service operators in the county ensure that they have active managerial control over the risk factors that contribute to foodborne illness outbreaks. In addition, Wake County recommends that staff ensures that their inspections, education and enforcement activities are targeted toward the reduction and elimination of risk factors that contribute to foodborne illness. Continued participation in FDA's Program Standards will provide guidance for identifying those risk factors that should be given priority for inspection, education and enforcement.

The common goal for industry and regulatory agencies is to protect public health by reducing or eliminating risk factors that contribute to foodborne illness.

I. 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 the 2005 Food Code. Since that time, the State of North Carolina has proposed to adopt the 2009 Food Code by reference with subsequent amendments starting in 2012.

In addition to some gaps identified in the State rules, education and standardization of staff is the key to consistent and effective regulation. To address this issue and to prepare for the implementation of the Food Code, Wake County enrolled in the FDA Voluntary National Retail Food Regulatory Program Standards (Program Standards) in February 2008.

To gauge compliance with the 2009 Code, Wake County designed and conducted a baseline survey of risk factors associated with foodborne illness in the spring of 2010. The factors surveyed in Wake County's 2010 baseline survey included:

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

Data for the 2010 baseline were obtained from 458 total inspections of institutional food service establishments, restaurants and retail food stores, consisting of 8,861 observations. This report presents the methodology used to establish a baseline and reports the results of the data. The 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 2010 risk factor survey is to establish a baseline, so that industry and regulatory agencies have data on which to measure behavioral changes that directly relate to foodborne illness. In addition, the survey enables industry managers and the local jurisdictions to measure their programs against national criteria.

The 2010 Wake County Baseline Survey 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.

By establishing a baseline, the information gathered from future field inspections can be used to measure trends in terms of compliance with specific requirements of the current Food Code.

An important consideration for the 2010 Wake County baseline survey of risk factors is that the current State rules are not fully compliant with the 2009 FDA Food Code. As a result, certain risk factors can be expected to be out of compliance, since there is not routine regulatory attention to those factors. As the State of North Carolina moves toward adoption of the 2009 Food Code and subsequent amendments by reference, it can be expected that an improvement in compliance with the provisions of the Code that address these risk factors will have a direct impact on the occurrence of foodborne illness risk factors in future surveys.

During the 2010 Wake County Baseline Survey, staff evaluated 458 retail food establishments and made 8,861 observations for compliance with the 2009 Food Code. Based on the design and sample size, the Wake County 2010 survey results are valid for comparison with previous national surveys on the "Occurrence of Foodborne Illness Risk Factors."

II. Methodology

A. Selection of facilities

The industry segments surveyed in Wake County's baseline risk factor study were institutional food service establishments, restaurants and retail food establishments. 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 3 industry segments and 9 facility types selected for the survey. Sample sizes (n) for each type are shown. Using FDA's Data Collection Manual (2003), Wake County randomly determined the appropriate sample size to achieve statistical significance for each type facility for each industry segment, and randomly selected 458 facilities for the survey.[1]

Industry Segment	Facility Type
Institutions	Hospitals (n=7) Nursing Homes (n=33) Elementary Schools (n=57)
Restaurants	Fast Food Restaurants (n=87) Full Service Restaurants (n=87)
Retail Food Stores	Delis (n=57) Meat Markets (n=59) Produce Departments (n=42) Seafood Markets (n=29)

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 7 hospitals. Hospital cafeterias in Wake County are classified by the North Carolina Department of Environment and Natural Resources (NC DENR) types of 01 or 16. Because of the low sample size, all hospital cafeterias were included in the study.

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

- ***Nursing Home*** food establishments (n=33) were selected based on the NC DENR type of 16. Each of these food establishments serves clients from nursing facilities.
- ***Elementary School*** food establishments (n=57) were selected from the list of private and public school lunchrooms with a risk category of 4. These facilities served school children from grades K-5.
- ***Fast Food Restaurants*** (n=87) were selected from NC DENR 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, i.e., counter, wait or drive-through service.
- ***Full Service Restaurants*** (n=87) were selected from NC DENR 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=59) were selected from the NC DENR type 30. Other facilities that sold raw meat or poultry directly to the consumer were also considered.[3]
- ***Seafood Markets*** (n=29) were selected from facilities that sell seafood directly to the consumer, including raw and/or ready-to-eat product. Seafood restaurants were not considered for this category, but were considered for fast food or full service restaurants.
- ***Produce Departments*** (n=42) 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 facility name.

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 2010 Wake County baseline survey used the State's category flow chart in Appendix M.

B. Assignment of Facilities

The project manager generated a list of types of facilities, and then randomized the list in a Microsoft Excel spreadsheet. A sample number was assigned to each facility, including the first

[2] FDA Data Collection Manual, "Developing a Baseline on the Occurrence of Foodborne Illness Risk Factors," page 43.
[3] FDA Data Collection Manual, "Developing a Baseline on the Occurrence of Foodborne Illness Risk Factors," page 43.

10 substitutes, which were numbered sequentially. Data collectors were assigned facilities to survey. If a facility was no longer in 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 one. This allowed staff to ask questions and standardize the process each week.

C. Selection of Data Collectors

Staff with knowledge of the risk factors and the 2009 Food Code was selected to perform the data collection process. Eight county staff and one regional environmental health specialist assisted with the survey. Staff was trained by the FDA regional retail food specialist who 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. E-mail correspondence was archived and used for reference throughout the process.

D. Geographical Locations

Selected facilities were located across the county. 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, Seafood and Produce). 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 5 major risk factors contributing to foodborne illness identified by CDC provided the foundation for the data collection inspection form. See Appendix O, "2010 Wake County baseline survey instrument." For each risk factor, Food Code requirements were identified and grouped into individual data items on the inspection form. See Appendix N, "Baseline Data Collection 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.

Unannounced visits to the selected establishment 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 correction.

F. Baseline Data Collection Form

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

- IN=Item found "in compliance" with Food Code provisions.

- OUT=Item found "out of compliance" with 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. E-mails 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 accuracy in transfer to the electronic database. Final tabulations were audited by an outside staff person to confirm the results of the study.

III. Data Reports and Discussion

The results contained in this report are intended to focus attention on foodborne illness risk factors associated with food preparation procedures and employee behaviors in most need of improvement by industry. If food safety practices within institutional foodservice, restaurants and retail food store facility types are to be significantly improved, individuals responsible for the management and oversight of food establishments must exercise active managerial control over the risk factors most often implicated as the cause of foodborne illness. Food safety management systems for control of these risk factors must be an integral part of daily operations.

Reducing the occurrence of foodborne illness risk factors should be a goal for all those involved in food safety. If this goal is to be achieved, regulatory retail food program managers need to establish program performance measures that are based on reducing the occurrence of these risk factors. Regulatory inspection programs should use intervention strategies that direct the foodservice and retail food industries' efforts toward attaining active managerial control of those food safety practices and employee behaviors most likely to contribute to foodborne illness. Recommended intervention strategies for both regulatory and industry food safety professionals are presented in Section IV, "Recommendations."

The 2010 Wake County baseline survey instrument consisted of 46 individual data items that are grouped into the five CDC risk factor categories and one "other" category related to chemical storage. The five CDC risk factors are presented in the negative, because prevention of these factors will reduce the risk of foodborne illness. The individual data items on the survey form are grouped on the survey instrument as follows:

Risk Factor	Individual Data Items	Number of items
Food from unsafe source	1a-3c	7
Inadequate cooking	4a-6c	16
Improper holding/time-temperature	7a-10d	10
Contaminated equipment/contamination	11a-12a	5
Poor personal hygiene	13a-17a	6
Other/chemical	18a-18c	3

The survey instrument is available at Appendix O.

Certified Manager 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 2010 Wake County baseline survey, staff surveyed whether a certified food protection manager was present and possessed a State-approved course certificate. If the conditions were met, the observation was marked IN compliance. The following table lists the facility type and the corresponding percent compliance with this question.

Facility Type	# facilities with certified manager present	% presence of certified managers
Hospitals (n=7)	5	71%
Nursing Homes (n=33)	18	55%
Elementary Schools (n=57)	47	82%
Fast Food Restaurants (n=87)	24	28%
Full Service Restaurants (n=87)	40	46%
Deli (n=57)	26	46%
Meat (n=59)	15	25%
Produce (n=42)	12	29%
Seafood (n=29)	7	24%

The highest percentage of facilities with a certified manager present was the hospital facility type. Meat markets had the lowest percentage of certified managers present.

Presentation of the data results

A summary of the overall percentage of IN compliance individual data items (Appendix O) per facility type is presented in Table 1 of this section. The data reflect 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 Baseline % IN compliance	FDA 2003 study	FDA 2008 study
Institutions	Hospital	86%	80%	81%
	Nursing Home	81%	80%	83%
	Elementary School	83%	83%	84%
Restaurants	Fast Food	72%	74%	78%
	Full Service	67%	62%	64%
Retail Store Departments	Deli	80%	70%	74%
	Meat and Poultry	82%	80%	88%
	Produce	79%	79%	86%
	Seafood	82%	80%	84%

2010 Wake County Baseline 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 2009 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. Each report is intended to compare comparable facilities and may be used by regulators and industry to focus attention on those areas found OUT of compliance during the survey.

These sections are:

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

A. Institutional Food Service-Hospitals

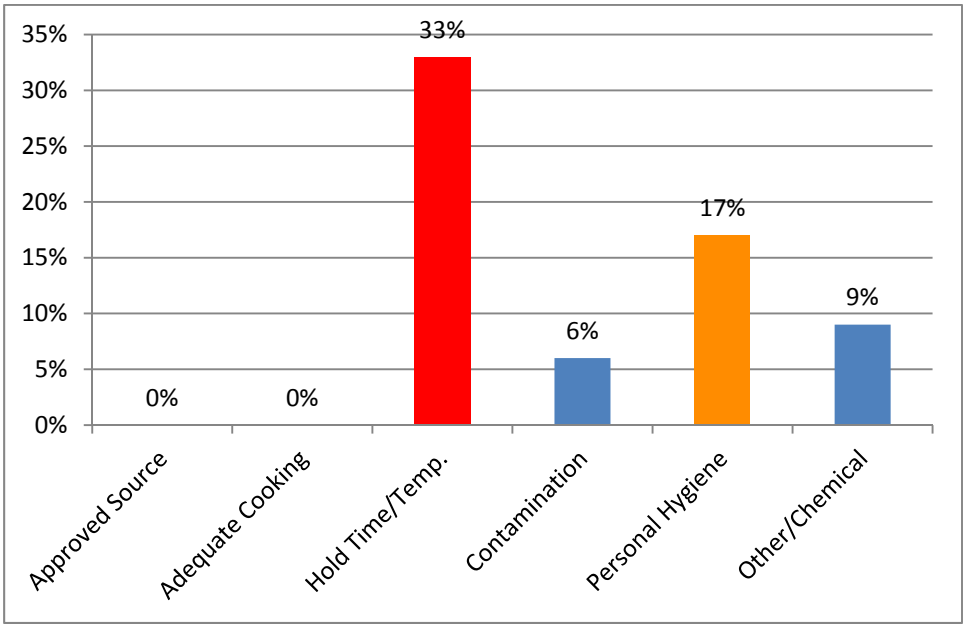
Results and Discussion

For the 2010 Wake County Baseline survey, all seven hospital cafeterias were surveyed. For the 46 possible individual data items on the survey instrument, 178 observations were made at seven hospital kitchens. See Appendix A for complete data related to hospitals.

Certified food protection managers (71%): For this survey, a certified food protection manager had to be present, and possess a State-approved course certificate, in order to be marked IN compliance. A certified food protection manager was present at five of the seven facilities (71% IN compliance).

1. Hospitals: Foodborne Illness Risk Factors found OUT of compliance
by percentage of observations **OUT** of compliance for each **risk factor**. Risk Factors represent categories made up of individual data items from the survey instrument (Appendix O).

Figure H-1



Data from figure H-1 are fully displayed in Table H-1 by risk factor category, with the complete number of observations that were OUT of compliance as compared to the "Total Observations" for each category. A total of 178 observations were made.

The sample size for hospital observations is small; however, the full population (n=7) was surveyed, and the data are presented.

Table H-1

Foodborne Illness Risk Factor Risk Factor OUT of compliance:	Hospital Cafeterias		
	% OUT	# OUT observations	Total Observations
Food from Unsafe Source	0%	0	14
Inadequate Cooking	0%	0	31
Improper Holding/Time-Temperature	**33%**	**15**	**46**
Contaminated Equipment/Contamination	6%	2	35
Poor Personal Hygiene	**17%**	**7**	**41**
Other/Chemical	9%	1	11
Totals	14%	25	178

The individual data items that are part of **Improper Holding/Time-Temperature** and **Poor Personal Hygiene** risk factors will be discussed more fully in the next section. These risk factor categories had the highest number and percentage of OUT of compliance items for hospitals.

2. Hospitals: Risk Factors that need priority attention
by percentage of observations found OUT of compliance for each individual data item that is part of a **risk factor** category.

For hospitals, the foodborne illness risk factors most in need of attention, with their corresponding OUT of compliance percentages, are:

- Hold/Time and Temperature (33% OUT of compliance)
- Personal Hygiene (17% OUT of compliance)

Tables H-2 and H-3 show the breakdown of these risk factors into the specific individual data items on the survey instrument that need priority attention.

Risk Factor: Improper Holding/Time-Temperature (33% OUT)

Table H-2: Breakdown of the **Improper Holding/Time-Temperature** Risk Factor by individual data item from the survey instrument. Items with $\geq$ 25% are bolded.

Data Item	# OUT	Total Obs.	% OUT
Cold Hold 8a	**4**	**7**	**57%**
Commercially prepared RTE, PHF date marked 10c	**4**	**7**	**57%**
Hot Hold 9a	**3**	**7**	**43%**
RTE, PHF discarded after seven days 10b	**3**	**7**	**43%**
RTE prepared on site, PHF date marked 10a	1	7	14%

Cold Holding at 41°F (Individual Data Item 8a): Maintaining potentially hazardous food (PHF) foods under the cold temperature control of 41°F limits the growth of pathogens that may be present in or on the food and may help prevent foodborne illness. Temperature has significant impact on both the generation time of an organism and its lag period. Control of the growth of *Listeria monocytogenes* (*Lm*) is the basis for the cold holding temperature of 41°F. North Carolina's cold holding temperature requirement is 45°F.

Date marking (Individual Data Items 10a, 10b, and 10c): Date marking of refrigerated ready-to-eat, PHF foods is an important food safety system component designed to promote proper food rotation and limit the growth of *Listeria monocytogenes* during cold storage. Discarding ready-to-eat, PHF that has remained in cold storage beyond the parameters described in the FDA Food Code prevents foods with a harmful level of *Listeria monocytogenes* from being served. The importance of date marking ready-to-eat, PHF is accentuated in the hospital environment because the meals are primarily served to a highly susceptible population. North Carolina's current rules do not require date marking.

Hot Holding (Individual Data Item 9a): Holding PHF at the proper hot temperature of 135°F is critical to preventing the growth of bacteria. Equipment, processes and monitoring procedures related to maintaining temperature control for PHF need to be assessed and corrective action should be taken, if necessary.

Risk Factor: Poor Personal Hygiene (17% OUT)

Table H-3: Breakdown of the **Poor Personal Hygiene** Risk Factor by individual data item. Items with ≥ 25% are bolded.

Data Item	# OUT	Total Obs.	% OUT
Employee Health Policy 17a	**4**	**7**	**57%**
Good Hygienic Practices 14a	**2**	**7**	**29%**
Proper Handwashing 13a	1	6	17%

Employee Health Policy (Item 17a): The development and effective implementation of an employee health policy based on the provisions in the Food Code may help to prevent foodborne illness associated with contamination of food by ill or infected food service employees. Current North Carolina rules do not require an employee health policy.

Good Hygienic Practices (Item 14a): Proper hygienic practices by food service employees minimize the possibility of transmitting disease through food. Employee practices such as eating, drinking and smoking in food preparation areas and working while experiencing persistent coughing and sneezing must be prohibited. Elimination of these practices will help prevent the transfer of microorganisms to foods and food contact surfaces.

Proper Handwashing (13a): Handwashing is a critical factor in reducing fecal-oral pathogens that can be transmitted from hands to RTE food as well as other pathogens that can be

transmitted from environmental sources. Many employees fail to wash their hands as often as necessary, and even those who do may use flawed techniques.

3. Hospitals: Summary of risk factor *category* **and** the individual items that need priority attention

Table H-4

Institutional Foodservice-Hospital Cafeteria
Summary of foodborne illness risk factors and
individual data items in need of priority attention

Foodborne Illness Risk Factor in need of priority attention (from Section 1)	Individual data items in need of priority attention with % OUT (from Section 2)
Holding/Time-Temperature (33% OUT)	**Cold Hold 8a (57% OUT)**
	Commercially prepared RTE, PHF date marked 10c (57% OUT)
	Hot Hold 9a (43% OUT)
	RTE, PHF discarded after seven days 10b (43% OUT)
	RTE prepared on site, PHF date marked 10a (14% OUT)
Personal Hygiene (17% OUT)	**Employee Health Policy 17a (57% OUT)**
	Good hygienic practices 14a (29% OUT)
	Proper handwashing 13a (17% OUT)

The most significant individual data items and risk factor categories are presented in Table H-4.

B. Institutional Food Service-Nursing Homes

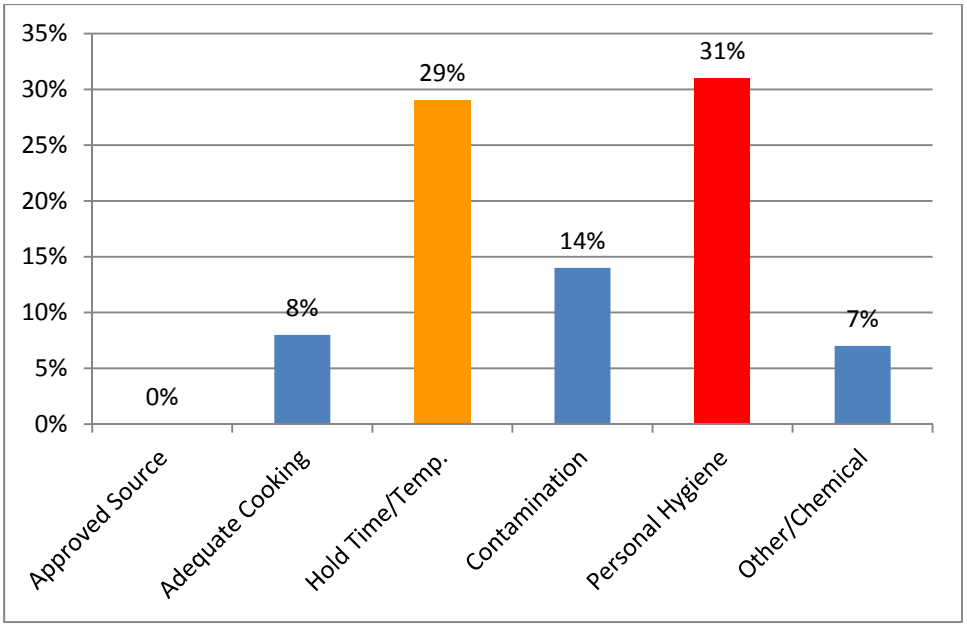
Results and Discussion

For the 2010 Wake County baseline survey, 33 nursing home kitchens were surveyed. For the 46 possible individual data items on the survey instrument 807 observations were made at the 33 nursing home kitchens. See Appendix B for complete data related to nursing homes.

Certified food protection managers (55%): For this survey, a certified food protection manager had to be present, and possess a State-approved course certificate, in order to be marked IN compliance. A certified food protection manager was present at 18 of the 33 facilities (55% IN compliance).

1. Nursing Homes: **Foodborne Illness Risk Factors found OUT of compliance** *(percentage (%) of observations found **OUT** of compliance for each **risk factor**)*. Risk Factors represent categories made up of individual data items from the survey instrument (Appendix O).

Figure NH-1



Data from figure NH-1 are fully displayed in Table NH-1 by risk factor category, with the complete number of observations that were OUT of compliance as compared to the "Total Observations" for each risk factor category. A total of 807 individual observations were made for nursing home kitchens.

Table NH-1

Foodborne Illness Risk Factor Risk Factor OUT of compliance:	Nursing Home Cafeterias		
	% OUT	# OUT observations	Total Observations
Food from Unsafe Source	0%	0	66
Inadequate Cooking	8%	11	140
Improper Holding/Time-Temperature	**29%**	**54**	**189**
Contaminated Equipment/Contamination	14%	23	162
Poor Personal Hygiene	**31%**	**60**	**194**
Other/Chemical	7%	4	56
Totals	19%	152	807

The individual data items which are part of the **Poor Personal Hygiene** (31% OUT) and **Improper Holding/Time-Temperature** (29% OUT) risk factors will be discussed more fully in Section 2. These risk factor categories had the highest number and percentage of OUT of compliance items for nursing home kitchens.

2. Nursing Homes: **Risk Factors that need priority attention** (percentage (%) of observations found OUT of compliance for each individual data item that is part of a risk factor)

For nursing homes, the foodborne illness risk factors most in need of attention with their corresponding OUT of compliance percentages are:

- Poor Personal Hygiene (31% OUT of compliance)
- Improper Holding/Time and Temperature (29% OUT of compliance)

Tables NH-2 and NH-3 show the breakdown of these risk factors into the specific individual data items on the survey instrument that need priority attention.

Risk Factor: Poor Personal Hygiene (31% OUT)

Table NH-3: Breakdown of the **Personal Hygiene** Risk Factor by individual data item. Items with ≥ 25% are bolded.

Data Item	# OUT	Total Obs.	% OUT
Employee Health Policy 17a	**33**	**33**	**100%**
Proper Handwashing 13a	**10**	**32**	**31%**
Prevention of Hand Contamination 15a	7	31	23%
Handwash facilities (accessible) 16a	6	33	18%
Good Hygienic Practices 14a	4	32	13%

Employee Health Policy (Item 17a): The development and effective implementation of an employee health policy based on the provisions in the Food Code may help to prevent foodborne illness associated with contamination of food by ill or infected food employees. 100% of observations for this individual item at nursing home kitchens were OUT of compliance with the Food Code specifications for a health policy. Current North Carolina rules do not require an employee health policy.

Proper Handwashing (13a): Handwashing is a critical factor in reducing fecal-oral pathogens that can be transmitted from hands to RTE food as well as other pathogens that can be transmitted from environmental sources. Many employees fail to wash their hands as often as necessary, and even those who do may use flawed techniques.

Prevention of Hand Contamination (Item 15a): Handwashing alone may not prevent the transmission of pathogens to foods via hand contact; therefore, preventing bare hand contact with ready-to-eat foods is a major control measure for limiting the spread of harmful bacteria and viruses from the hands to ready-to-eat food. Reinforcing the importance of preventing bare hand contact with ready-to-eat foods should be supported by a management system that includes proper employee training and monitoring of practices to identify to what extent procedures are being followed. North Carolina rules stress minimal bare hand contact but do not differentiate between RTE food and raw products, and do not fully restrict bare hand contact of RTE foods.

Handwash facilities (Item 16a): Hands are a common vehicle for the transmission of pathogens to foods in an establishment. Hands can become soiled with a variety of contaminants during routine operations. The transfer of contaminants can be limited by providing food employees with handwashing sinks that are properly equipped and conveniently located. Handwashing sinks that are blocked by portable equipment or stacked full of soiled utensils and other items, are rendered unavailable for employee use.

Good Hygienic Practices (Item 14a): Proper hygienic practices by food service employees minimize the possibility of transmitting disease through food. Employee practices such as eating, drinking and smoking in food preparation areas and working while experiencing persistent coughing and sneezing must be prohibited. Elimination of these practices will help prevent the transfer of microorganisms to foods and food contact surfaces.

Risk Factor: Holding/Time-Temperature (29% OUT)

Table NH-2: Breakdown of the **Holding/Time-Temperature** Risk Factor by individual data item from the survey instrument. Items with ≥ 25% are bolded.

Data Item	# OUT	Total Obs.	% OUT
Commercially prepared RTE, PHF date marked 10c	**16**	**31**	**52%**
Cold Hold 8a	**11**	**33**	**33%**
Proper Cooling Procedure (Cooked and cooled) 7a	**5**	**16**	**31%**
RTE prepared on site, PHF date marked 10a	**8**	**32**	**25%**
RTE, PHF discarded after seven days 10b	7	30	23%
Proper Cooling Procedure (Ambient and cooled) 7b	3	13	23%
Proper Cooling Procedure (Received and cooled) 7c	2	11	18%
Hot Hold 9A	2	21	10%

Date marking (Individual Data Items 10a, 10b, and 10c): Date marking of refrigerated ready-to-eat, PHF foods is an important food safety system component designed to promote proper food rotation and limit the growth of *Listeria monocytogenes* during cold storage. Discarding ready-to-eat, PHF that has remained in cold storage beyond the parameters described in the *FDA Food Code* prevents foods with a harmful level of *Listeria monocytogenes* from being served. The importance of date marking of ready-to-eat, PHF is accentuated in the nursing home environment because the meals are primarily served to a highly susceptible population. North Carolina's current rules do not require date marking. During the 2010 Wake County survey, all three individual data items that address date marking ranked for the Improper Holding/Time-Temperature risk factor category.

Cold Holding at 41F (Individual Data Item 8a): Maintaining potentially hazardous food (PHF) foods under the cold temperature control of 41°F limits the growth of pathogens that may be present in or on the food and may help prevent foodborne illness. Temperature has significant impact on both the generation time of an organism and its lag period. Control of the growth of *Listeria monocytogenes* (*Lm*) is the basis for the cold holding temperature of 41°F. North Carolina's cold holding temperature requirement is 45°F.

Proper Cooling Procedure (Individual Data Items 7a, 7b, and 7c): Safe cooling requires rapid removal of heat from foods quickly enough to prevent the growth of spore-forming pathogens. Nursing home foodservice directors and managers need to ensure their practices and procedures are capable of rapidly cooling PHF. Item 7a represents those items that are cooled from a cooked state. Item 7b represents cooling from an ambient state (e.g., melons), and 7c addresses cooling after receiving food shipments. Rapid cooling is a risk factor that needs active managerial control.

Hot Holding (Individual Data Item 9a): Holding PHF at the proper hot temperature of 135°F is critical to preventing the growth of bacteria. Equipment, processes and monitoring procedures related to maintaining temperature control for PHF need to be assessed and corrective action

should be taken, if necessary. Note the low number of OUT of compliance observations relative to the total number of observations.

3. Nursing Homes: Summary of risk factor *category* **and** the individual items that need priority attention

Table NH-4

Institutional Foodservice-Nursing Homes
Summary of foodborne illness risk factors and
individual data items in need of priority attention

Foodborne Illness Risk Factor in need of priority attention (from Section 1)	Individual data items in need of priority attention with % OUT (from Section 2)
Personal Hygiene (31% OUT)	**Employee Health Policy 17a (100% OUT)**
	Proper Handwashing 13a(31% OUT)
	Prevention of Hand Contamination 15A (23% OUT)
	Handwash facilities (accessible) 16A (18% OUT)
	Good Hygienic Practices 14A (13%)
Holding/Time-Temperature (29% OUT)	**Commercially prepared RTE, PHF date marked 10c (52% OUT)**
	Cold Hold 8a (33% OUT)
	Proper Cooling Procedure (Cooked and cooled) 7a (31% OUT)
	RTE prepared on site, PHF date marked 10a (25% OUT)
	RTE, PHF discarded after seven days 10b (23% OUT)
	Proper Cooling Procedure (Ambient and cooled) 7b (23% OUT)
	Proper Cooling Procedure (Received and cooled) 7c (18% OUT)
	Hot Hold 9b (10% OUT)

The most significant individual data items and risk factor categories are summarized in Table NH-4.

C. Institutional Food Service-Elementary Schools

Results and Discussion

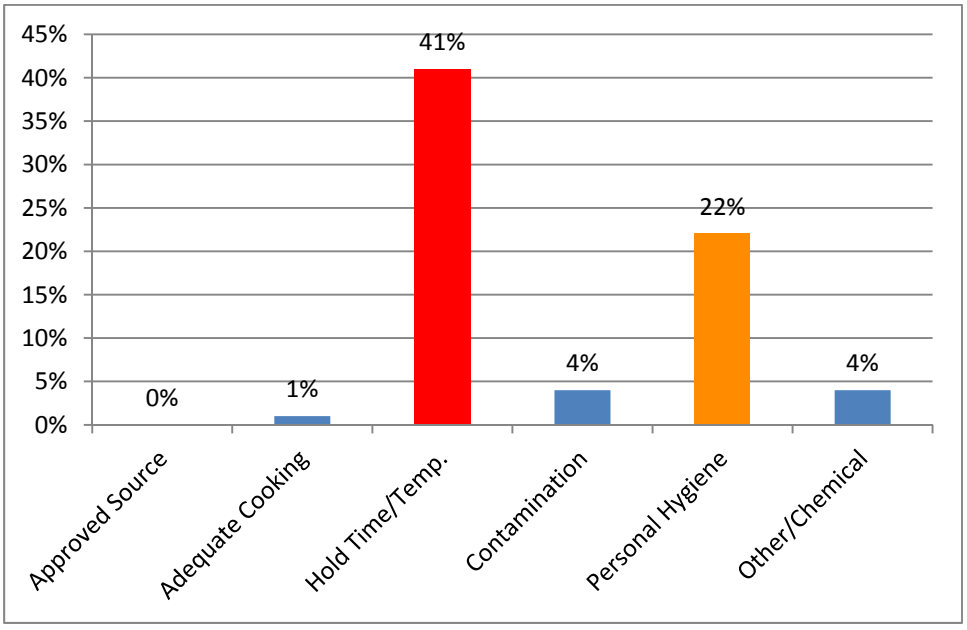
For the 2010 Wake County Baseline survey, 57 elementary school kitchens were surveyed. For the 46 possible individual data items on the survey instrument, 1,257 observations were made at 57 elementary school kitchens. See Appendix C for complete data related to elementary schools.

Certified food protection managers (82%): For this survey, a certified food protection manager had to be present, and possess a State-approved course certificate, in order to be marked IN compliance. A certified food protection manager was present at 47 of the 57 facilities (82% IN compliance). Of the nine facility types surveyed, elementary school kitchens had the highest percent of certified managers present.

1. Elementary Schools: Foodborne Illness Risk Factors found OUT of compliance

*by percentage of observations **OUT** of compliance for each **risk factor***. Risk Factors represent categories made up of individual data items from the survey instrument (See Appendix O).

Figure Elem-1



Data from Figure Elem-1 are fully displayed in Table Elem-1 by risk factor category, with the complete number of observations that were OUT of compliance as compared to the "Total Observations" for each risk factor category. A total of 1,257 individual observations were made at elementary school kitchens.

Table Elem-1

Foodborne Illness Risk Factor Risk Factor OUT of compliance:	Elementary Schools		
	% OUT	# OUT observations	Total Observations
Food from Unsafe Source	0%	0	115
Inadequate Cooking	1%	3	224
Improper Holding/Time-Temperature	**41%**	**126**	**309**
Contaminated Equipment/Contamination	4%	7	175
Poor Personal Hygiene	**22%**	**75**	**342**
Other/Chemical	4%	4	92
Totals	17%	215	1257

The individual data items which are part of **Holding/Time-Temperature** and **Personal Hygiene** risk factors will be discussed more fully in Section 2. These risk factor categories had the highest number and percentage of OUT of compliance items for elementary school kitchens.

2. Elementary Schools: Risk Factors that need priority attention (percentage (%) of observations found OUT of compliance for each individual data item that is part of a risk factor)

For elementary schools, the foodborne illness risk factors most in need of attention with their corresponding OUT of compliance percentages are:

- Improper Holding/Time and Temperature (41% OUT of compliance)
- Poor Personal Hygiene (22% OUT of compliance)

Tables NH-2 and NH-3 show the breakdown of these risk factors into the specific individual data items on the survey instrument that need priority attention.

Risk Factor: Improper Holding/Time-Temperature (41% OUT)

Table Elem-2: Breakdown of the **Holding/Time-Temperature** Risk Factor by individual data item from the survey instrument. Items with ≥ 25% are bolded.

Data Item	# OUT	Total Obs.	% OUT
RTE, PHF discarded after seven days 10b	**37**	**53**	**70%**
Commercially prepared RTE, PHF date marked 10c	**33**	**49**	**67%**
RTE prepared on site, PHF date marked 10a	**14**	**31**	**45%**
Cold Hold 8a	**23**	**57**	**40%**
Hot Hold 9a	**15**	**15**	**29%**
Proper Cooling Procedure (Cooked and cooled) 7a	3	3	20%
Proper Cooling Procedure (Received and cooled) 7c	1	1	3%

Date marking (Individual Data Items 10a, 10b, and 10c): Date marking of refrigerated ready-to-eat, PHF foods is an important food safety system component designed to promote proper food rotation and limit the growth of *Listeria monocytogenes* during cold storage. Discarding ready-to-eat, PHF that has remained in cold storage beyond the parameters described in the FDA Food Code prevents foods with a harmful level of *Listeria monocytogenes* from being served. The importance of date marking of ready-to-eat, PHF is accentuated in the elementary school environment because the meals are primarily served to a highly susceptible population. North Carolina's current rules do not require date marking. During the 2010 Wake County survey, all three individual data items that address date marking ranked high for the Improper Holding/Time-Temperature risk factor category.

Cold Holding at 41F (Individual Data Item 8a): Maintaining potentially hazardous food (PHF) foods under the cold temperature control of 41°F limits the growth of pathogens that may be present in or on the food and may help prevent foodborne illness. Temperature has significant impact on both the generation time of an organism and its lag period. Control of the growth of *Listeria monocytogenes* (*Lm*) is the basis for the cold holding temperature of 41°F. North Carolina's cold holding temperature requirement is 45°F.

Hot Holding (Individual Data Item 9a): Holding PHF at the proper hot temperature of 135°F is critical to preventing the growth of bacteria. Equipment, processes and monitoring procedures related to maintaining temperature control for PHF need to be assessed and corrective action should be taken if necessary.

Proper Cooling Procedure (Individual Data Items 7a and 7c): Safe cooling requires rapid removal of heat from foods quickly enough to prevent the growth of spore-forming pathogens. Elementary school cafeteria foodservice directors and managers need to ensure their practices and procedures are capable of rapidly cooling PHF. Item 7a represents those items that are cooled from a cooked state and 7c addresses cooling after receiving food shipments. These sample sizes were small for comparison; however, rapid cooling is an important component for the risk factor.

Risk Factor: Poor Personal Hygiene (22% OUT)

Table Elem-3: Breakdown of the **Personal Hygiene** Risk Factor by individual data item. Items with ≥ 25% are bolded.

Data Item	# OUT	Total Obs.	% OUT
Employee Health Policy 17a	**57**	**57**	**100%**
Proper Handwashing 13a	8	57	14%
Good Hygienic Practices 14a	5	57	9%
Handwash facilities (accessible) 16a	2	57	4%
Handwash Facilities (soap and towels) 16b	2	57	4%
Prevention of Hand Contamination 15a	1	57	2%

Employee Health Policy (Item 17a): The development and effective implementation of an employee health policy based on the provisions in the Food Code may help to prevent foodborne illness associated with contamination of food by ill or infected food employees. 100% of observations for this individual item at elementary schools were OUT of compliance with the Food Code specifications for a health policy. Current North Carolina rules do not require an employee health policy.

Proper Handwashing (13a): Handwashing is a critical factor in reducing fecal-oral pathogens that can be transmitted from hands to RTE food as well as other pathogens that can be transmitted from environmental sources. Many employees fail to wash their hands as often as necessary, and even those who do may use flawed techniques.

The data for other items is presented in Table Elem-3. The sample size for these OUT observations is relatively low; however, each of these items will be described in the overall report. Controlling each item is a significant control for reducing the risk of foodborne illness.

3. Elementary Schools: Summary of risk factor *category* **and** the individual items that need priority attention

Table Elem-4

Institutional Foodservice-Elementary Schools
Summary of foodborne illness risk factors and individual data items in need of priority attention

Foodborne Illness Risk Factor in need of priority attention (from Section 1)	Individual data items in need of priority attention with % OUT (from Section 2)
Holding/Time-Temperature (41% OUT)	**RTE, PHF discarded after seven days 10b (70% OUT)**
	Commercially prepared RTE, PHF date marked 10c (67% OUT)
	RTE prepared on site, PHF date marked 10a (45% OUT)
	Cold Hold 8a (40% OUT)
	Hot Hold 9a (29% OUT)
	Proper Cooling Procedure (Cooked and cooled) 7a (20% OUT)
	Proper Cooling Procedure (Received and cooled) 7c (3% OUT)
Personal Hygiene (22% OUT)	**Employee Health Policy 17a (100% OUT)**
	Proper Handwashing 13a (14% OUT)
	Good Hygienic Practices 14a (9%)
	Handwash facilities (accessible) 16a (4% OUT)
	Handwash Facilities (soap and towels) 16b (4% OUT)
	Prevention of Hand Contamination 15a (2% OUT)

The most significant individual data items and risk factor categories are summarized in Table Elem-4.

D. Restaurants-Fast Food

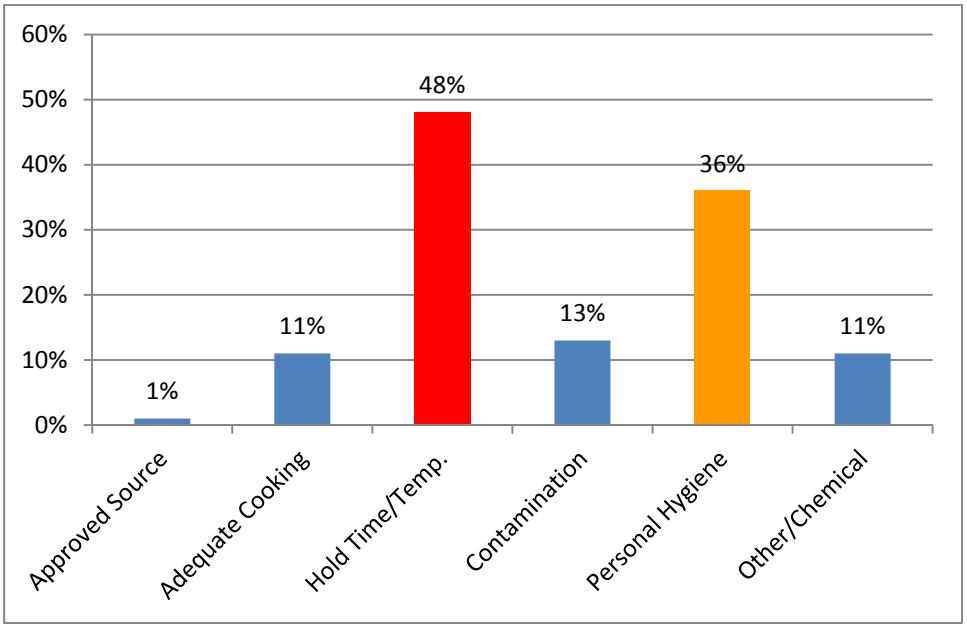
Results and Discussion

For the 2010 Wake County Baseline survey, 87 fast food restaurants were surveyed. For the 46 possible individual data items on the survey instrument 1,628 observations were made at 87 fast food restaurants. See Appendix D for complete data related to fast food restaurants.

Certified food protection managers (28%): For this survey, a certified food protection manager had to be present, and possess a State-approved course certificate, in order to be marked IN compliance. A certified food protection manager was present at 24 of the 87 facilities (28% IN compliance).

1. Fast Food Restaurants: Foodborne Illness Risk Factors found OUT of compliance
*by percentage of observations **OUT** of compliance for each **risk factor***. Risk Factors represent categories made up of individual data items from the survey instrument (See Appendix O).

Figure Fast-1



Data from Figure Fast-1 are fully displayed in Table Fast-1 by risk factor category, with the complete number of observations that were OUT of compliance as compared to the "Total Observations" for each category. A total of 1,628 observations were made.

Table Fast-1

Foodborne Illness Risk Factor Risk Factor OUT of compliance:	Fast Food Restaurants		
	% OUT	# OUT observations	Total Observations
Food from Unsafe Source	1%	2	179
Inadequate Cooking	11%	9	85
Improper Holding/Time-Temperature	**48%**	**206**	**430**
Contaminated Equipment/Contamination	13%	46	349
Poor Personal Hygiene	**36%**	**177**	**493**
Other/Chemical	11%	10	92
Totals	28%	450	1,628

The individual data items which are part of **Improper Holding/Time-Temperature** and **Poor Personal Hygiene** risk factors will be discussed more fully in Section 2. These risk factor categories had the highest number and percentage of OUT of compliance items for fast food restaurants.

2. Fast Food Restaurants: Risk Factors that need priority attention
by percentage of observations found OUT of compliance for each individual data item that is part of a **risk factor** category.

For fast food restaurants, the foodborne illness risk factors most in need of attention with their corresponding OUT of compliance percentages are:

- Improper Holding /Time and Temperature (48% OUT of compliance)
- Poor Personal Hygiene (36% OUT of compliance)

Tables Fast-2 and Fast-3 show the breakdown of these risk factors into the specific individual data items on the survey instrument that need priority attention.

Risk Factor: Holding/Time-Temperature (48% OUT)

Table Fast-2: Breakdown of the **Improper Holding/Time-Temperature** Risk Factor by individual data item from the survey instrument. Items with ≥ 25% are bolded.

Data Item	# OUT	Total Obs.	% OUT
RTE prepared on site, PHF date marked 10a	**31**	**49**	**63%**
Cold Hold 8a	**54**	**87**	**62%**
RTE, PHF discarded after seven days 10b	**50**	**84**	**60%**
Commercially prepared RTE, PHF date marked 10c	**47**	**82**	**57%**
Time as Public Health Control 10d	**2**	**7**	**29%**
Proper Cooling Procedure (Cooked and cooled) 7a	**4**	**16**	**25%**
Proper Cooling Procedure (Ambient and cooled) 7b	**4**	**16**	**25%**
Hot Hold 9a	12	67	18%
Proper Cooling Procedure (Received and cooled) 7c	2	21	10%

Date marking (Individual Data Items 10a, 10b, 10c, and 10d): Date marking of refrigerated ready-to-eat, PHF foods is an important food safety system component designed to promote proper food rotation and limit the growth of *Listeria monocytogenes* during cold storage. Discarding ready-to-eat, PHF that has remained in cold storage beyond the parameters described in the FDA Food Code prevents foods with a harmful level of *Listeria monocytogenes* from being served. Item 10d addresses use of time as a public health control. North Carolina's current rules do not require date marking.

Cold Holding at 41°F (Individual Data Item 8a): Maintaining potentially hazardous food (PHF) foods under the cold temperature control of 41°F limits the growth of pathogens that may be present in or on the food and may help prevent foodborne illness. Temperature has significant impact on both the generation time of an organism and its lag period. Control of the growth of *Listeria monocytogenes* (*Lm*) is the basis for the cold holding temperature of 41°F. North Carolina's cold holding temperature requirement is 45°F.

Proper Cooling Procedure (Individual Data Items 7a, 7b and 7c): Safe cooling requires rapid removal of heat from foods quickly enough to prevent the growth of spore-forming pathogens. Foodservice directors and managers need to ensure their practices and procedures are capable of rapidly cooling PHF. Item 7a represents those items that are cooled from a cooked state, 7b represents cooling from ambient temperatures, and 7c addresses cooling after receiving food shipments.

Hot Holding (Individual Data Item 9a): Holding PHF at the proper hot temperature of 135°F is critical to preventing the growth of bacteria. Equipment, processes, and monitoring procedures related to maintaining temperature control for PHF need to be assessed and corrective action should be taken, if necessary.

Risk Factor: Poor Personal Hygiene (36% OUT)

Table Fast-3: Breakdown of the **Personal Hygiene** Risk Factor by individual data item. Items with ≥ 25% are bolded.

Data Item	# OUT	Total Obs.	% OUT
Employee Health Policy 17a	**79**	**87**	**91%**
Prevention of Hand Contamination 15a	**34**	**74**	**46%**
Proper Handwashing 13a	**22**	**75**	**29%**
Handwash facilities (accessible) 16a	19	87	22%
Good Hygienic Practices 14a	18	83	22%
Handwash facilities (soap and towels) 16b	5	87	6%

Employee Health Policy (Item 17a): The development and effective implementation of an employee health policy based on the provisions in the Food Code may help to prevent foodborne illness associated with contamination of food by ill or infected food employees. Current North Carolina rules do not require an employee health policy.

Prevention of Hand Contamination (Item 15a): Handwashing alone may not prevent the transmission of pathogens to foods via hand contact; therefore, preventing bare hand contact with ready-to-eat foods is a major control measure for limiting the spread of harmful bacteria and viruses from the hands to ready-to-eat (RTE) food. Reinforcing the importance of preventing bare hand contact with ready-to-eat foods should be supported by a management system that includes proper employee training and monitoring of practices to identify to what extent procedures are being followed. North Carolina rules stress minimal bare hand contact, but do not differentiate between RTE food and raw products, and do not fully restrict bare hand contact of RTE foods.

Proper Handwashing (13a): Handwashing is a critical factor in reducing fecal-oral pathogens that can be transmitted from hands to RTE food as well as other pathogens that can be transmitted from environmental sources. Many employees fail to wash their hands as often as necessary, and even those who do may use flawed techniques.

Handwash facilities (Items 16a and 16b): Hands are a common vehicle for the transmission of pathogens to foods in an establishment. Hands can become soiled with a variety of contaminants during routine operations. The transfer of contaminants can be limited by providing food employees with handwashing sinks that are properly equipped and conveniently located. Handwashing sinks that are blocked by portable equipment or stacked full of soiled utensils and other items, are rendered unavailable for employee use. In addition to keeping sinks available for handwashing, they must be stocked with soap and towels.

Good Hygienic Practices (Item 14a): Proper hygienic practices by food employees minimize the possibility of transmitting disease through food. Employee practices such as eating, drinking and smoking in food preparation areas and working while experiencing persistent coughing and

sneezing must be prohibited. Elimination of these practices will help prevent the transfer of microorganisms to foods and food contact surfaces.

3. Fast Food Restaurants: Summary of risk factor *category* **and** the individual items that need priority attention

Table Fast-4

Restaurants-Fast Food
Summary of foodborne illness risk factors and individual data items in need of priority attention

Foodborne Illness Risk Factor in need of priority attention (from Section 1)	Individual data items in need of priority attention with % OUT (from Section 2)
Holding/Time-Temperature (48% OUT)	**RTE prepared on site, PHF date marked 10a (63% OUT)**
	Cold Hold 8a (62% OUT)
	RTE, PHF discarded after seven days 10b (60% OUT)
	Commercially prepared RTE, PHF date marked 10c (57% OUT)
	Time as Public Health Control 10d (29% OUT)
	Proper Cooling Procedure (Cooked and cooled) 7a (25% OUT)
	Proper Cooling Procedure (Ambient and cooled) 7b (25% OUT)
	Hot Hold 9a (18% OUT)
	Proper Cooling Procedure (Received and cooled) 7c (10% OUT
Personal Hygiene (36% OUT)	**Employee Health Policy 17a (91% OUT)**
	Prevention of Hand Contamination 15a (46% OUT)
	Proper Handwashing 13a (29% OUT)
	Handwash facilities (accessible) 16a (22% OUT)
	Good Hygienic Practices 14a (22% OUT)
	Handwash facilities (soap and towels) 16b (6% OUT)

The most significant individual data items and risk factor categories are presented in Table H-4.

E. Restaurants-Full Service

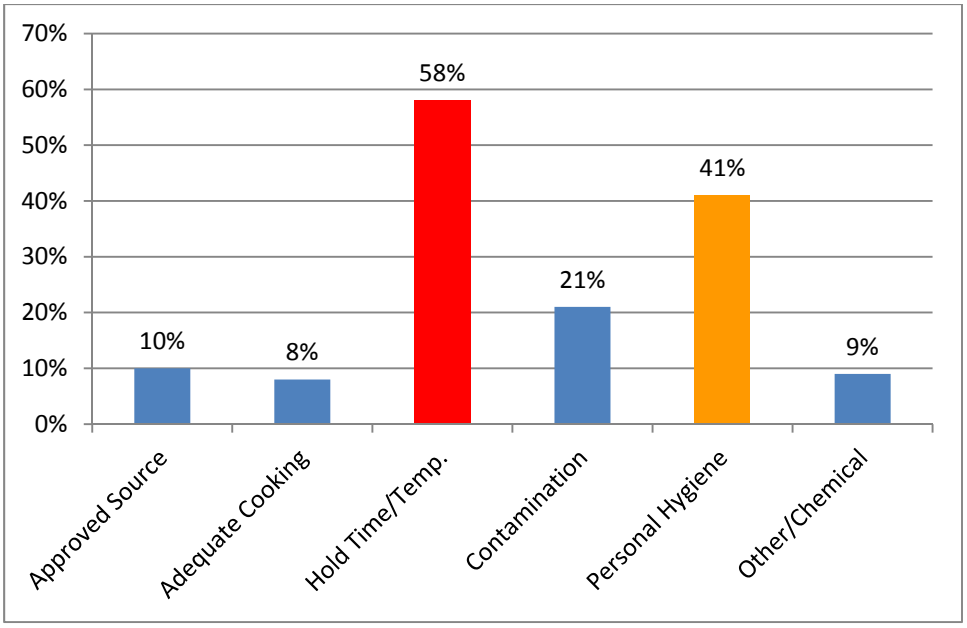
Results and Discussion

For the 2010 Wake County Baseline survey, 87 full service restaurants were surveyed. For the 46 possible individual data items on the survey instrument 1,901 observations were made at 87 full service restaurants. See Appendix E for complete data related to full service restaurants.

Certified food protection managers (46%): For this survey, a certified food protection manager had to be present, and possess a State-approved course certificate, in order to be marked IN compliance. A certified food protection manager was present at 40 of the 87 facilities (46% IN compliance).

1. Full Service Restaurants: Foodborne Illness Risk Factors found OUT of compliance
*by percentage of observations **OUT** of compliance for each **risk factor***. Risk Factors represent categories made up of individual data items from the survey instrument (See Appendix O).

Figure Res-1



Data from Figure Res-1 are fully displayed in Table Res-1 by risk factor category, with the complete number of observations that were OUT of compliance as compared to the "Total Observations" for each category. A total of 1,901 observations were made.

Table Res-1

Foodborne Illness Risk Factor Risk Factor OUT of compliance:	Full Service Restaurants		
	% OUT	# OUT observations	Total Observations
Food from Unsafe Source	10%	22	216
Inadequate Cooking	8%	11	132
Improper Holding/Time-Temperature	**58%**	**292**	**501**
Contaminated Equipment/Contamination	21%	90	429
Poor Personal Hygiene	**41%**	**210**	**508**
Other/Chemical	9%	10	115
Totals	33%	635	1,901

The individual data items which are part of **Improper Holding/Time-Temperature** and **Poor Personal Hygiene** risk factors will be discussed more fully in Section 2. These risk factor categories had the highest number and percentage of OUT of compliance items for full service restaurants.

2. Full Service Restaurants: Risk Factors that need priority attention
by percentage of observations found OUT of compliance for each individual data item that is part of a **risk factor** category.

For full service restaurants, the foodborne illness risk factors most in need of attention with their corresponding OUT of compliance percentages are:

- Improper Holding/Time and Temperature (58% OUT of compliance)
- Poor Personal Hygiene (41% OUT of compliance)

Tables Res-2 and Res-3 show the breakdown of these risk factors into the specific individual data items on the survey instrument that need priority attention.

Risk Factor: Improper Holding/Time-Temperature (58% OUT)

Table Res-2: Breakdown of the **Improper Holding/Time-Temperature** Risk Factor by individual data item from the survey instrument. Items with ≥ 25% are bolded.

Data Item	# OUT	Total Obs.	% OUT
RTE, PHF discarded after 7 days 10b	**67**	**85**	**79%**
Commercially prepared RTE, PHF date marked 10c	**57**	**78**	**73%**
RTE prepared on site, PHF date marked 10a	**57**	**82**	**70%**
Cold Hold 8a	**59**	**87**	**68%**
Proper Cooling Procedure (Cooked and cooled) 7a	**28**	**56**	**50%**
Time as Public Health Control 10c	**1**	**3**	**33%**
Proper Cooling Procedure (Ambient and cooled) 7b	5	22	23%
Hot Hold 9a	16	75	21%
Proper Cooling Procedure (Received and cooled) 7c	2	12	17%

Date marking (Individual Data Items 10a, 10b, 10c and 10d): Date marking of refrigerated ready-to-eat, PHF foods is an important food safety system component designed to promote proper food rotation and limit the growth of *Listeria monocytogenes* during cold storage. Discarding ready-to-eat, PHF that has remained in cold storage beyond the parameters described in the *FDA Food Code* prevents foods with a harmful level of *Listeria monocytogenes* from being served. North Carolina's current rules do not require date marking.

Cold Holding at 41°F (Individual Data Item 8a): Maintaining potentially hazardous food (PHF) foods under the cold temperature control of 41°F limits the growth of pathogens that may be present in or on the food and may help prevent foodborne illness. Temperature has significant impact on both the generation time of an organism and its lag period. Control of the growth of *Listeria monocytogenes* (*Lm*) is the basis for the cold holding temperature of 41°F. North Carolina's cold holding temperature requirement is 45°F.

Proper Cooling Procedure (Individual Data Items 7a, 7b and 7c): Safe cooling requires rapid removal of heat from foods quickly enough to prevent the growth of spore-forming pathogens. Foodservice directors and managers need to ensure their practices and procedures are capable of rapidly cooling PHF. Item 7a represents those items that are cooled from a cooked state, 7b represents cooling from ambient temperatures, and 7c addresses cooling after receiving food shipments.

Risk Factor: Personal Hygiene (41% OUT)

Table Res-3: Breakdown of the **Poor Personal Hygiene** Risk Factor by individual data item. Items with ≥ 25% are bolded.

Data Item	# OUT	Total Obs.	% OUT
Employee Health Policy 17a	**86**	**87**	**99%**
Prevention of Hand Contamination 15a	**45**	**77**	**58%**
Proper Handwashing 13a	**27**	**84**	**32%**
Good Hygienic Practices 14a	**22**	**86**	**26%**
Handwash facilities (accessible) 16a	18	87	21%
Handwash facilities (soap and towels) 16b	12	87	14%

Employee Health Policy (Item 17a): The development and effective implementation of an employee health policy based on the provisions in the Food Code may help to prevent foodborne illness associated with contamination of food by ill or infected food employees. Current North Carolina rules do not require an employee health policy.

Prevention of Hand Contamination (Item 15a): Handwashing alone may not prevent the transmission of pathogens to foods via hand contact; therefore, preventing bare hand contact with ready-to-eat (RTE) foods is a major control measure for limiting the spread of harmful bacteria and viruses from the hands to RTE food. Reinforcing the importance of preventing bare hand contact with RTE foods should be supported by a management system that includes proper employee training and monitoring of practices to identify to what extent procedures are being followed. North Carolina rules stress minimal bare hand contact, but do not differentiate between RTE food and raw products, and do not fully restrict bare hand contact of RTE foods.

Proper Handwashing (Item 13a): Handwashing is a critical factor in reducing fecal-oral pathogens that can be transmitted from hands to RTE food as well as other pathogens that can be transmitted from environmental sources. Many employees fail to wash their hands as often as necessary, and even those who do may use flawed techniques.

Good Hygienic Practices (Item 14a): Proper hygienic practices by food employees minimize the possibility of transmitting disease through food. Employee practices such as eating, drinking and smoking in food preparation areas and working while experiencing persistent coughing and sneezing must be prohibited. Elimination of these practices will help prevent the transfer of microorganisms to foods and food contact surfaces.

Handwash facilities (Item 16a and 16b): Hands are a common vehicle for the transmission of pathogens to foods in an establishment. Hands can become soiled with a variety of contaminants during routine operations. The transfer of contaminants can be limited by providing food employees with handwashing sinks that are properly equipped and conveniently located. Handwashing sinks that are blocked by portable equipment or stacked full of soiled

utensils and other items, are rendered unavailable for employee use. In addition to keeping sinks available for handwashing, they must be stocked with soap and towels.

3. Full Service Restaurants: Summary of risk factor *category* **and** the individual items that need priority attention

Table Res-4

Restaurants-Full Service Restaurants
Summary of foodborne illness risk factors and individual data items in need of priority attention

Foodborne Illness Risk Factor in need of priority attention (from Section 1)	Individual data items in need of priority attention with % OUT (from Section 2)
Holding/Time-Temperature (58% OUT)	**RTE, PHF discarded after seven days 10b (79% OUT)**
	Commercially prepared RTE, PHF date marked 10c (73% OUT)
	RTE prepared on site, PHF date marked 10a (70% OUT)
	Cold Hold 8a (68% OUT)
	Proper Cooling Procedure (Cooked and cooled) 7a (50% OUT)
	Time as Public Health Control 10d (33% OUT)
	Proper Cooling Procedure (Ambient and cooled) 7b (23% OUT)
	Hot Hold 9a (21% OUT)
	Proper Cooling Procedure (Received and cooled) 7c (17% OUT)
Personal Hygiene (41% OUT)	**Employee Health Policy 17a (99% OUT)**
	Prevention of Hand Contamination 15a (58% OUT)
	Proper Handwashing 13a (32% OUT)
	Good Hygienic Practices 14a (26% OUT)
	Handwash facilities (accessible) 16a (21% OUT)
	Handwash facilities (soap and towels) 16b (14% OUT)

The most significant individual data items and risk factor categories are presented in Table Res-4.

F. Retail Food-Deli

Results and Discussion

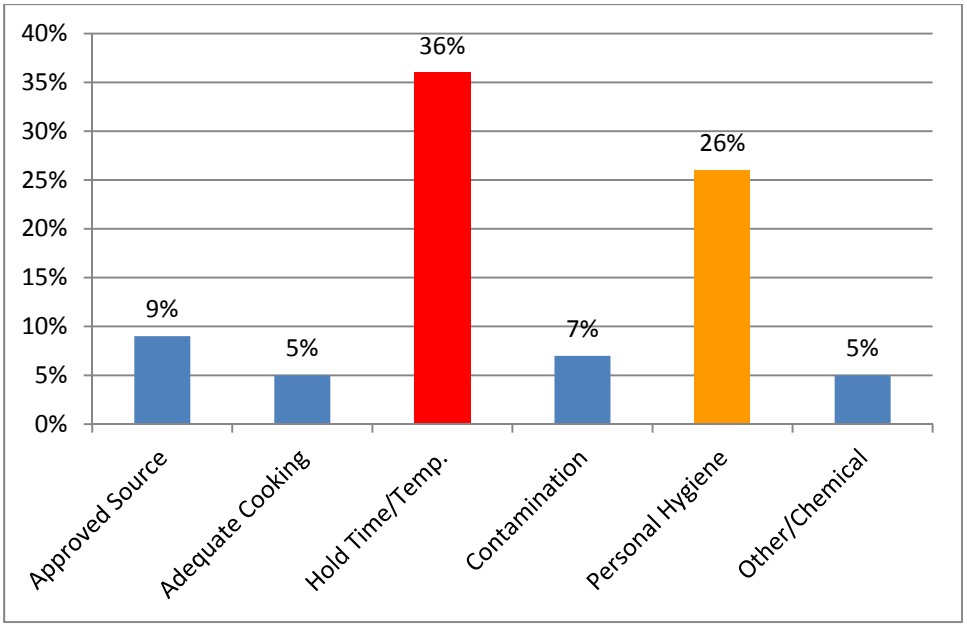
For the 2010 Wake County Baseline survey, 57 delis were surveyed. For the 46 possible individual data items on the survey instrument 1,144 observations were made at 57 delis. See Appendix F for complete data related to delis.

Certified food protection managers (46%): For this survey, a certified food protection manager had to be present, and possess a State-approved course certificate, in order to be marked IN compliance. A certified food protection manager was present at 26 of the 57 facilities (46% IN compliance).

1. Delis: Foodborne Illness Risk Factors found OUT of compliance

*by percentage of observations **OUT** of compliance for each **risk factor***. Risk Factors represent categories made up of individual data items from the survey instrument (Appendix O).

Figure Deli-1



Data from Figure Deli-1 are fully displayed in Table Deli-1 by risk factor category, with the complete number of observations that were OUT of compliance as compared to the "Total Observations" for each category. A total of 1,144 observations were made.

Table Deli-1

Foodborne Illness Risk Factor Risk Factor OUT of compliance:	Delis		
	% OUT	# OUT observations	Total Observations
Food from Unsafe Source	9%	12	137
Inadequate Cooking	5%	2	42
Improper Holding/Time-Temperature	**36%**	**106**	**297**
Contaminated Equipment/Contamination	7%	17	253
Poor Personal Hygiene	**26%**	**85**	**330**
Other/Chemical	5%	4	83
Totals	20%	226	1,144

The individual data items which are part of **Improper Holding/Time-Temperature** and **Poor Personal Hygiene** risk factors will be discussed more fully in Section 2. These risk factor categories had the highest number and percentage of OUT of compliance items for delis.

2. Delis: Risk Factors that need priority attention
by percentage of observations found OUT of compliance for each individual data item that is part of a **risk factor** category.

For delis, the foodborne illness risk factors most in need of attention with their corresponding OUT of compliance percentages are:

- Improper Holding/Time and Temperature (36% OUT of compliance)
- Poor Personal Hygiene (26% OUT of compliance)

Tables Deli-2 and Deli-3 show the breakdown of these risk factors into the specific individual data items on the survey instrument that need priority attention.

Risk Factor: Holding/Time-Temperature (36% OUT)

Table Deli-2: Breakdown of the **Holding/Time-Temperature** Risk Factor by individual data item from the survey instrument

Data Item	# OUT	Total Obs.	% OUT
Cold Hold 8a	**32**	**57**	**56%**
RTE, PHF discarded after seven days 10b	**30**	**56**	**54%**
Commercially prepared RTE, PHF date marked 10c	**18**	**55**	**33%**
Hot Hold 9a	**13**	**46**	**28%**
Proper Cooling Procedure (Cooked and cooled) 7a	**7**	**26**	**27%**
Proper Cooling Procedure (Ambient and cooled) 7b	1	7	14%
RTE prepared on site, PHF date marked 10a	5	48	10%

Cold Holding at 41°F (Individual Data Item 8a): Maintaining potentially hazardous foods (PHF) at or below 41°F limits the growth of pathogens that may be present in or on the food and may help prevent foodborne illness. Temperature has significant impact on both the generation time of an organism and its lag period. Control of the growth of *Listeria monocytogenes* (*Lm*) is the basis for the cold holding temperature of 41°F. North Carolina's cold holding temperature requirement is 45°F.

Date marking (Individual Data Items 10a, 10b and 10c): Date marking of refrigerated ready-to-eat, PHF foods is an important food safety system component designed to promote proper food rotation and limit the growth of *Listeria monocytogenes* during cold storage. Discarding ready-to-eat, PHF that has remained in cold storage beyond the parameters described in the FDA Food Code prevents foods with a harmful level of *Listeria monocytogenes* from being served. North Carolina's current rules do not require date marking.

Hot Holding (Individual Data Item 9a): Holding PHF at the proper hot temperature of 135°F is critical to preventing the growth of bacteria. Equipment, processes and monitoring procedures related to maintaining temperature control for PHF need to be assessed and corrective action should be taken if necessary.

Proper Cooling Procedure (Individual Data Items 7a, 7b and 7c): Safe cooling requires rapid removal of heat from foods quickly enough to prevent the growth of spore-forming pathogens. Foodservice directors and managers need to ensure their practices and procedures are capable of rapidly cooling PHF. Item 7a represents those items that are cooled from a cooked state, 7b represents cooling from ambient temperatures, and 7c addresses cooling after receiving food shipments.

Risk Factor: Personal Hygiene (26% OUT)

Table Deli-3: Breakdown of the **Personal Hygiene** Risk Factor by individual data item

Data Item	# OUT	Total Obs.	% OUT
Employee Health Policy 17a	**45**	**57**	**79%**
Proper Handwashing 13a	**23**	**53**	**43%**
Handwash facilities (accessible) 16a	8	57	14%
Good Hygienic Practices 14a	5	53	9%
Prevention of Hand Contamination 15a	2	53	4%
Handwash facilities (soap and towels) 16b	2	57	4%

Employee Health Policy (Item 17a): The development and effective implementation of an employee health policy based on the provisions in the Food Code may help to prevent foodborne illness associated with contamination of food by ill or infected food employees. Current North Carolina rules do not require an employee health policy.

Proper Handwashing (13a): Handwashing is a critical factor in reducing fecal-oral pathogens that can be transmitted from hands to RTE food as well as other pathogens that can be transmitted from environmental sources. Many employees fail to wash their hands as often as necessary, and even those who do may use flawed techniques.

Handwash facilities (Item 16a and 16b): Hands are a common vehicle for the transmission of pathogens to foods in an establishment. Hands can become soiled with a variety of contaminants during routine operations. The transfer of contaminants can be limited by providing food employees with handwashing sinks that are properly equipped and conveniently located. Handwashing sinks that are blocked by portable equipment or stacked full of soiled utensils and other items, are rendered unavailable for employee use. In addition to keeping sinks available for handwashing, they must be stocked with soap and towels.

Good Hygienic Practices (Item 14a): Proper hygienic practices by food employees minimize the possibility of transmitting disease through food. Employee practices such as eating, drinking and smoking in food preparation areas and working while experiencing persistent coughing and sneezing must be prohibited. Elimination of these practices will help prevent the transfer of microorganisms to foods and food contact surfaces.

Prevention of Hand Contamination (Item 15a): Handwashing alone may not prevent the transmission of pathogens to foods via hand contact; therefore, preventing bare hand contact with ready-to-eat (RTE) foods is a major control measure for limiting the spread of harmful bacteria and viruses from the hands to RTE food. Reinforcing the importance of preventing bare hand contact with RTE foods should be supported by a management system that includes proper employee training and monitoring of practices to identify to what extent procedures are being followed. North Carolina rules stress minimal bare hand contact, but do not differentiate between RTE food and raw products, and do not fully restrict bare hand contact of RTE foods.

3. Delis: Summary of risk factor *category* **and** the individual items that need priority attention

Table Deli-4

Retail Food-Deli
Summary of foodborne illness risk factors and
individual data items in need of priority attention

Foodborne Illness Risk Factor in need of priority attention (from Section 1)	Individual data items in need of priority attention with % OUT (from Section 2)
Holding/Time-Temperature (36% OUT)	**Cold Hold 8a (56% OUT)**
	RTE, PHF discarded after seven days 10a (54% OUT)
	Commercially prepared RTE, PHF date marked 10c (33% OUT)
	Hot Hold 9a (28% OUT)
	Proper Cooling Procedure (Cooked and cooled) 7a (27% OUT)
	Proper Cooling Procedure (Ambient and cooled) 7b (14% OUT)
	RTE prepared on site, PHF date marked 10a (10% OUT)
Personal Hygiene (26% OUT)	**Employee Health Policy 17a (79% OUT)**
	Proper Handwashing 13a (43% OUT)
	Handwash facilities (accessible) 16a (14% OUT)
	Good Hygienic Practices 14a (9% OUT)
	Prevention of Hand Contamination 15a (4% OUT)
	Handwash facilities (soap and towels) 16b (4% OUT)

The most significant individual data items and risk factor categories are presented in Table Deli-4.

G. Retail Food-Meat Markets

Results and Discussion

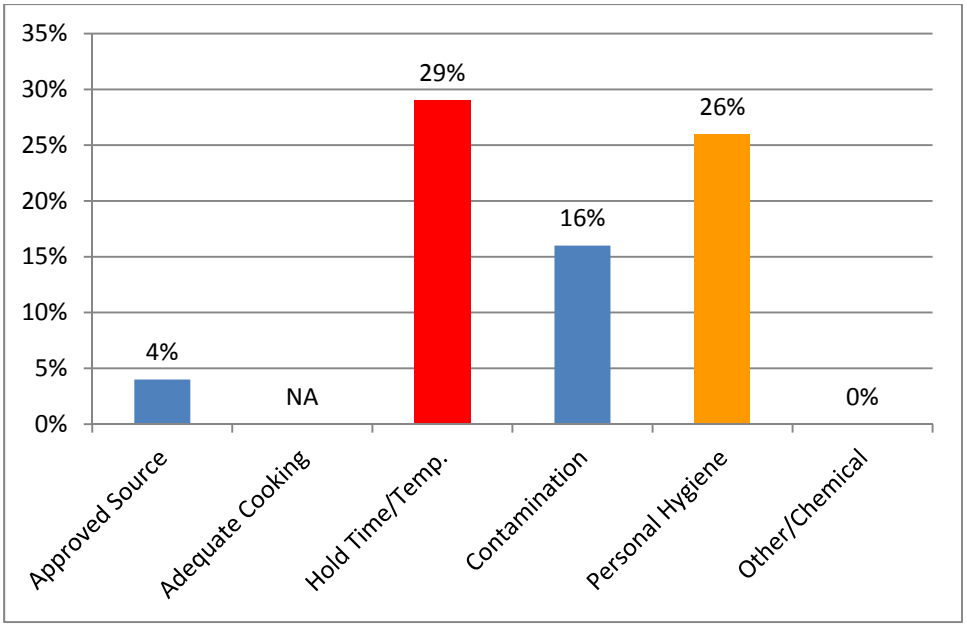
For the 2010 Wake County Baseline survey, 59 meat markets were surveyed. For the 46 possible individual data items on the survey instrument 830 observations were made at 59 meat markets. See Appendix G for complete data related to meat markets.

Certified food protection managers (25%): For this survey, a certified food protection manager had to be present, and possess a State-approved course certificate, in order to be marked IN compliance. A certified food protection manager was present at 15 of the 59 facilities (25% IN compliance).

1. Meat Markets: Foodborne Illness Risk Factors found OUT of compliance

*by percentage of observations **OUT** of compliance for each **risk factor***. Risk Factors represent categories made up of individual data items from the survey instrument (Appendix O).

Figure Meat-1



Data from Figure Meat-1 are fully displayed in Table Meat-1 by risk factor category, with the complete number of observations that were OUT of compliance as compared to the "Total Observations" for each category. A total of 830 observations were made.

Table Meat-1

Foodborne Illness Risk Factor Risk Factor OUT of compliance:	Meat Markets		
	% OUT	# OUT observations	Total Observations
Food from Unsafe Source	4%	5	129
Inadequate Cooking	NA	0	0
Improper Holding/Time-Temperature	**29%**	**26**	**89**
Contaminated Equipment/Contamination	16%	42	266
Poor Personal Hygiene	**26%**	**73**	**281**
Other/Chemical	0%	0	65
Totals	18%	146	830

The individual data items which are part of **Improper Holding/Time-Temperature** and **Poor Personal Hygiene** risk factors will be discussed more fully in Section 2. These risk factor categories had the highest number and percentage of OUT of compliance items for meat markets.

2. Meat Markets: Risk Factors that need priority attention
by percentage of observations found OUT of compliance for each individual data item that is part of a **risk factor** category.

For meat markets, the foodborne illness risk factors most in need of attention with their corresponding OUT of compliance percentages are:

- Improper Holding/Time and Temperature (29% OUT of compliance)
- Poor Personal Hygiene (26% OUT of compliance)

Tables Meat-2 and Meat-3 show the breakdown of these risk factors into the specific individual data items on the survey instrument that need priority attention.

Risk Factor: Improper Holding/Time-Temperature (29% OUT)

Table Meat-2: Breakdown of the **Holding/Time-Temperature** Risk Factor by individual data item from the survey instrument. Items with ≥ 25% are bolded.

Data Item	# OUT	Total Obs.	% OUT
RTE, PHF discarded after 7 days 10b	**5**	**14**	**36%**
Commercially prepared RTE, PHF date marked 10c	**5**	**14**	**36%**
Cold Hold 8a	**16**	**59**	**27%**

Date marking (Individual Data Items 10b and 10c): Date marking of refrigerated ready-to-eat, PHF foods is an important food safety system component designed to promote proper food

rotation and limit the growth of *Listeria monocytogenes* during cold storage. Discarding ready-to-eat, PHF that has remained in cold storage beyond the parameters described in the *FDA Food Code* prevents foods with a harmful level of *Listeria monocytogenes* from being served. North Carolina's current rules do not require date marking.

Cold Holding at 41°F (Individual Data Item 8a): Maintaining potentially hazardous food (PHF) foods under the cold temperature control of 41°F limits the growth of pathogens that may be present in or on the food and may help prevent foodborne illness. Temperature has significant impact on both the generation time of an organism and its lag period. Control of the growth of *Listeria monocytogenes* (*Lm*) is the basis for the cold holding temperature of 41°F. North Carolina's cold holding temperature requirement is 45°F.

Risk Factor: Poor Personal Hygiene (26% OUT)

Table Meat-3: Breakdown of the **Personal Hygiene** Risk Factor by individual data item. Items with ≥ 25% are bolded.

Data Item	# OUT	Total Obs.	% OUT
Employee Health Policy 17a	**51**	**59**	**86%**
Handwash facilities (accessible) 16a	10	59	17%
Prevention of Hand Contamination 15a	2	14	14%
Proper Handwashing 13a	5	38	13%
Handwash facilities (accessibility) 16a	3	59	5%
Good Hygienic Practices 14a	2	52	4%

Employee Health Policy (Item 17a): The development and effective implementation of an employee health policy based on the provisions in the Food Code may help to prevent foodborne illness associated with contamination of food by ill or infected food employees. Current North Carolina rules do not require an employee health policy.

Handwash facilities (Item 16a): Hands are a common vehicle for the transmission of pathogens to foods in an establishment. Hands can become soiled with a variety of contaminants during routine operations. The transfer of contaminants can be limited by providing food employees with handwashing sinks that are properly equipped and conveniently located. Handwashing sinks that are blocked by portable equipment or stacked full of soiled utensils and other items, are rendered unavailable for employee use.

The other individual data items are listed, and are important for prevention of foodborne illness. The sample sizes are relatively small for analysis.

3. Meat Markets: Summary of risk factor *category* **and** the individual items that need priority attention

Table Meat-4

Retail Food-Meat Markets
Summary of foodborne illness risk factors and
individual data items in need of priority attention

Foodborne Illness Risk Factor in need of priority attention (from Section A)	Individual data items in need of priority attention with % OUT (from Section B)
Holding/Time-Temperature (29% OUT)	**RTE, PHF discarded after seven days 10a (36% OUT)**
	Commercially prepared RTE, PHF date marked 10c (36% OUT)
	Cold Hold 8a (27% OUT)
Personal Hygiene (26% OUT)	**Employee Health Policy 17a (86% OUT)**
	Handwash facilities (accessible) 16a (17% OUT)
	Prevention of Hand Contamination 15a (14% OUT)
	Proper Handwashing 13a (13% OUT)
	Handwash facilities (accessibility) 16a (5% OUT)
	Good Hygienic Practices 14a (4% OUT)

The most significant individual data items and risk factor categories are presented in Table Meat-4.

H. Retail Food-Seafood Markets

Results and Discussion

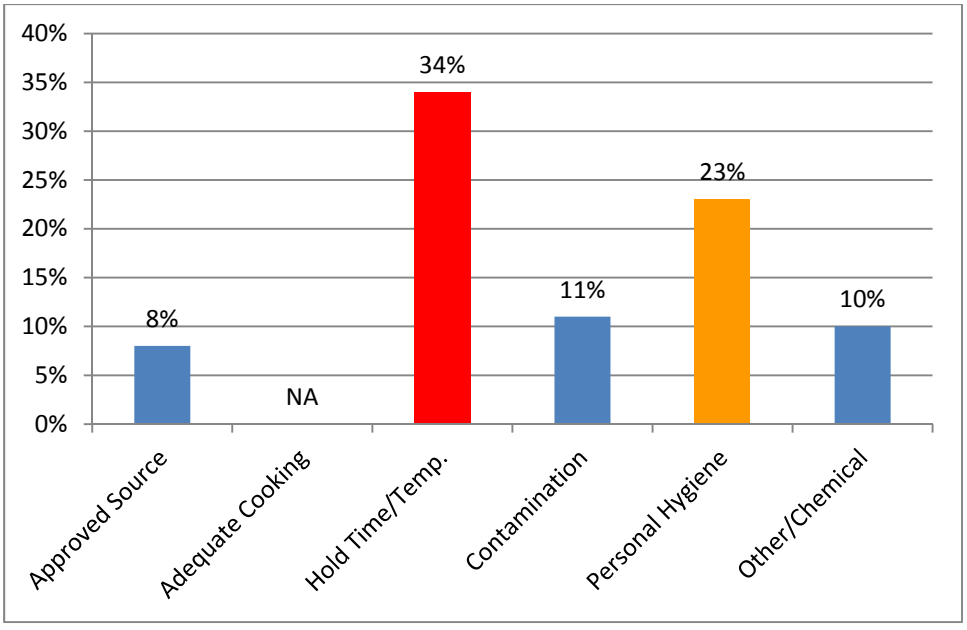
For the 2010 Wake County Baseline survey, 29 seafood markets were surveyed. For the 46 possible individual data items on the survey instrument 496 observations were made at 29 seafood markets. See Appendix H for complete data related to seafood markets.

Certified food protection managers (24%): For this survey, a certified food protection manager had to be present, and possess a State-approved course certificate, in order to be marked IN compliance. A certified food protection manager was present at seven of the 29 facilities (24% IN compliance). This is the lowest compliance for a facility type in the survey.

1. Seafood: Foodborne Illness Risk Factors found OUT of compliance

*by percentage of observations **OUT** of compliance for each **risk factor***. Risk Factors represent categories made up of individual data items from the survey instrument (See Appendix O).

Figure Seafood-1



Data from Figure Seafood-1 are fully displayed in Table Seafood-1 by risk factor category, with the complete number of observations that were OUT of compliance as compared to the "Total Observations" for each category. A total of 496 observations were made.

Table Seafood-1

Foodborne Illness Risk Factor Risk Factor OUT of compliance:	Seafood		
	% OUT	# OUT observations	Total Observations
Food from Unsafe Source	8%	8	96
Inadequate Cooking	NA	0	0
Improper Holding/Time-Temperature	**34%**	**33**	**98**
Contaminated Equipment/Contamination	11%	15	136
Poor Personal Hygiene	**23%**	**32**	**137**
Other/Chemical	10%	3	29
Totals	18%	91	496

The individual data items which are part of **Improper Holding/Time-Temperature** and **Poor Personal Hygiene** risk factors will be discussed more fully in Section 2. These risk factor categories had the highest number and percentage of OUT of compliance items for seafood markets.

2. Seafood: Risk Factors that need priority attention
by percentage of observations found OUT of compliance for each individual data item that is part of a **risk factor** category.

For seafood markets, the foodborne illness risk factors most in need of attention with their corresponding OUT of compliance percentages are:

- Improper Holding/Time and Temperature (34% OUT of compliance)
- Poor Personal Hygiene (23% OUT of compliance)

Tables Seafood-2 and Seafood-3 show the breakdown of these risk factors into the specific individual data items on the survey instrument that need priority attention.

Risk Factor: Holding/Time-Temperature (34% OUT)

Table Seafood-2: Breakdown of the **Improper Holding/Time-Temperature** Risk Factor by individual data item from the survey instrument. Items with $\geq$ 25% are bolded.

Data Item	# OUT	Total Obs.	% OUT
Commercially prepared RTE, PHF date marked 10c	**11**	**23**	**48%**
RTE, PHF discarded after 7 days 10b	**11**	**27**	**41%**
Cold Hold 8a	**10**	**29**	**34%**

Date marking (Individual Data Items 10b and 10c): Date marking of refrigerated ready-to-eat, PHF foods is an important food safety system component designed to promote proper food rotation and limit the growth of *Listeria monocytogenes* during cold storage. Discarding ready-to-eat, PHF that has remained in cold storage beyond the parameters described in the FDA Food Code prevents foods with a harmful level of *Listeria monocytogenes* from being served. North Carolina's current rules do not require date marking.

Cold Holding at 41°F (Individual Data Item 8a): Maintaining potentially hazardous food (PHF) foods under the cold temperature control of 41°F limits the growth of pathogens that may be present in or on the food and may help prevent foodborne illness. Temperature has significant impact on both the generation time of an organism and its lag period. Control of the growth of *Listeria monocytogenes* (*Lm*) is the basis for the cold holding temperature of 41°F. North Carolina's cold holding temperature requirement is 45°F.

Risk Factor: Poor Personal Hygiene (23% OUT)

Table Seafood-3: Breakdown of the **Personal Hygiene** Risk Factor by individual data item

Data Item	# OUT	Total Obs.	% OUT
Employee Health Policy 17a	**23**	**29**	**79%**
Handwash facilities (accessible) 16a	4	29	14%
Proper Handwashing 13a	2	15	13%
Handwash facilities (soap and towels) 16b	2	29	7%
Good Hygienic Practices 14a	1	22	5%

Employee Health Policy (Item 17a): The development and effective implementation of an employee health policy based on the provisions in the Food Code may help to prevent foodborne illness associated with contamination of food by ill or infected food employees. Current North Carolina rules do not require an employee health policy.

Handwash facilities (Item 16a and 16b): Hands are a common vehicle for the transmission of pathogens to foods in an establishment. Hands can become soiled with a variety of contaminants during routine operations. The transfer of contaminants can be limited by providing food employees with handwashing sinks that are properly equipped and conveniently located. Handwashing sinks that are blocked by portable equipment or stacked full of soiled utensils and other items, are rendered unavailable for employee use. In addition to accessibility, hand sinks should be supplied with soap and towels.

Proper Handwashing (13a): Handwashing is a critical factor in reducing fecal-oral pathogens that can be transmitted from hands to RTE food as well as other pathogens that can be transmitted from environmental sources. Many employees fail to wash their hands as often as necessary and even those who do may use flawed techniques.

Good Hygienic Practices (Item 14a): Proper hygienic practices by food employees minimize the possibility of transmitting disease through food. Employee practices such as eating, drinking and smoking in food preparation areas and working while experiencing persistent coughing and sneezing must be prohibited. Elimination of these practices will help prevent the transfer of microorganisms to foods and food contact surfaces.

3. Seafood: Summary of risk factor *category* **and** the individual items that need priority attention

Table Seafood-4

Retail Food-Seafood
Summary of foodborne illness risk factors and individual data items in need of priority attention

Foodborne Illness Risk Factor in need of priority attention (from Section 1)	Individual data items in need of priority attention with % OUT (from Section 2)
Improper Holding/Time-Temperature (34% OUT)	**Commercially prepared RTE, PHF date marked 10c (48% OUT)**
	RTE, PHF discarded after seven days 10b (41% OUT)
	Cold Hold 8a (34% OUT)
Poor Personal Hygiene (23% OUT)	**Employee Health Policy 17a (79% OUT)**
	Handwash facilities (accessible) 16a (14% OUT)
	Proper Handwashing 13a (13% OUT)
	Handwash facilities (soap and towels) 16a (7% OUT)
	Good Hygienic Practices 14a (5% OUT)

The most significant individual data items and risk factor categories are presented in Table Seafood-4.

I. Retail Food-Produce

Results and Discussion

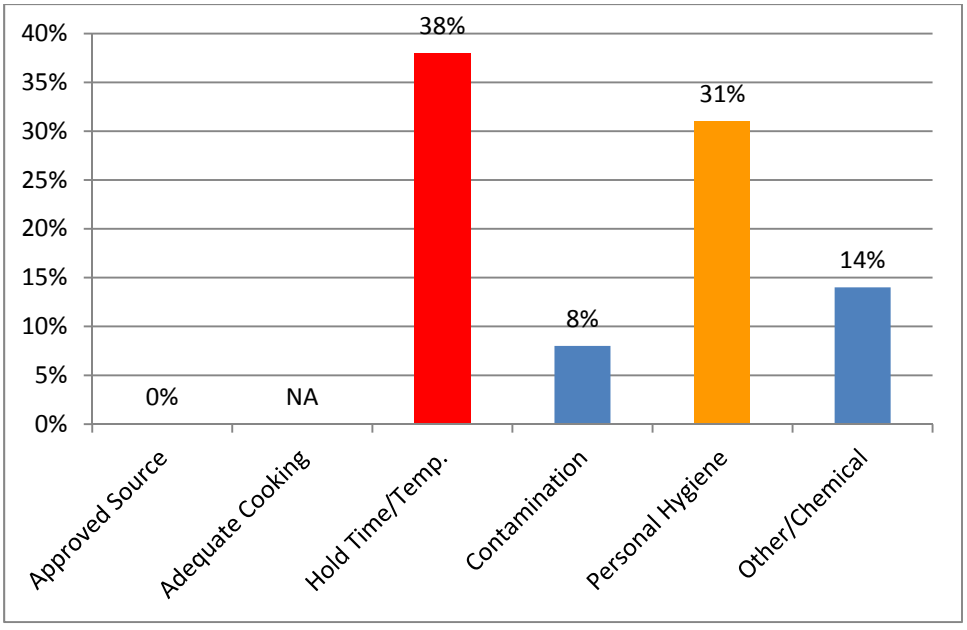
For the 2010 Wake County Baseline survey, 42 produce departments were surveyed. For the 46 possible individual data items on the survey instrument 620 observations were made at 42 produce departments. See Appendix I for complete data related to produce departments.

Certified food protection managers (29%): For this survey, a certified food protection manager had to be present, and possess a State-approved course certificate, in order to be marked IN compliance. A certified food protection manager was present at 12 of the 42 facilities (29% IN compliance).

1. Produce: Foodborne Illness Risk Factors found OUT of compliance

*by percentage of observations **OUT** of compliance for each **risk factor***. Risk Factors represent categories made up of individual data items from the survey instrument (See Appendix O).

Figure Produce-1



Data from Figure Produce-1 are fully displayed in Table Produce-1 by risk factor category, with the complete number of observations that were OUT of compliance as compared to the "Total Observations" for each category. A total of 620 observations were made.

Table Produce-1

Foodborne Illness Risk Factor Risk Factor OUT of compliance:	Produce		
	% OUT	# OUT observations	Total Observations
Food from Unsafe Source	0%	0	97
Inadequate Cooking	NA	0	0
Improper Holding/Time-Temperature	**38%**	**47**	**123**
Contaminated Equipment/Contamination	8%	10	126
Poor Personal Hygiene	**31%**	**60**	**196**
Other/Chemical	14%	12	88
Totals	21%	129	620

The individual data items which are part of **Improper Holding/Time-Temperature** and **Poor Personal Hygiene** risk factors will be discussed more fully in Section 2. These risk factor categories had the highest number and percentage of OUT of compliance items for product departments.

2. Produce: Risk Factors that need priority attention
by percentage of observations found OUT of compliance for each individual data item that is part of a **risk factor** category.

For produce, the foodborne illness risk factors most in need of attention with their corresponding OUT of compliance percentages are:

- Improper Holding/Time and Temperature (38% OUT of compliance)
- Poor Personal Hygiene (31% OUT of compliance)

Tables Produce-2 and Produce-3 show the breakdown of these risk factors into the specific individual data items on the survey instrument that need priority attention.

Risk Factor: Holding/Time-Temperature (38% OUT)

Table Produce-2: Breakdown of the **Improper Holding/Time-Temperature** Risk Factor by individual data item from the survey instrument. Items with $\geq$ 25% are bolded.

Data Item	# OUT	Total Obs.	% OUT
Cold Hold 8a	**29**	**42**	**69%**
Proper Cooling Procedure (Ambient and cooled) 7b	**2**	**6**	**33%**
Commercially prepared RTE, PHF date marked 10c	**4**	**12**	**33%**
RTE, PHF discarded after seven days 10b	7	32	22%
RTE prepared on site, PHF date marked 10a	5	31	16%

Cold Holding at 41°F (Individual Data Item 8a): Maintaining potentially hazardous food (PHF) foods under the cold temperature control of 41°F limits the growth of pathogens that may be present in or on the food and may help prevent foodborne illness. Temperature has significant impact on both the generation time of an organism and its lag period. Control of the growth of *Listeria monocytogenes* (*Lm*) is the basis for the cold holding temperature of 41°F. Cut, green, leafy greens are considered PHF based on the 2009 FDA Food Code. This may have contributed to the OUT of compliance for this individual data item. North Carolina's cold holding temperature requirement is 45°F.

Proper Cooling Procedure (Individual Data Items 7b) : Safe cooling requires rapid removal of heat from foods quickly enough to prevent the growth of spore-forming pathogens. Foodservice directors and managers need to ensure their practices and procedures are capable of rapidly cooling PHF. Item 7b represents cooling from ambient temperatures. Cooling melons before slicing them would eliminate this potential for risk.

Datemarking (Individual Data Items 10a, 10b and 10c): Date marking of refrigerated ready-to-eat, PHF foods is an important food safety system component designed to promote proper food rotation and limit the growth of *Listeria monocytogenes* during cold storage. Discarding ready-to-eat, PHF that has remained in cold storage beyond the parameters described in the *FDA Food Code* prevents foods with a harmful level of *Listeria monocytogenes* from being served. North Carolina's current rules do not require

Risk Factor: Poor Personal Hygiene (31% OUT)

Table Produce-3: Breakdown of the **Poor Personal Hygiene** Risk Factor by individual data item. Items with ≥ 25% are bolded.

Data Item	# OUT	Total Obs.	% OUT
Employee Health Policy 17a	**36**	**42**	**86%**
Handwash facilities (accessible) 16a	10	42	24%
Proper Handwashing 13a	4	17	24%
Prevention of Hand Contamination 15a	4	21	19%
Handwash facilities (soap and towels) 16b	4	42	10%
Good Hygienic Practices 14a	2	32	6%

Employee Health Policy (Item 17a): The development and effective implementation of an employee health policy based on the provisions in the Food Code may help to prevent foodborne illness associated with contamination of food by ill or infected food employees. Current North Carolina rules do not require an employee health policy.

Handwash facilities (Item 16a and 16b): Hands are a common vehicle for the transmission of pathogens to foods in an establishment. Hands can become soiled with a variety of contaminants during routine operations. The transfer of contaminants can be limited by providing food employees with handwashing sinks that are properly equipped and conveniently

located. Handwashing sinks that are blocked by portable equipment or stacked full of soiled utensils and other items, are rendered unavailable for employee use. In addition to accessibility, hand sinks should be supplied with soap and towels.

The other individual data items are listed, and are important for prevention of foodborne illness. The sample sizes are relatively small for analysis.

A. Produce: Summary of risk factor *category* **and** the individual items that need priority attention

Table Produce-4

Retail Food-Produce
Summary of foodborne Illness risk factors and
Individual data items in need of priority attention

Foodborne Illness Risk Factor in need of priority attention (from Section 1)	Individual data items in need of priority attention with % OUT (from Section 2)
Improper Holding/Time-Temperature (38% OUT)	**Cold Hold 8a (69% OUT)**
	Proper Cooling Procedure (Ambient and cooled) 7b (33% OUT)
	Commercially prepared RTE, PHF date marked 10c (33% OUT)
	RTE, PHF discarded after seven days 10b (22% OUT)
	RTE prepared on site, PHF date marked 10a (16% OUT)
Poor Personal Hygiene (31% OUT)	**Employee Health Policy 17a (86% OUT)**
	Handwash facilities (accessible) 16a (24% OUT)
	Proper Handwashing 13a (24% OUT)
	Prevention of Hand Contamination 15a (19% OUT)
	Handwash facilities (soap and towels) 16b (10% OUT)
	Good Hygienic Practices 14a (6% OUT)

The most significant individual data items and risk factor categories are presented in Table Produce-4.

IV. Recommendations

The results of the 2010 baseline survey indicate that many of the risk factors observed in Wake County food service establishments are not currently regulated by the North Carolina rules. The North Carolina Department of Environment and Natural Resources has been working with stakeholders to adopt the 2009 Food Code by reference with subsequent amendments to better address risk factors identified OUT of compliance and to remain current with national food protection standards. The Wake County Board of Human Services wrote a letter of support to the State on May 27, 2010, supporting adoption of the FDA Food Code with subsequent amendments (See Appendix P). The State's current plan is to adopt the Food Code effective July 2012.

In addition to Food Code adoption, Wake County recommends that regulatory agencies ensure that their inspections, education and enforcement activities are geared toward the control of the risk factors that contribute to foodborne illness outbreaks. Participation in FDA's Program Standards provides guidance for continuing to focus on these improvements.

Recognizing that food managers and workers have the most significant impact on their operations, Wake County staff recommends that food service operators in the county ensure that they have active managerial control over the reduction in risk factors that contribute to foodborne illness outbreaks.

The common goal for industry and regulatory agencies is to protect public health by reducing or eliminating risk factors that contribute to foodborne illness.

Summary of Findings by Facility Type											
Facility Type=Hospitals	**n=7**										
	IN	**% IN**	**OUT**	**% OUT**	**NA**	**% NA**	**NO**	**%NO**	**Blank**	**% Blank**	**% Total**
Certified Food Protection Manager	5	71%	2	29%							
Approved Source 1A	7	100%	0	0%	0	0%	0	0%	0	0%	100%
Approved Source 1B	0	0%	0	0%	7	100%	0	0%	0	0%	100%
Approved Source 1C	0	0%	0	0%	7	100%	0	0%	0	0%	100%
Receiving/Sound Coundition 2A	7	100%	0	0%	0	0%	0	0%	0	0%	100%
Records 3A	0	0%	0	0%	7	100%	0	0%	0	0%	100%
Records 3B	0	0%	0	0%	7	100%	0	0%	0	0%	100%
Records 3C	0	0%	0	0%	7	100%	0	0%	0	0%	100%
Proper Cooking Temp 4A	0	0%	0	0%	1	14%	6	86%	0	0%	100%
Proper Cooking Temp 4B	3	100%	0	0%	0	0%	4	57%	0	0%	100%
Proper Cooking Temp 4C	1	100%	0	0%	0	0%	6	86%	0	0%	100%
Proper Cooking Temp 4D	2	100%	0	0%	0	0%	5	71%	0	0%	100%
Proper Cooking Temp 4E	0	0%	0	0%	7	100%	0	0%	0	0%	100%
Proper Cooking Temp 4F	0	0%	0	0%	7	100%	0	0%	0	0%	100%
Proper Cooking Temp 4G	0	0%	0	0%	6	86%	1	14%	0	0%	100%
Proper Cooking Temp 4H	1	100%	0	0%	2	29%	4	57%	0	0%	100%
Rapid Reheating/Hot Hold 5A	0	0%	0	0%	2	29%	5	71%	0	0%	100%
Rapid Reheating/Hot Hold 5B	0	0%	0	0%	2	29%	5	71%	0	0%	100%
Rapid Reheating/Hot Hold 5C	3	100%	0	0%	0	0%	4	57%	0	0%	100%
Rapid Reheating/Hot Hold 5D	0	0%	0	0%	2	29%	5	71%	0	0%	100%
HSP Juice 6A	7	100%	0	0%	0	0%	0	0%	0	0%	100%
HSP Pasteurized Eggs 6B	7	100%	0	0%	0	0%	0	0%	0	0%	100%
HSP Raw Undercooked 6C	7	100%	0	0%	0	0%	0	0%	0	0%	100%
Proper Cooling Procedure 7A	4	100%	0	0%	1	14%	2	29%	0	0%	100%
Proper Cooling Procedure 7B	2	100%	0	0%	2	29%	3	43%	0	0%	100%
Proper Cooling Procedure 7C	5	100%	0	0%	0	0%	2	29%	0	0%	100%
Cold Hot 8A	3	43%	4	57%	0	0%	0	0%	0	0%	100%
Hot Hold 9A	4	57%	3	43%	0	0%	0	0%	0	0%	100%
Hot Hold 9B	0	0%	0	0%	1	14%	6	86%	0	0%	100%
Time 10A	6	86%	1	14%	0	0%	0	0%	0	0%	100%
Time 10B	4	57%	3	43%	0	0%	0	0%	0	0%	100%
Time 10C	3	43%	4	57%	0	0%	0	0%	0	0%	100%
Time 10D	0	0%	0	0%	7	100%	0	0%	0	0%	100%
Separation 11A	6	86%	1	14%	0	0%	0	0%	0	0%	100%
Separation 11B	7	100%	0	0%	0	0%	0	0%	0	0%	100%
Separation 11C	6	86%	1	14%	0	0%	0	0%	0	0%	100%
Separation 11D	7	100%	0	0%	0	0%	0	0%	0	0%	100%
Food Contact Surfaces 12A	7	100%	0	0%	0	0%	0	0%	0	0%	100%
Proper Handwashing 13A	5	83%	1	17%	0	0%	1	14%	0	0%	100%
Good Hygenic Practices 14A	5	71%	2	29%	0	0%	0	0%	0	0%	100%
Prevention Hand Contamination 15A	7	100%	0	0%	0	0%	0	0%	0	0%	100%
Handwash Facilities 16A	7	100%	0	0%	0	0%	0	0%	0	0%	100%
Handwash Facilities 16B	7	100%	0	0%	0	0%	0	0%	0	0%	100%
Employee Health Policy 17A	3	43%	4	57%	0	0%	0	0%	0	0%	100%
Chemicals 18A	4	100%	0	0%	3	43%	0	0%	0	0%	100%
Chemicals 18B	6	86%	1	14%	0	0%	0	0%	0	0%	100%
Chemicals 18C	0	0%	0	0%	7	100%	0	0%		0%	100%
TOTALS	153	86%	25		85		59		0		

Summary of Findings by Facility Type											
Facility Type=Nursing Homes	**n=33**										
	IN	**% IN**	**OUT**	**% OUT**	**NA**	**% NA**	**NO**	**%NO**	**Blank**	**% Blank**	**% Total**
Certified Food Protection Manager	18	55%	15	45%	0		0		0		
Approved Source 1A	33	100%	0	0%	0	0%	0	0%	0	0%	100%
Approved Source 1B	0	0%	0	0%	33	100%	0	0%	0	0%	100%
Approved Source 1C	0	0%	0	0%	33	100%	0	0%	0	0%	100%
Receiving/Sound Coundition 2A	33	100%	0	0%	0	0%	0	0%	0	0%	100%
Records 3A	0	0%	0	0%	33	100%	0	0%	0	0%	100%
Records 3B	0	0%	0	0%	33	100%	0	0%	0	0%	100%
Records 3C	0	0%	0	0%	33	100%	0	0%	0	0%	100%
Proper Cooking Temp 4A	1	100%	0	0%	6	18%	26	79%	0	0%	100%
Proper Cooking Temp 4B	3	75%	1	25%	4	12%	25	76%	0	0%	100%
Proper Cooking Temp 4C	1	100%	0	0%	4	12%	28	85%	0	0%	100%
Proper Cooking Temp 4D	6	100%	0	0%	4	12%	23	70%	0	0%	100%
Proper Cooking Temp 4E	0	0%	0	0%	33	100%	0	0%	0	0%	100%
Proper Cooking Temp 4F	0	0%	0	0%	29	88%	4	12%	0	0%	100%
Proper Cooking Temp 4G	0	0%	0	0%	22	67%	11	33%	0	0%	100%
Proper Cooking Temp 4H	8	100%	0	0%	1	3%	24	73%	0	0%	100%
Rapid Reheating/Hot Hold 5A	4	50%	4	50%	1	3%	24	73%	0	0%	100%
Rapid Reheating/Hot Hold 5B	0	0%	0	0%	9	27%	24	73%	0	0%	100%
Rapid Reheating/Hot Hold 5C	11	92%	1	8%	0	0%	21	64%	0	0%	100%
Rapid Reheating/Hot Hold 5D	0	0%	1	100%	3	9%	29	88%	0	0%	100%
HSP Juice 6A	33	100%	0	0%	0	0%	0	0%	0	0%	100%
HSP Pasteurized Eggs 6B	31	94%	2	6%	0	0%	0	0%	0	0%	100%
HSP Raw Undercooked 6C	31	94%	2	6%	0	0%	0	0%	0	0%	100%
Proper Cooling Procedure 7A	11	69%	5	31%	1	3%	16	48%	0	0%	100%
Proper Cooling Procedure 7B	10	77%	3	23%	3	9%	17	52%	0	0%	100%
Proper Cooling Procedure 7C	9	82%	2	18%	1	3%	21	64%	0	0%	100%
Cold Hot 8A	22	67%	11	33%	0	0%	0	0%	0	0%	100%
Hot Hold 9A	19	90%	2	10%	1	3%	11	33%	0	0%	100%
Hot Hold 9B	2	100%	0	0%	4	12%	27	82%	0	0%	100%
Time 10A	24	75%	8	25%	1	3%	0	0%	0	0%	100%
Time 10B	23	77%	7	23%	1	3%	2	2%	0	0%	100%
Time 10C	15	48%	16	52%	1	3%	1	1%	0	0%	100%
Time 10D	0	0%	0	0%	33	100%	0	0%	0	0%	100%
Separation 11A	29	91%	3	9%	1	3%	0	0%	0	0%	100%
Separation 11B	26	84%	5	16%	2	6%	0	0%	0	0%	100%
Separation 11C	30	91%	3	9%	0	0%	0	0%	0	0%	100%
Separation 11D	33	100%	0	0%	0	0%	0	0%	0	0%	100%
Food Contact Surfaces 12A	21	64%	12	36%	0	0%	0	0%	0	0%	100%
Proper Handwashing 13A	22	69%	10	31%	0	0%	1	3%	0	0%	100%
Good Hygenic Practices 14A	28	88%	4	13%	0	0%	1	3%	0	0%	100%
Prevention Hand Contamination 15A	24	77%	7	23%	0	0%	2	6%	0	0%	100%
Handwash Facilities 16A	27	82%	6	18%	0	0%	0	0%	0	0%	100%
Handwash Facilities 16B	33	100%	0	0%	0	0%	0	0%	0	0%	100%
Employee Health Policy 17A	0	0%	33	100%	0	0%	0	0%	0	0%	100%
Chemicals 18A	23	100%	0	0%	10	30%	0	0%	0	0%	100%
Chemicals 18B	29	88%	4	12%	0	0%	0	0%	0	0%	100%
Chemicals 18C	0	0%	0	0%	33	100%	0	0%		0%	100%
TOTALS	655	81%	152		373		338		0		

Summary of Findings by Facility Type											
Facility Type=Elementary Lunchrooms	n=57										
	IN	% IN	OUT	% OUT	NA	% NA	NO	%NO	Blank	% Blanl	% Total
Certified Food Protection Manager	47	82%	10	18%					0		
Approved Source 1A	57	100%	0	0%	0	0%	0	0%	0	0%	100%
Approved Source 1B	1	100%	0	0%	56	98%	0	0%	0	0%	100%
Approved Source 1C	0	0%	0	0%	57	100%	0	0%	0	0%	100%
Receiving/Sound Coundition 2A	57	100%	0	0%	0	0%	0	0%	0	0%	100%
Records 3A	0	0%	0	0%	57	100%	0	0%	0	0%	100%
Records 3B	0	0%	0	0%	57	100%	0	0%	0	0%	100%
Records 3C	0	0%	0	0%	57	100%	0	0%	0	0%	100%
Proper Cooking Temp 4A	0	0%	0	0%	56	98%	1	2%	0	0%	100%
Proper Cooking Temp 4B	0	0%	0	0%	55	96%	2	4%	0	0%	100%
Proper Cooking Temp 4C	0	0%	0	0%	56	98%	1	2%	0	0%	100%
Proper Cooking Temp 4D	0	0%	0	0%	56	98%	1	2%	0	0%	100%
Proper Cooking Temp 4E	0	0%	0	0%	57	100%	0	0%	0	0%	100%
Proper Cooking Temp 4F	0	0%	0	0%	57	100%	0	0%	0	0%	100%
Proper Cooking Temp 4G	0	0%	0	0%	56	98%	1	2%	0	0%	100%
Proper Cooking Temp 4H	1	100%	0	0%	55	96%	1	2%	0	0%	100%
Rapid Reheating/Hot Hold 5A	10	83%	2	17%	7	12%	38	67%	0	0%	100%
Rapid Reheating/Hot Hold 5B	0	0%	0	0%	52	91%	5	9%	0	0%	100%
Rapid Reheating/Hot Hold 5C	39	98%	1	3%	1	2%	16	28%	0	0%	100%
Rapid Reheating/Hot Hold 5D	0	0%	0	0%	53	93%	4	7%	0	0%	100%
HSP Juice 6A	57	100%	0	0%	0	0%	0	0%	0	0%	100%
HSP Pasteurized Eggs 6B	57	100%	0	0%	0	0%	0	0%	0	0%	100%
HSP Raw Undercooked 6C	57	100%	0	0%	0	0%	0	0%	0	0%	100%
Proper Cooling Procedure 7A	12	80%	3	20%	4	7%	38	67%	0	0%	100%
Proper Cooling Procedure 7B	17	100%	0	0%	4	7%	36	63%	0	0%	100%
Proper Cooling Procedure 7C	34	97%	1	3%	1	2%	21	37%	0	0%	100%
Cold Hot 8A	34	60%	23	40%	0	0%	0	0%	0	0%	100%
Hot Hold 9A	36	71%	15	29%	0	0%	6	11%	0	0%	100%
Hot Hold 9B	1	100%	0	0%	54	95%	2	4%	0	0%	100%
Time 10A	17	55%	14	45%	6	11%	20	35%	0	0%	100%
Time 10B	16	30%	37	70%	1	2%	3	5%	0	0%	100%
Time 10C	16	33%	33	67%	1	2%	7	12%	0	0%	100%
Time 10D	0	0%	0	0%	56	98%	1	2%	0	0%	100%
Separation 11A	2	67%	1	33%	54	95%	0	0%	0	0%	100%
Separation 11B	1	100%	0	0%	56	98%	0	0%	0	0%	100%
Separation 11C	53	93%	4	7%	0	0%	0	0%	0	0%	100%
Separation 11D	57	100%	0	0%	0	0%	0	0%	0	0%	100%
Food Contact Surfaces 12A	55	96%	2	4%	0	0%	0	0%	0	0%	100%
Proper Handwashing 13A	49	86%	8	14%	0	0%	0	0%	0	0%	100%
Good Hygenic Practices 14A	52	91%	5	9%	0	0%	0	0%	0	0%	100%
Prevention Hand Contamination 15A	56	98%	1	2%	0	0%	0	0%	0	0%	100%
Handwash Facilities 16A	55	96%	2	4%	0	0%	0	0%	0	0%	100%
Handwash Facilities 16B	55	96%	2	4%	0	0%	0	0%	0	0%	100%
Employee Health Policy 17A	0	0%	57	100%	0	0%	0	0%	0	0%	100%
Chemicals 18A	35	100%	0	0%	22	39%	0	0%	0	0%	100%
Chemicals 18B	53	93%	4	7%	0	0%	0	0%	0	0%	100%
Chemicals 18C	0	0%	0	0%	57	100%	0	0%	0	0%	100%
TOTALS	1042	83%	215		1161		204		0		

Summary of Findings by Facility Type											
Facility Type=Fast Foods	**n=87**										
	IN	**% IN**	**OUT**	**% OUT**	**NA**	**% NA**	**NO**	**%NO**	**Blank**	**% Blank**	**% Total**
Certified Food Protection Manager	24	28%	63	72%							
Approved Source 1A	87	100%	0	0%	0	0%	0	0%	0	0%	100%
Approved Source 1B	3	100%	0	0%	84	97%	0	0%	0	0%	100%
Approved Source 1C	1	100%	0	0%	86	99%	0	0%	0	0%	100%
Receiving/Sound Coundition 2A	85	98%	2	2%	0	0%	0	0%	0	0%	100%
Records 3A	1	100%	0	0%	86	99%	0	0%	0	0%	100%
Records 3B	0	0%	0	0%	87	100%	0	0%	0	0%	100%
Records 3C	0	0%	0	0%	87	100%	0	0%	0	0%	100%
Proper Cooking Temp 4A	4	100%	0	0%	64	74%	19	22%	0	0%	100%
Proper Cooking Temp 4B	10	91%	1	9%	55	63%	21	24%	0	0%	100%
Proper Cooking Temp 4C	0	0%	0	0%	80	92%	7	8%	0	0%	100%
Proper Cooking Temp 4D	11	100%	0	0%	44	51%	32	37%	0	0%	100%
Proper Cooking Temp 4E	0	0%	0	0%	87	100%	0	0%	0	0%	100%
Proper Cooking Temp 4F	0	0%	0	0%	87	100%	0	0%	0	0%	100%
Proper Cooking Temp 4G	0	0%	0	0%	86	99%	1	1%	0	0%	100%
Proper Cooking Temp 4H	8	100%	0	0%	59	68%	20	23%	0	0%	100%
Rapid Reheating/Hot Hold 5A	5	56%	4	44%	56	64%	22	25%	0	0%	100%
Rapid Reheating/Hot Hold 5B	1	50%	1	50%	57	66%	28	32%	0	0%	100%
Rapid Reheating/Hot Hold 5C	37	93%	3	8%	18	21%	29	33%	0	0%	100%
Rapid Reheating/Hot Hold 5D	0	0%	0	0%	81	93%	6	7%	0	0%	100%
HSP Juice 6A	0	0%	0	0%	87	100%	0	0%	0	0%	100%
HSP Pasteurized Eggs 6B	0	0%	0	0%	87	100%	0	0%	0	0%	100%
HSP Raw Undercooked 6C	0	0%	0	0%	87	100%	0	0%	0	0%	100%
Proper Cooling Procedure 7A	12	75%	4	25%	43	49%	28	32%	0	0%	100%
Proper Cooling Procedure 7B	12	75%	4	25%	48	55%	23	26%	0	0%	100%
Proper Cooling Procedure 7C	19	90%	2	10%	20	23%	46	53%	0	0%	100%
Cold Hot 8A	33	38%	54	62%	0	0%	0	0%	0	0%	100%
Hot Hold 9A	55	82%	12	18%	10	11%	10	11%	0	0%	100%
Hot Hold 9B	1	100%	0	0%	80	92%	6	7%	0	0%	100%
Time 10A	18	37%	31	63%	35	40%	3	3%	0	0%	100%
Time 10B	34	40%	50	60%	3	3%	0	0%	0	0%	100%
Time 10C	35	43%	47	57%	3	3%	2	2%	0	0%	100%
Time 10D	5	71%	2	29%	76	87%	4	5%	0	0%	100%
Separation 11A	36	80%	9	20%	42	48%	0	0%	0	0%	100%
Separation 11B	38	88%	5	12%	44	51%	0	0%	0	0%	100%
Separation 11C	80	92%	7	8%	0	0%	0	0%	0	0%	100%
Separation 11D	87	100%	0	0%	0	0%	0	0%	0	0%	100%
Food Contact Surfaces 12A	62	71%	25	29%	0	0%	0	0%	0	0%	100%
Proper Handwashing 13A	53	71%	22	29%	0	0%	12	14%	0	0%	100%
Good Hygenic Practices 14A	65	78%	18	22%	0	0%	4	5%	0	0%	100%
Prevention Hand Contamination 15A	40	54%	34	46%	0	0%	13	15%	0	0%	100%
Handwash Facilities 16A	68	78%	19	22%	0	0%	0	0%	0	0%	100%
Handwash Facilities 16B	82	94%	5	6%	0	0%	0	0%	0	0%	100%
Employee Health Policy 17A	8	9%	79	91%	0	0%	0	0%	0	0%	100%
Chemicals 18A	5	100%	0	0%	82	94%	0	0%	0	0%	100%
Chemicals 18B	77	89%	10	11%	0	0%	0	0%	0	0%	100%
Chemicals 18C	0	0%	0	0%	87	100%	0	0%	0	0%	100%
TOTALS	1178	72%	450		2038		336		0		

Summary of Findings by Facility Type											
Facility Type=Full Service Restaurants	n=87										
	IN	% IN	OUT	% OUT	NA	% NA	NO	%NO	Blank	% Blank	% Total
Certified Food Protection Manager	40	46%	47	54%							
Approved Source 1A	87	100%	0	0%	0	0%	0	0%	0	0%	100%
Approved Source 1B	10	91%	1	9%	76	87%	0	0%	0	0%	100%
Approved Source 1C	1	100%	0	0%	86	99%	0	0%	0	0%	100%
Receiving/Sound Coundition 2A	85	98%	2	2%	0	0%	0	0%	0	0%	100%
Records 3A	6	100%	0	0%	81	93%	0	0%	0	0%	100%
Records 3B	4	31%	9	69%	74	85%	0	0%	0	0%	100%
Records 3C	1	9%	10	91%	76	87%	0	0%	0	0%	100%
Proper Cooking Temp 4A	7	88%	1	13%	22	25%	57	66%	0	0%	100%
Proper Cooking Temp 4B	12	86%	2	14%	23	26%	50	57%	0	0%	100%
Proper Cooking Temp 4C	0	0%	0	0%	60	69%	27	31%	0	0%	100%
Proper Cooking Temp 4D	39	93%	3	7%	3	3%	42	48%	0	0%	100%
Proper Cooking Temp 4E	0	0%	0	0%	86	99%	1	1%	0	0%	100%
Proper Cooking Temp 4F	0	0%	0	0%	81	93%	6	7%	0	0%	100%
Proper Cooking Temp 4G	3	100%	0	0%	77	89%	7	8%	0	0%	100%
Proper Cooking Temp 4H	28	90%	3	10%	5	6%	51	59%	0	0%	100%
Rapid Reheating/Hot Hold 5A	22	96%	1	4%	12	14%	52	60%	0	0%	100%
Rapid Reheating/Hot Hold 5B	0	0%	1	100%	58	67%	28	32%	0	0%	100%
Rapid Reheating/Hot Hold 5C	10	100%	0	0%	30	34%	47	54%	0	0%	100%
Rapid Reheating/Hot Hold 5D	0	0%	0	0%	73	84%	14	16%	0	0%	100%
HSP Juice 6A	0	0%	0	0%	87	100%	0	0%	0	0%	100%
HSP Pasteurized Eggs 6B	0	0%	0	0%	87	100%	0	0%	0	0%	100%
HSP Raw Undercooked 6C	0	0%	0	0%	87	100%	0	0%	0	0%	100%
Proper Cooling Procedure 7A	28	50%	28	50%	5	6%	26	30%	0	0%	100%
Proper Cooling Procedure 7B	17	77%	5	23%	34	39%	31	36%	0	0%	100%
Proper Cooling Procedure 7C	10	83%	2	17%	2	2%	73	84%	0	0%	100%
Cold Hot 8A	28	32%	59	68%	0	0%	0	0%	0	0%	100%
Hot Hold 9A	59	79%	16	21%	4	5%	8	9%	0	0%	100%
Hot Hold 9B	1	100%	0	0%	70	80%	16	18%	0	0%	100%
Time 10A	25	30%	57	70%	5	6%	0	0%	0	0%	100%
Time 10B	18	21%	67	79%	2	2%	0	0%	0	0%	100%
Time 10C	21	27%	57	73%	5	6%	4	5%	0	0%	100%
Time 10D	2	67%	1	33%	83	95%	1	1%	0	0%	100%
Separation 11A	62	74%	22	26%	3	3%	0	0%	0	0%	100%
Separation 11B	71	85%	13	15%	3	3%	0	0%	0	0%	100%
Separation 11C	63	72%	24	28%	0	0%	0	0%	0	0%	100%
Separation 11D	87	100%	0	0%	0	0%	0	0%	0	0%	100%
Food Contact Surfaces 12A	56	64%	31	36%	0	0%	0	0%	0	0%	100%
Proper Handwashing 13A	57	68%	27	32%	0	0%	3	3%	0	0%	100%
Good Hygenic Practices 14A	64	74%	22	26%	0	0%	1	1%	0	0%	100%
Prevention Hand Contamination 15A	32	42%	45	58%	0	0%	10	11%	0	0%	100%
Handwash Facilities 16A	69	79%	18	21%	0	0%	0	0%	0	0%	100%
Handwash Facilities 16B	75	86%	12	14%	0	0%	0	0%	0	0%	100%
Employee Health Policy 17A	1	1%	86	99%	0	0%	0	0%	0	0%	100%
Chemicals 18A	27	96%	1	4%	59	68%	0	0%	0	0%	100%
Chemicals 18B	78	90%	9	10%	0	0%	0	0%	0	0%	100%
Chemicals 18C	0	0%	0	0%	87	100%	0	0%	0	0%	100%
TOTALS	1266	67%	635		1546		555		0		

Summary of Findings by Facility Type											
Facility Type=Delis	**n=57**										
	IN	**% IN**	**OUT**	**% OUT**	**NA**	**% NA**	**NO**	**%NO**	**Blank**	**% Blank**	**% Total**
Certified Food Protection Manager	26	46%	31	54%							
Approved Source 1A	57	100%	0	0%	0	0%	0	0%	0	0%	100%
Approved Source 1B	0	0%	0	0%	57	100%	0	0%	0	0%	100%
Approved Source 1C	1	100%	0	0%	56	98%	0	0%	0	0%	100%
Receiving/Sound Coundition 2A	56	98%	1	2%	0	0%	0	0%	0	0%	100%
Records 3A	0	0%	0	0%	57	100%	0	0%	0	0%	100%
Records 3B	5	45%	6	55%	46	81%	0	0%	0	0%	100%
Records 3C	6	55%	5	45%	46	81%	0	0%	0	0%	100%
Proper Cooking Temp 4A	0	0%	0	0%	56	98%	1	2%	0	0%	100%
Proper Cooking Temp 4B	0	0%	0	0%	55	96%	2	4%	0	0%	100%
Proper Cooking Temp 4C	0	0%	0	0%	54	95%	3	5%	0	0%	100%
Proper Cooking Temp 4D	25	100%	0	0%	2	4%	30	53%	0	0%	100%
Proper Cooking Temp 4E	0	0%	0	0%	57	100%	0	0%	0	0%	100%
Proper Cooking Temp 4F	0	0%	0	0%	57	100%	0	0%	0	0%	100%
Proper Cooking Temp 4G	1	100%	0	0%	55	96%	1	2%	0	0%	100%
Proper Cooking Temp 4H	1	100%	0	0%	27	47%	29	51%	0	0%	100%
Rapid Reheating/Hot Hold 5A	2	100%	0	0%	52	91%	3	5%	0	0%	100%
Rapid Reheating/Hot Hold 5B	1	100%	0	0%	52	91%	4	7%	0	0%	100%
Rapid Reheating/Hot Hold 5C	10	83%	2	17%	22	39%	23	40%	0	0%	100%
Rapid Reheating/Hot Hold 5D	0	0%	0	0%	56	98%	1	2%	0	0%	100%
HSP Juice 6A	0	0%	0	0%	57	100%	0	0%	0	0%	100%
HSP Pasteurized Eggs 6B	0	0%	0	0%	57	100%	0	0%	0	0%	100%
HSP Raw Undercooked 6C	0	0%	0	0%	57	100%	0	0%	0	0%	100%
Proper Cooling Procedure 7A	19	73%	7	27%	9	16%	22	39%	0	0%	100%
Proper Cooling Procedure 7B	6	86%	1	14%	41	72%	9	16%	0	0%	100%
Proper Cooling Procedure 7C	0	0%	0	0%	49	86%	8	14%	0	0%	100%
Cold Hot 8A	25	44%	32	56%	0	0%	0	0%	0	0%	100%
Hot Hold 9A	33	72%	13	28%	2	4%	9	16%	0	0%	100%
Hot Hold 9B	1	100%	0	0%	54	95%	2	4%	0	0%	100%
Time 10A	43	90%	5	10%	9	16%	0	0%	0	0%	100%
Time 10B	26	46%	30	54%	0	0%	1	2%	0	0%	100%
Time 10C	37	67%	18	33%	1	2%	1	2%	0	0%	100%
Time 10D	1	100%	0	0%	55	96%	1	2%	0	0%	100%
Separation 11A	48	87%	7	13%	2	4%	0	0%	0	0%	100%
Separation 11B	27	100%	0	0%	30	53%	0	0%	0	0%	100%
Separation 11C	52	91%	5	9%	0	0%	0	0%	0	0%	100%
Separation 11D	57	100%	0	0%	0	0%	0	0%	0	0%	100%
Food Contact Surfaces 12A	52	91%	5	9%	0	0%	0	0%	0	0%	100%
Proper Handwashing 13A	30	57%	23	43%	0	0%	4	7%	0	0%	100%
Good Hygenic Practices 14A	48	91%	5	9%	0	0%	4	7%	0	0%	100%
Prevention Hand Contamination 15A	51	96%	2	4%	0	0%	4	7%	0	0%	100%
Handwash Facilities 16A	49	86%	8	14%	0	0%	0	0%	0	0%	100%
Handwash Facilities 16B	55	96%	2	4%	0	0%	0	0%	0	0%	100%
Employee Health Policy 17A	12	21%	45	79%	0	0%	0	0%	0	0%	100%
Chemicals 18A	28	100%	0	0%	29	51%	0	0%	0	0%	100%
Chemicals 18B	53	93%	4	7%	0	0%	0	0%	0	0%	100%
Chemicals 18C	0	0%	0	0%	57	100%	0	0%	0	0%	100%
TOTALS	918	80%	226		1316		162		0		

Summary of Findings by Facility Type											
Facility Type=Meat	**n=59**										
	IN	**% IN**	**OUT**	**% OUT**	**NA**	**% NA**	**NO**	**%NO**	**Blank**	**% Blan**	**% Total**
Certified Food Protection Manager	15	25%	44	75%							
Approved Source 1A	55	93%	4	7%	0	0%	0	0%	0	0%	100%
Approved Source 1B	5	100%	0	0%	54	92%	0	0%	0	0%	100%
Approved Source 1C	3	100%	0	0%	56	95%	0	0%	0	0%	100%
Receiving/Sound Coundition 2A	58	98%	1	2%	0	0%	0	0%	0	0%	100%
Records 3A	3	100%	0	0%	55	93%	1	2%	0	0%	100%
Records 3B	0	0%	0	0%	59	100%	0	0%	0	0%	100%
Records 3C	0	0%	0	0%	59	100%	0	0%	0	0%	100%
Proper Cooking Temp 4A	0	0%	0	0%	59	100%	0	0%	0	0%	100%
Proper Cooking Temp 4B	0	0%	0	0%	59	100%	0	0%	0	0%	100%
Proper Cooking Temp 4C	0	0%	0	0%	58	98%	1	2%	0	0%	100%
Proper Cooking Temp 4D	0	0%	0	0%	57	97%	2	3%	0	0%	100%
Proper Cooking Temp 4E	0	0%	0	0%	59	100%	0	0%	0	0%	100%
Proper Cooking Temp 4F	0	0%	0	0%	59	100%	0	0%	0	0%	100%
Proper Cooking Temp 4G	0	0%	0	0%	58	98%	1	2%	0	0%	100%
Proper Cooking Temp 4H	0	0%	0	0%	56	95%	3	5%	0	0%	100%
Rapid Reheating/Hot Hold 5A	0	0%	0	0%	59	100%	0	0%	0	0%	100%
Rapid Reheating/Hot Hold 5B	0	0%	0	0%	59	100%	0	0%	0	0%	100%
Rapid Reheating/Hot Hold 5C	0	0%	0	0%	58	98%	1	2%	0	0%	100%
Rapid Reheating/Hot Hold 5D	0	0%	0	0%	59	100%	0	0%	0	0%	100%
HSP Juice 6A	0	0%	0	0%	59	100%	0	0%	0	0%	100%
HSP Pasteurized Eggs 6B	0	0%	0	0%	59	100%	0	0%	0	0%	100%
HSP Raw Undercooked 6C	0	0%	0	0%	59	100%	0	0%	0	0%	100%
Proper Cooling Procedure 7A	0	0%	0	0%	57	97%	2	3%	0	0%	100%
Proper Cooling Procedure 7B	1	100%	0	0%	58	98%	0	0%	0	0%	100%
Proper Cooling Procedure 7C	0	0%	0	0%	53	90%	6	10%	0	0%	100%
Cold Hot 8A	43	73%	16	27%	0	0%	0	0%	0	0%	100%
Hot Hold 9A	1	100%	0	0%	58	98%	0	0%	0	0%	100%
Hot Hold 9B	0	0%	0	0%	59	100%	0	0%	0	0%	100%
Time 10A	0	0%	0	0%	58	98%	1	2%	0	0%	100%
Time 10B	9	64%	5	36%	45	76%	0	0%	0	0%	100%
Time 10C	9	64%	5	36%	45	76%	0	0%	0	0%	100%
Time 10D	0	0%	0	0%	59	100%	0	0%	0	0%	100%
Separation 11A	22	73%	8	27%	29	49%	0	0%	0	0%	100%
Separation 11B	47	80%	12	20%	0	0%	0	0%	0	0%	100%
Separation 11C	52	88%	7	12%	0	0%	0	0%	0	0%	100%
Separation 11D	59	100%	0	0%	0	0%	0	0%	0	0%	100%
Food Contact Surfaces 12A	44	75%	15	25%	0	0%	0	0%	0	0%	100%
Proper Handwashing 13A	33	87%	5	13%	0	0%	21	36%	0	0%	100%
Good Hygenic Practices 14A	50	96%	2	4%	0	0%	7	12%	0	0%	100%
Prevention Hand Contamination 15A	12	86%	2	14%	32	54%	13	22%	0	0%	100%
Handwash Facilities 16A	49	83%	10	17%	0	0%	0	0%	0	0%	100%
Handwash Facilities 16B	56	95%	3	5%	0	0%	0	0%	0	0%	100%
Employee Health Policy 17A	8	14%	51	86%	0	0%	0	0%	0	0%	100%
Chemicals 18A	6	100%	0	0%	53	90%	0	0%	0	0%	100%
Chemicals 18B	59	100%	0	0%	0	0%	0	0%	0	0%	100%
Chemicals 18C	0	0%	0	0%	59	100%	0	0%		0%	100%
TOTALS	684	82%	146		1825		59		0		

Summary of Findings by Facility Type											
Facility Type=Seafood	**n=29**										
	IN	**% IN**	**OUT**	**% OUT**	**NA**	**% NA**	**NO**	**%NO**	**Blank**	**% Blank**	**% Total**
Certified Food Protection Manager	7	24%	22	76%							
Approved Source 1A	26	90%	3	10%	0	0%	0	0%	0	0%	100%
Approved Source 1B	18	95%	1	5%	10	34%	0	0%	0	0%	100%
Approved Source 1C	0	0%	0	0%	29	100%	0	0%	0	0%	100%
Receiving/Sound Coundition 2A	29	100%	0	0%	0	0%	0	0%	0	0%	100%
Records 3A	13	87%	2	13%	12	41%	2	7%	0	0%	100%
Records 3B	2	50%	2	50%	25	86%	0	0%	0	0%	100%
Records 3C	0	0%	0	0%	29	100%	0	0%	0	0%	100%
Proper Cooking Temp 4A	0	0%	0	0%	29	100%	0	0%	0	0%	100%
Proper Cooking Temp 4B	0	0%	0	0%	29	100%	0	0%	0	0%	100%
Proper Cooking Temp 4C	0	0%	0	0%	29	100%	0	0%	0	0%	100%
Proper Cooking Temp 4D	0	0%	0	0%	29	100%	0	0%	0	0%	100%
Proper Cooking Temp 4E	0	0%	0	0%	29	100%	0	0%	0	0%	100%
Proper Cooking Temp 4F	0	0%	0	0%	28	97%	1	3%	0	0%	100%
Proper Cooking Temp 4G	0	0%	0	0%	29	100%	0	0%	0	0%	100%
Proper Cooking Temp 4H	0	0%	0	0%	10	34%	19	66%	0	0%	100%
Rapid Reheating/Hot Hold 5A	0	0%	0	0%	28	97%	1	3%	0	0%	100%
Rapid Reheating/Hot Hold 5B	0	0%	0	0%	29	100%	0	0%	0	0%	100%
Rapid Reheating/Hot Hold 5C	0	0%	0	0%	28	97%	1	3%	0	0%	100%
Rapid Reheating/Hot Hold 5D	0	0%	0	0%	29	100%	0	0%	0	0%	100%
HSP Juice 6A	0	0%	0	0%	29	100%	0	0%	0	0%	100%
HSP Pasteurized Eggs 6B	0	0%	0	0%	29	100%	0	0%	0	0%	100%
HSP Raw Undercooked 6C	0	0%	0	0%	29	100%	0	0%	0	0%	100%
Proper Cooling Procedure 7A	0	0%	0	0%	23	79%	6	21%	0	0%	100%
Proper Cooling Procedure 7B	0	0%	0	0%	29	100%	0	0%	0	0%	100%
Proper Cooling Procedure 7C	6	100%	0	0%	9	31%	14	48%	0	0%	100%
Cold Hot 8A	19	66%	10	34%	0	0%	0	0%	0	0%	100%
Hot Hold 9A	1	100%	0	0%	28	97%	0	0%	0	0%	100%
Hot Hold 9B	0	0%	0	0%	29	100%	0	0%	0	0%	100%
Time 10A	11	92%	1	8%	17	59%	0	0%	0	0%	100%
Time 10B	16	59%	11	41%	2	7%	0	0%	0	0%	100%
Time 10C	12	52%	11	48%	6	21%	0	0%	0	0%	100%
Time 10D	0	0%	0	0%	29	100%	0	0%	0	0%	100%
Separation 11A	20	69%	9	31%	0	0%	0	0%	0	0%	100%
Separation 11B	19	95%	1	5%	9	31%	0	0%	0	0%	100%
Separation 11C	27	93%	2	7%	0	0%	0	0%	0	0%	100%
Separation 11D	29	100%	0	0%	0	0%	0	0%	0	0%	100%
Food Contact Surfaces 12A	26	90%	3	10%	0	0%	0	0%	0	0%	100%
Proper Handwashing 13A	13	87%	2	13%	0	0%	14	48%	0	0%	100%
Good Hygenic Practices 14A	21	95%	1	5%	0	0%	7	24%	0	0%	100%
Prevention Hand Contamination 15A	13	100%	0	0%	1	3%	15	52%	0	0%	100%
Handwash Facilities 16A	25	86%	4	14%	0	0%	0	0%	0	0%	100%
Handwash Facilities 16B	27	93%	2	7%	0	0%	0	0%	0	0%	100%
Employee Health Policy 17A	6	21%	23	79%	0	0%	0	0%	0	0%	100%
Chemicals 18A	0	0%	0	0%	29	100%	0	0%	0	0%	100%
Chemicals 18B	26	90%	3	10%	0	0%	0	0%	0	0%	100%
Chemicals 18C	0	0%	0	0%	29	100%	0	0%		0%	100%
TOTALS	405	82%	91		758		80		0		

Summary of Findings by Facility Type											
Facility Type=Produce	**n=42**										
	IN	**% IN**	**OUT**	**% OUT**	**NA**	**% NA**	**NO**	**%NO**	**Blank**	**% Blank**	**% Total**
Certified Food Protection Manager	12	29%	30	71%							
Approved Source 1A	42	100%	0	0%	0	0%	0	0%	0	0%	100%
Approved Source 1B	0	0%	0	0%	42	100%	0	0%	0	0%	100%
Approved Source 1C	3	100%	0	0%	39	93%	0	0%	0	0%	100%
Receiving/Sound Coundition 2A	42	100%	0	0%	0	0%	0	0%	0	0%	100%
Records 3A	0	0%	0	0%	42	100%	0	0%	0	0%	100%
Records 3B	0	0%	0	0%	42	100%	0	0%	0	0%	100%
Records 3C	0	0%	0	0%	42	100%	0	0%	0	0%	100%
Proper Cooking Temp 4A	0	0%	0	0%	42	100%	0	0%	0	0%	100%
Proper Cooking Temp 4B	0	0%	0	0%	42	100%	0	0%	0	0%	100%
Proper Cooking Temp 4C	0	0%	0	0%	42	100%	0	0%	0	0%	100%
Proper Cooking Temp 4D	0	0%	0	0%	42	100%	0	0%	0	0%	100%
Proper Cooking Temp 4E	0	0%	0	0%	42	100%	0	0%	0	0%	100%
Proper Cooking Temp 4F	0	0%	0	0%	42	100%	0	0%	0	0%	100%
Proper Cooking Temp 4G	0	0%	0	0%	42	100%	0	0%	0	0%	100%
Proper Cooking Temp 4H	0	0%	0	0%	42	100%	0	0%	0	0%	100%
Rapid Reheating/Hot Hold 5A	0	0%	0	0%	42	100%	0	0%	0	0%	100%
Rapid Reheating/Hot Hold 5B	0	0%	0	0%	42	100%	0	0%	0	0%	100%
Rapid Reheating/Hot Hold 5C	0	0%	0	0%	42	100%	0	0%	0	0%	100%
Rapid Reheating/Hot Hold 5D	0	0%	0	0%	42	100%	0	0%	0	0%	100%
HSP Juice 6A	0	0%	0	0%	42	100%	0	0%	0	0%	100%
HSP Pasteurized Eggs 6B	0	0%	0	0%	42	100%	0	0%	0	0%	100%
HSP Raw Undercooked 6C	0	0%	0	0%	42	100%	0	0%	0	0%	100%
Proper Cooling Procedure 7A	0	0%	0	0%	42	100%	0	0%	0	0%	100%
Proper Cooling Procedure 7B	4	67%	2	33%	22	52%	14	33%	0	0%	100%
Proper Cooling Procedure 7C	0	0%	0	0%	42	100%	0	0%	0	0%	100%
Cold Hot 8A	13	31%	29	69%	0	0%	0	0%	0	0%	100%
Hot Hold 9A	0	0%	0	0%	42	100%	0	0%	0	0%	100%
Hot Hold 9B	0	0%	0	0%	42	100%	0	0%	0	0%	100%
Time 10A	26	84%	5	16%	7	17%	4	10%	0	0%	100%
Time 10B	25	78%	7	22%	6	14%	4	10%	0	0%	100%
Time 10C	8	67%	4	33%	30	71%	0	0%	0	0%	100%
Time 10D	0	0%	0	0%	42	100%	0	0%	0	0%	100%
Separation 11A	0	0%	0	0%	42	100%	0	0%	0	0%	100%
Separation 11B	0	0%	0	0%	42	100%	0	0%	0	0%	100%
Separation 11C	39	93%	3	7%	0	0%	0	0%	0	0%	100%
Separation 11D	42	100%	0	0%	0	0%	0	0%	0	0%	100%
Food Contact Surfaces 12A	35	83%	7	17%	0	0%	0	0%	0	0%	100%
Proper Handwashing 13A	13	76%	4	24%	0	0%	25	60%	0	0%	100%
Good Hygenic Practices 14A	30	94%	2	6%	0	0%	10	24%	0	0%	100%
Prevention Hand Contamination 15A	17	81%	4	19%	0	0%	21	50%	0	0%	100%
Handwash Facilities 16A	32	76%	10	24%	0	0%	0	0%	0	0%	100%
Handwash Facilities 16B	38	90%	4	10%	0	0%	0	0%	0	0%	100%
Employee Health Policy 17A	6	14%	36	86%	0	0%	0	0%	0	0%	100%
Chemicals 18A	4	100%	0	0%	38	90%	0	0%	0	0%	100%
Chemicals 18B	42	100%	0	0%	0	0%	0	0%	0	0%	100%
Chemicals 18C	30	71%	12	29%	0	0%	0	0%	0	0%	100%
TOTALS	491	79%	129		1234		78		0		

Summary of Findings by Facility Type											
Facility Type=All facilities	**n=458**										
	IN	**% IN**	**OUT**	**% OUT**	**NA**	**% NA**	**NO**	**%NO**	**Blank**	**% Blank**	**% Total**
Certified Food Protection Manager	194	42%	264	58%							
Approved Source 1A	451	98%	7	2%	0	0%	0	0%	0	0%	100%
Approved Source 1B	37	95%	2	5%	419	91%	0	0%	0	0%	100%
Approved Source 1C	9	100%	0	0%	449	98%	0	0%	0	0%	100%
Receiving/Sound Coundition 2A	452	99%	6	1%	0	0%	0	0%	0	0%	100%
Records 3A	23	92%	2	8%	430	94%	3	1%	0	0%	100%
Records 3B	11	39%	17	61%	430	94%	0	0%	0	0%	100%
Records 3C	7	32%	15	68%	436	95%	0	0%	0	0%	100%
Proper Cooking Temp 4A	12	92%	1	8%	335	73%	110	24%	0	0%	100%
Proper Cooking Temp 4B	28	88%	4	13%	322	70%	104	23%	0	0%	100%
Proper Cooking Temp 4C	2	100%	0	0%	383	84%	73	16%	0	0%	100%
Proper Cooking Temp 4D	83	97%	3	3%	237	52%	135	29%	0	0%	100%
Proper Cooking Temp 4E	0	NA	0	NA	457	100%	1	0%	0	0%	100%
Proper Cooking Temp 4F	0	NA	0	NA	447	98%	11	2%	0	0%	100%
Proper Cooking Temp 4G	4	100%	0	0%	431	94%	23	5%	0	0%	100%
Proper Cooking Temp 4H	47	94%	3	6%	257	56%	151	33%	0	0%	100%
Rapid Reheating/Hot Hold 5A	43	80%	11	20%	259	57%	145	32%	0	0%	100%
Rapid Reheating/Hot Hold 5B	2	50%	2	50%	360	79%	94	21%	0	0%	100%
Rapid Reheating/Hot Hold 5C	110	94%	7	6%	199	43%	142	31%	0	0%	100%
Rapid Reheating/Hot Hold 5D	0	0%	1	100%	398	87%	59	13%	0	0%	100%
HSP Juice 6A	97	100%	0	0%	361	79%	0	0%	0	0%	100%
HSP Pasteurized Eggs 6B	95	98%	2	2%	361	79%	0	0%	0	0%	100%
HSP Raw Undercooked 6C	95	98%	2	2%	361	79%	0	0%	0	0%	100%
Proper Cooling Procedure 7A	86	65%	47	35%	185	40%	140	31%	0	0%	100%
Proper Cooling Procedure 7B	69	82%	15	18%	241	53%	133	29%	0	0%	100%
Proper Cooling Procedure 7C	83	92%	7	8%	177	39%	191	42%	0	0%	100%
Cold Hot 8A	220	48%	238	52%	0	0%	0	0%	0	0%	100%
Hot Hold 9A	208	77%	61	23%	145	32%	44	10%	0	0%	100%
Hot Hold 9B	6	100%	0	0%	393	86%	59	13%	0	0%	100%
Time 10A	170	58%	122	42%	138	30%	28	6%	0	0%	100%
Time 10B	171	44%	217	56%	60	13%	10	2%	0	0%	100%
Time 10C	156	44%	195	56%	92	20%	15	3%	0	0%	100%
Time 10D	8	73%	3	27%	440	96%	7	2%	0	0%	100%
Separation 11A	225	79%	60	21%	173	38%	0	0%	0	0%	100%
Separation 11B	236	87%	36	13%	186	41%	0	0%	0	0%	100%
Separation 11C	402	88%	56	12%	0	0%	0	0%	0	0%	100%
Separation 11D	458	100%	0	0%	0	0%	0	0%	0	0%	100%
Food Contact Surfaces 12A	358	78%	100	22%	0	0%	0	0%	0	0%	100%
Proper Handwashing 13A	275	73%	102	27%	0	0%	81	18%	0	0%	100%
Good Hygenic Practices 14A	363	86%	61	14%	0	0%	34	7%	0	0%	100%
Prevention Hand Contamination 15A	252	73%	95	27%	33	7%	78	17%	0	0%	100%
Handwash Facilities 16A	381	83%	77	17%	0	0%	0	0%	0	0%	100%
Handwash Facilities 16B	428	93%	30	7%	0	0%	0	0%	0	0%	100%
Employee Health Policy 17A	44	10%	414	90%	0	0%	0	0%	0	0%	100%
Chemicals 18A	132	99%	1	1%	325	71%	0	0%	0	0%	100%
Chemicals 18B	423	92%	35	8%	0	0%	0	0%	0	0%	100%
Chemicals 18C	30	71%	12	29%	416	91%	0	0%	0	0%	100%
TOTALS	6792		2069	23%	10336		1871		0		

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

Risk Factor (**IN compliance)**	Hospitals			Nursing Homes			Elementary Schools			Fast Food Restaurants			Full Service Restaurants		
	%	n	Total Obs	%	n	Total Obs	%	n	Total Obs	%	n	Total Obs	%	n	Total Obs
Food from Unsafe Source	100%	14	14	100%	66	66	100%	115	115	99%	177	179	90%	194	216
Inadequate Cooking	100%	31	31	92%	129	140	99%	221	224	89%	76	85	92%	121	132
Improper Holding/Time-Temperature	67%	31	46	71%	135	189	59%	183	309	52%	224	430	42%	209	501
Contaminated Equipment/Protection fro	94%	33	35	86%	139	162	96%	168	175	87%	303	349	79%	339	429
Poor Personal Hygiene	83%	34	41	69%	134	194	78%	267	342	64%	316	493	59%	298	508
Other/Chemical	91%	10	11	93%	52	56	96%	88	92	89%	82	92	91%	105	115
Totals	86%	153	178	81%	655	807	83%	1042	1257	72%	1178	1628	67%	1266	1901

Risk Factor	Delis			Meat			Seafood			Produce		
	%	n	Total Obs	%	n	Total Obs	%	n	Total Obs	%	n	Total Obs
Food from Unsafe Source	91%	125	137	96%	124	129	92%	88	96	100%	87	87
Inadequate Cooking	95%	40	42	NA	0	0	NA	0	0	NA	0	0
Improper Holding/Time-Temperature	64%	191	297	71%	63	89	66%	65	98	62%	76	123
Contaminated Equipment/Protection fro	93%	236	253	84%	224	266	89%	121	136	92%	116	126
Poor Personal Hygiene	74%	245	330	74%	208	281	77%	105	137	69%	136	196
Other/Chemical	95%	81	85	100%	65	65	90%	26	29	86%	76	88
Totals	80%	918	1144	82%	684	830	82%	405	496	79%	491	620

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		
	%	n	Total Obs	%	n	Total Obs	%	n	Total Obs	%	n	Total Obs	%	n	Total Obs
Food from Unsafe Source	0%	0	14	0%	0	66	0%	0	115	1%	2	179	10%	22	216
Inadequate Cooking	0%	0	31	8%	11	140	1%	3	224	11%	9	85	8%	11	132
Improper Holding/Time-Temperature	33%	15	46	29%	54	189	41%	126	309	48%	206	430	58%	292	501
Contaminated Equipment/Protection from	6%	2	35	14%	23	162	4%	7	175	13%	46	349	21%	90	429
Poor Personal Hygiene	17%	7	41	31%	60	194	22%	75	342	36%	177	493	41%	210	508
Other/Chemical	9%	1	11	7%	4	56	4%	4	92	11%	10	92	9%	10	115
Totals	14%	25	178	19%	152	807	17%	215	1257	28%	450	1628	33%	635	1901

Risk Factor	Delis			Meat			Seafood			Produce		
	%	n	Total Obs	%	n	Total Obs	%	n	Total Obs	%	n	Total Obs
Food from Unsafe Source	9%	12	137	4%	5	129	8%	8	96	0%	0	87
Inadequate Cooking	5%	2	42	NA	0	0	NA	0	0	NA	0	0
Improper Holding/Time-Temperature	36%	106	297	29%	26	89	34%	33	98	38%	47	123
Contaminated Equipment/Protection from	7%	17	253	16%	42	266	11%	15	136	8%	10	126
Poor Personal Hygiene	26%	85	330	26%	73	281	23%	32	137	31%	60	196
Other/Chemical	5%	4	85	0%	0	65	10%	3	29	14%	12	88
Totals	20%	226	1144	18%	146	830	18%	91	496	21%	129	620

Hold is the most significant risk factor across the board

: top most significant

: 2nd most significant

Risk Categorization of Food Establishments

Examples
- Full Service Restaurant
- Big Deli
- Caterers
- Nursing Homes
- School Lunch Rooms serving Preschool Aged
- Some Sushi Establishments
- Reduced Oxygen Packaging

Risk Type 4
- Establishments Serving Highly Susceptible Populations and/or
- Establishments Using Specialized Processes
- Unlimited Number of Cook and Cool of PH* Foods and/or
- Unlimited Amount of Raw PH* Preparation

Less Complex

Examples
- Meat Markets/Seafood
- Some Grocery Store Delis
- MFU
- Middle and High School Lunch Rooms
- Some Sub Shops
- Breading/Marinating preparation

Risk Type 3
- Cook and Cool No More Than 3 PH* Foods
- Unlimited Amount of Raw PH Preparation

Less Complex

Examples
- Some Grocery Store Delis
- Pushcarts / Some MFUs
- Cook / Serve Food Service
- LFSE
- Cook / Serve Pizza
- Sandwich Shops
- Produce

Risk Type 2
- Cook and Cool No More Than 2 PH* Foods
- Raw PH* Ingredients Received in a Ready to Cook Form

Less Complex

Examples
- Some Drink Stands
- Nachos with Non-PH* Cheese
- Multi-Use Utensils

Risk Type 1
- Prepare Only Non-PH* Foods

***** Potentially Hazardous

CDC Risk Factor FOODS FROM UNSAFE SOURCES Food Source	CDC Risk Factor INADEQUATE COOK Pathogen Destruction
1. Approved Source **Data Item - 1A** 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 **Data Item – 1B** 3-201.15* Molluscan Shellfish 3-202.18* Shellstock Identification **Data Item – 1C** 3-201.16* Wild Mushrooms 3-201.17* Game Animals **2. Receiving/Sound Condition** **Data Item – 2A** 3-202.11* Temperature 3-202.15* Package Integrity 3-101.11* Safe, Unadulterated, and Honestly Presented	**4. Proper Cooking Temperature per PHF** **Data Item – 4A** 3-401.11(A)(1)(a)* Raw Animal Foods 3-401.11(A)(2)* Raw Animal Foods **Data Item – 4B** 3-401.11(A)(2)* Raw Animal Foods **Data Item – 4C** 3-401.11(B)(1)(2)* Raw Animal Foods **Data Item – 4D** 3-401.11(A)(3)* Raw Animal Foods **Data Item – 4E** 3-401.11(A)(3)* Raw Animal Foods **Data Item – 4F** 3-401.12* Microwave Cooking **Data Item – 4G** 3-401.11(A)(2)* Raw Animal Foods **Data Item – 4H** 3-401.11(A)(1)(b)* Raw Animal Foods
3. Records **Data Item – 3A** 3-202.18* Shellfish Identification 3-203.12* Shellfish Maintaining Identification **Data Item – 3B** 3.402.11* Parasite Destruction 3.402.12* Records, Creation and Retention **Data Item – 3C** 3-502.12* Reduced Oxygen Packaging, Criteria 8-103.12* Conformance with Approved Procedures	**5. Rapid Reheating for Hot Holding** **Data Item 5A** 3-403.11(A)* Reheating for Hot Holding **Data Item 5B** 3-403.11(B)* Reheating for Hot Holding - Microwave **Data Item 5C** 3-403.11(C)* Reheating for Hot Holding – Commercially Processed RTE Food **Data Item 5D** 3-403.11(E)* Reheating for Hot Holding – Remaining sliced portions roasts Of beef

6. Food & Food Preparation for Highly Susceptible Populations – 2001 *Food Code*

Data Item 6A
3-801.11(A)(2)* Prohibited Foods

Data Item 6B
3-801.11(B)* Prohibited Foods
3-801.11(E)* Prohibited Foods

Data Item 6C
3-801.11(D)* Prohibited Foods

CDC Risk Factor
IMPROPER COOLING
Limitation of Growth of Organisms of Public Health Concern

7. Proper Cooling Procedure

Data Item 7A
3-501.14(A)* Cooling – Cooked PHF

Data Item 7B
3-501.14(B)* Cooling – PHF prepared from ingredients at ambient temperature

Data Item 7C
3-501.14(C)* Cooling – PHF receipt of foods allowed at >41° F. (5° C.) during shipment

8. Cold Hold (41° F. (5° C.))

Data Item 8A
3-501.16(B)* PHF, Hot and Cold Holding
(*For the purposes of this Baseline, 41° F. (5° C.) or below will be used as the criteria for assessing all PHF that are maintained/held cold.)*

9. Hot Hold (135° F. (57° C.))

Data Item 9A
3-501.16(A)* PHF, Hot and Cold Holding

Data Item 9B
3-501.16(A)* PHF, Hot and Cold Holding

10. Time

Data Item 10A
3-501.17(A)(C)* Ready-to-Eat, PHF, Date Marking – On-premises Preparation
7 calendar days at 41° F. (5° C.) or less

Data Item 10B
3-501.18* Ready-to-Eat, PHF, Disposition
(Food shall be discarded if not consumed within ≤ 7 calendar days at 41° F. (5° C.) or less

Data Item 10C
3-501.17(B)(F)* Ready-to-Eat, PHF, Date Marking
– commercially processed food
(Commercially processed food containers shall be clearly marked, at the time originally opened in a food establishment, with the consume by date which is, including the day the original container is opened:
≤ 7 calendar days at 41° F. (5° C.) or less

Data Item 10D
3-501.19* Time as a Public Health Control

CDC Risk Factor CONTAMINATED EQUIPMENT Protection from Contamination	CDC Risk Factor POOR PERSONAL HYGIENE Personnel
11. Separation / Segregation /Protection **Data Item 11A** 3-302.11(A)(1)* Packaged and Unpackaged Food – Separation, Packaging, and Segregation *(Separate raw animal foods from raw RTE and cooked RTE foods)* **Data Item 11B** 3-302.11(A)(2)* Packaged and Unpackaged Food – Separation, Packaging, and Segregation *(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)* **Data Item 11C** 3-302.11(A)(4-6)* Packaged and Unpackaged Food – Separation, Packaging, and Segregation 3-304.11(B)* Food Contact with Equipment and Utensils **Data Item 11D** 3-306.14(A)(B)* Returned Food, Reservice or Sale	**13. Proper, Adequate Handwashing** **Data Item 13A** 2-301.11* Clean Condition 2-301.12* Cleaning Procedure 2-301.14* When to Wash 2-301.15* Where to Wash **14. Good Hygiene Practices** **Data Item 14A** 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 **15. Prevention of Contamination from Hands** **Data Item 15A** 3-301.11* Preventing Contamination from Hands
12. Food Contact Surfaces **Data Item 12A** 4-601.11(A) & (B)* Equipment, Food Contact Surfaces and Utensils 4-602.11* Equipment Food-Contact Surfaces and Utensils - Frequency 4-701.10* Sanitization of Equipment and Utensils – Food Contact Surfaces and Utensils 4-702.11* Sanitization of Equipment and Utensils – Before Use After Cleaning	**16. Handwash Facilities** **Data Item 16A** 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 **Data Item 16B** 6-301.11 Handwashing Cleanser, Availability 6-301.12 Hand Drying Provision

CDC Risk Factor
POOR PERSONAL HYGIENE
Personnel

17. Employee Health Policy

Data Item 17A

2-201.11 Responsibility of Person in Charge
2-201.12* Exclusions and Restrictions
2-201.13 Removal of Exclusions and Restrictions
2.201.14* Responsibility of a Food Employee or an Applicant to Report to the Person in Charge
2-201.15* Reporting by the Person in Charge

18. Chemical

Data Item 18A

3-202.12* Additives
3-302.14* Protection from Unapproved Additives
(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)

Data Item 18B

7-101.11* Identifying Information, Prominence-Original Containers
7-102.11* Common Name-Working Containers

Operational Suppliers and Applications
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
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
7-207.12* Refrigerated Medicines, Storage
7-208.11* Storage-First Aid Supplies
7-209.11* Storage-Other Personal Care Items

Data Item 18C

Stock and Retail Sale of Poisonous or Toxic Material

7.301.11* Separation-Storage and Display
(Separation is to be by spacing or partitioning)

FDA-Baseline Data Collection Form

Date:
Time In: Time Out: Inspector:
Establishment: Manager:
Physical Address:
City: Industry Segment:
State: Zip: County: Facility Type:

Certified Food Protection Manager present: YES NO

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)

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 Shellfish from NSSP (National Shellfish Sanitation Program) listed sources. No recreationally caught shellfish received or sold
IN OUT NA NO C. Game, wild mushrooms harvested with approval of Regulatory Authority

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STATUS **2. Receiving / Sound Condition**

IN OUT A. Food received at proper temperatures/ protected from contamination during transportation and receiving/food is safe, unadulterated

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STATUS **3. Records**

IN OUT NA NO A. Shellstock tags/labels retained for 90 days from the date the container is emptied
IN OUT NA NO B. As required, written documentation of parasite destruction maintained for 90 days for Fish products
IN OUT NA C. CCP monitoring records maintained in accordance with HACCP plan when required

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CDC RISK FACTOR-INADEQUATE COOK

PATHOGEN DESTRUCTION

STATUS **4. Proper Cooking Temperature Per Potentially Hazardous Food (PHF)**

***(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 PHF 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
IN OUT NA NO B. Comminuted Fish, Meats, Game animals cooked to 155°F (68°C) for 15 seconds
IN OUT NA NO C . Roasts, including formed roasts, are cooked to 130°F (54°C) for 112 minutes or as Chart specified and according to oven parameters per Chart ***(NOTE: This data item includes beef roasts, corned beef roasts, pork roasts, and cured pork roasts such as ham).***
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) for 15 seconds
IN OUT NA NO E. Wild game animals cooked to 165°F (74°C) for 15 seconds
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 15 seconds.
IN OUT NA NO H. All other PHF cooked to 145°F (63°C) for 15 seconds, including fish and pork.

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STATUS **5. Rapid Reheating For Hot Holding**

IN OUT NA NO A. PHF 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
IN OUT NA NO C. Commercially processed ready to eat food, reheated to 135°F (57°C) or above **for hot holding**
IN OUT NA NO D. Remaining unsliced portions of roasts are reheated for hot holding using minimum oven parameters

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STATUS **6. 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.
I**N OUT NA** B. Pasteurized eggs or egg products substituted for raw shell eggs in preparation of foods that are not 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.

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CDC RISK FACTOR - IMPROPER HOLD

LIMITATION OF GROWTH OF ORGANISMS OF PUBLIC HEALTH CONCERN

STATUS **7. 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 PHF is cooled from 135°F (57°C) to 70°F (21°C) within 2 hours **and** from 135°F (57°C) to 41°F (5°C) or below within 6 hours
IN OUT NA NO B. PHF (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

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STATUS **8. 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 <u>all</u> PHF that are maintained/held cold.) If one product is found out of temperature the item is marked OUT of compliance.)*

IN OUT A. PHF 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.)***

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STATUS **9. Hot Hold (135° F (57°C))**

IN OUT NA NO A. PHF is maintained at 135°F (57°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

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STATUS **10. Time as Public Health Control/ Date Marking**

IN OUT NA NO A. Ready-to-eat PHF held for more than 24 hours is date marked as required (prepared on-site)
IN OUT NA NO B. Discard RTE PHF 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 PHF is date marked as required
IN OUT NA NO D. When time only is used as a public health control, PHF food served within 4 hours as required

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CDC RISK FACTOR-CONTAMINATED EQUIPMENT

PROTECTION FROM CONTAMINATION

STATUS **11. 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
IN OUT NA NO B. Raw animal foods are separated from each other during storage, preparation, holding, and display
IN OUT C. Food is protected from environmental contamination – critical items
IN OUT D. After being served or sold to a consumer, food is not re-served

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STATUS **12. 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

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CDC RISK FACTOR-POOR PERSONAL HYGIENE

PERSONNEL

STATUS **13. Proper, Adequate Handwashing**

IN OUT NO A. Hands are clean and properly washed when and as required

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_____
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STATUS **14. 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

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STATUS **15. Prevention of Contamination From Hands**

IN OUT NA NO A. Employees do not contact exposed, ready-to-eat food with their bare hands. ***(NOTE: In determining the status of this data item, an assessment of alternative methods when otherwise approved is to be made to determine implementation in accordance with the guidelines contained in Annex 3, 2009 Food Code, page 61.)***

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STATUS **16. 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

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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 employees' responsibility to notify management of symptoms and illnesses identified in the Food Code.

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CDC RISK FACTOR - OTHER

FOREIGN SUBSTANCES

STATUS **18. Chemicals**

IN OUT NA A. If used, only approved food or color additives. Sulfites are not applied to fresh fruits and vegetables intended for raw consumption
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

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_____
_____

WAKE COUNTY NORTH CAROLINA

Environmental Services

TEL 919 856 7400
FAX 919 743 4772

Environmental Health & Safety Division
336 Fayetteville Street • Raleigh, NC 27602
www.wakegov.com

May 27, 2010

Mr. Terry Pierce
Director
NC Department of Environment and Natural Resources
Division of Environmental Health
1630 Mail Service Center
Raleigh, NC 27699-1630

Dear Mr. Pierce:

The Wake County Board of Human Services voted to support North Carolina's adoption of the FDA Food Code, with subsequent amendments. The Food Code is based on the latest food science, is supported with public health reasons that relate to each Section, and is updated every four years with a rigorous process involving diverse stakeholders. Therefore, its adoption along with the updated amendments would ensure that North Carolina has the regulatory foundation to protect the public health of our citizens.

We look forward to working with the Division of Environmental Health in implementing the Food Code.

Sincerely,

William L. Stanford, Jr., Chair
Wake County Human Services and
Environmental Services Board