

Tulsa City-County Health Department
Report on the Occurrence of Foodborne Illness
Risk Factors in Healthcare, Schools, Fast Food &
Full Service Restaurants, and Retail Food
Establishment Types
2021

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I. Introduction

Background

The Tulsa City-County Health Department (THD) serves as the primary public health agency to residents in Tulsa County. The mission of THD is to improve the health and well-being of all Tulsa County residents. Food Protection Service (FPS) Program's goal is to prevent foodborne illness likelihood by promoting food safety-related behaviors and practices.

FPS is comprised of 30 employees made up of a Program Manager, 4 supervisors, 20 Environmental Health Specialists (Sanitarians), 1 Data Analyst and 4 Clerical Support Staff. Sanitarians are responsible for routine inspections, complaint investigations, plan reviews, etc. for approximately 4,700 retail food establishments in Tulsa County. Tulsa County food establishments types include hospitals, full service restaurants, fast food restaurants, schools, retail food stores, processors, and long term care facilities that serve the public in addition to residents. FPS program conducted approximately 7,600 inspections last fiscal year.

The State of Oklahoma has adopted the 2013 FDA Food Code. The 2017 FDA Food Code and updates are expected to be adopted by November 2021. THD-FPS derives regulatory authority under Title 63 Oklahoma State Statutes, Contract Agreements with the Oklahoma State Department of Health and local city ordinances.

Purpose

FPS Program has been active with the FDA Voluntary National Retail Food Regulatory Program Standards since its enrollment in 2002. Since that time, THD-FPS has worked on continuous improvement to achieve conformance with program standards.

The Center for Disease Control (CDC) has consistently identified five major risk factors that contribute to foodborne illness. These risk factors include poor personal hygiene, improper holding temperature, contaminated equipment, inadequate cooking and food from an unsafe source. The THD-FPS risk factor study also includes correlation of Active Managerial Control (AMC) or having a certified food protection manager present when measured against how well risk factors are controlled. THD monitors these risk factors through routine inspections and continues to educate retail food establishments on food safety behaviors and practices.

Some of the objectives of this study are to:

- Identify risk factors in need of improvement per establishment type
- Evaluate trends over time to determine risk factor improvement or decline
- Develop intervention strategies to control identified risk factors needing improvement
- Develop strategies internally to improve the THD-FPS Program

Study Design

This study will be used as a baseline to assess CDC risk factor trends going forward. THD elected to use previous jurisdictional data from over a three-year period, July 1, 2017 to June 30, 2020. The current food inspection form (Appendix A) has been in use since 2011. There is a total of 58 compliance data items possible. The first 35 compliance data items represent priority and priority foundation and are directly or indirectly related to risk factors that contribute to food borne illness. The remaining line items are designated as core compliance data items related to general sanitation

& maintenance, equipment design & maintenance, and physical facilities & structures. The food inspection form utilizes the IN, OUT, NA, and NO compliance marking criteria.

Of the 58 data items on the food inspection form, 19 data items have been identified to correspond with one of the five CDC Foodborne Illness Risk Factors including AMC (see Table 1). A full description of the compliance data items can be found in Table 2.

Table 1

CDC Foodborne Illness Risk Factors – Compliance Data Items	# of Data Items
Improper Holding Temperature - 18, 19, 20, 21, 22, 23	6
Inadequate Cooking - 17, 24	2
Contaminated equipment - 11, 32, 33	3
Food from unsafe source - 8, 9, 10	3
Poor Personal Hygiene - 4, 5, 6, 7	4
Active Managerial Control - 2	1

Table 2

Data Items	
Compliance Item No.	Description
2	Person in Charge present, demonstration of knowledge, performs duties
4	Ill workers? Person in Charge & Employee responsibilities: Report symptoms & diagnosis; Restrict/Exclude (removal, retain or adjust)
5	Hands clean, washed, maintained; Hand antiseptics
6	No Bare Hand Contact with Ready-to-Eat foods or alternate methods; Glove limitations
7	Adequate hand wash facilities: supplied, accessible; Toilets properly supplied
8	Food, water, ice: obtained from approved source
9	Food in good condition, safe, unadulterated, segregated
10	Required records (shellstock tags, parasite destruction)
11	Food separated/protected; Proper tasting procedures; Self-serve operations; Single service use when required
17	Cooking time & temperatures; Plant food cooking
18	Reheating procedures for hot holding
19	Cooling time & temp; cooling methods
20	Hot holding temps; received at proper temp
21	Cold holding temps; received at proper temp
22	Date marking and disposition
23	Time as public health control, procedures/records
24	Non-continuous cooking process / partial cook
32	Warewashing; Sanitize at ppm/temp
33	Food contact surfaces of equipment & utensils clean

II. Methodology

Selection of Facilities

All Tulsa County food establishments within the current database were categorized into four industry segments (if applicable): Healthcare, Schools, Restaurants, and Retail Food Stores. Within each industry segment establishment types were distinguished (Table 3). Healthcare is comprised of both hospitals and long-term care establishments that serve residents and public guests. All K-12 schools were included in this study. Restaurants were broken down into fast food and full service. Retail Food Stores were broken down into grocery and convenience. Grocery is defined as an establishment with one or more departments that does not have a gas station directly associated with the establishment. Convenience, on the other hand, is an establishment that sells similar but a more limited selection of grocery items usually with a gasoline service as a primary feature of the establishment.

All establishments are also categorized by risk: high, medium and low. High and medium facilities serve Time/Temperature Control for Safety TCS foods. Low risk establishments primarily serve pre-packaged foods. All low risk establishments were excluded from this study.

Table 3

Industry Segment	Establishment Type
Healthcare	Hospitals
	Long term care
Schools	Kindergarten – 12 th grade
Restaurants	Fast Food
	Full Service
Retail Food Stores	Grocery
	Convenience

Data Collection

All establishments matching one of the four industry segments were used in this study. Food inspection data was retrieved from FPS's current database program and matched with its respective industry segment and establishment type. Only routine, compliance, and complaint inspection data was used.

The data was analyzed by calculating the IN-compliance percentage which is the number of IN compliance observations divided by total IN and OUT observations. THD used this formula to explore the IN-compliance percentage for each compliance data item as well as CDC risk factor. The IN-compliance percentage gives an indication of how well or effective the risk factor is being controlled. The greater the control over a risk factor the more effective an establishment is at food safety management. THD used the following criteria to determine the priority of IN compliance percentage, see Table 4.

Table 4

IN Compliance %	Priority
Greater than 90%	Risk factor is well controlled
90% - 71%	Risk factor needs improvement
70% - 61%	Risk factor is of special concern
Less than 60%	Risk factor is priority

Results

A. Healthcare

Hospitals

This study included 11 hospitals and a total of 78 inspections were completed over the three-year period. There were 10 establishments designated as high risk and 1 medium risk.

Results

Active Managerial Control – Compliance item number 2 was observed OUT of compliance once and associated with the one non-compliant/failing inspection.

Figure 1 displays percent IN-compliance for each compliance item for each CDC risk factor. Compliance items 7, 19, 20, 21, and 22 are in “need of improvement” as they are below 90% - 71% IN-compliance. Compliance item 33 is a priority since it is below 60% IN-compliance.

Figure 1 – Hospitals – Percent IN-Compliance for each Compliance Data Item

Risk Factor	Compliance Item No.	# IN Compliance Observations	# OUT Compliance Observations	% IN Compliance
Active Managerial Control	2	77	1	98.7%
	18	4	0	100.0%
Improper Holding Temperature	19	26	3	89.7%
	20	54	14	79.4%
	21	62	15	80.5%
	22	66	9	88.0%
	23	25	0	100.0%
Inadequate Cooking	17	30	0	100.0%
	24	12	0	100.0%
Contaminated Equipment	11	68	1	98.6%
	32	70	2	97.2%
	33	45	31	59.2%
Food from Unsafe Source	8	78	0	100.0%
	9	78	0	100.0%
	10	2	0	100.0%
Poor Personal Hygiene	4	78	0	100.0%
	5	76	0	100.0%
	6	75	1	98.7%
	7	66	12	84.6%

Total for ALL COMBINED DATA ITEMS	926	77	92.3%
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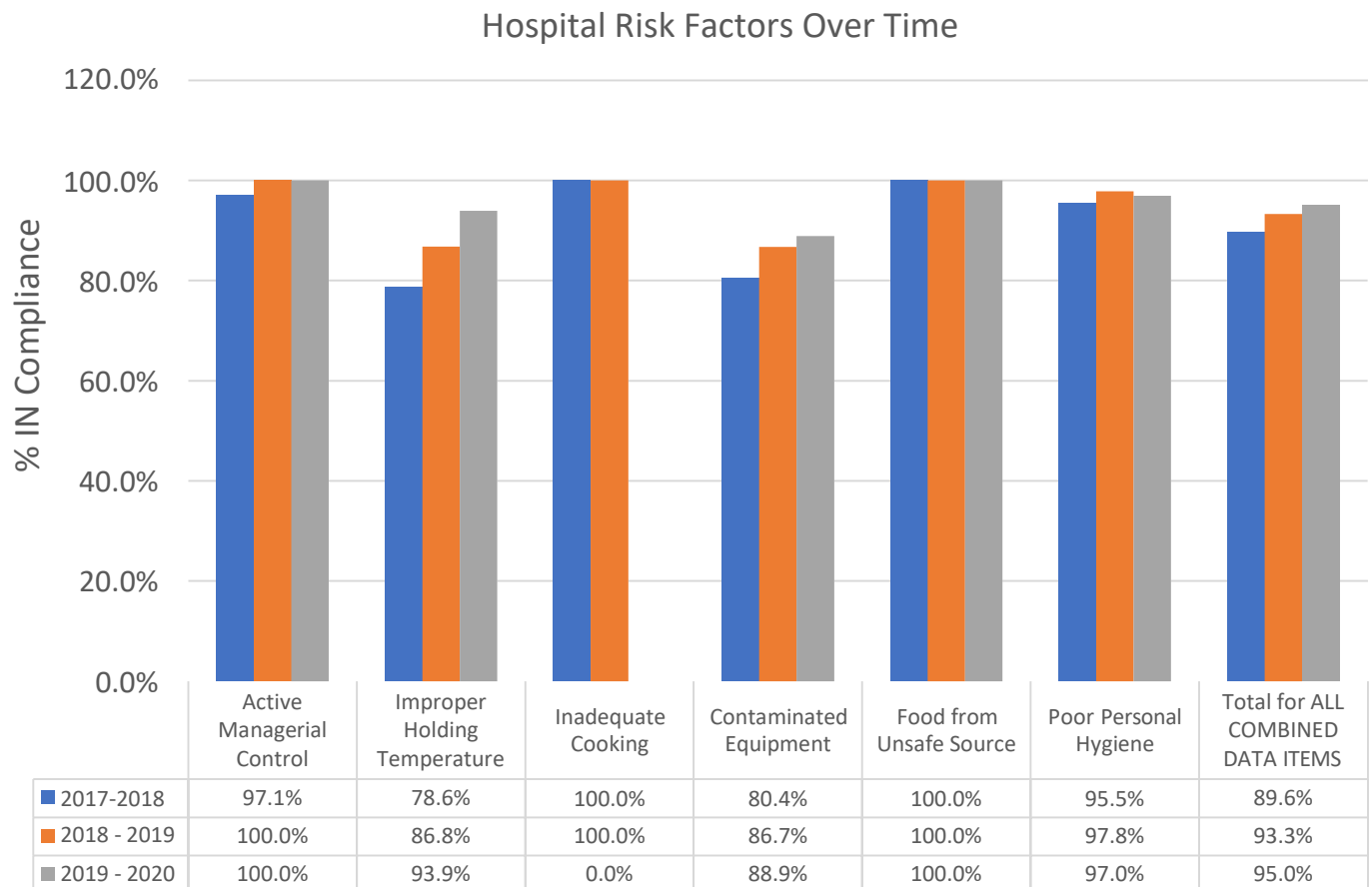
Figure 2 displays healthcare’s percent IN-compliance for each CDC risk factor. The lowest IN-compliance percentages are Improper Holding Temperature (85.3%) and Contaminated Equipment (84.3%).

Figure 2 – Hospitals – Percent IN-Compliance for each Risk Factor

Risk Factor	TOTAL # IN Compliance Observations	TOTAL # OUT Compliance Observations	% IN Compliance
Active Managerial Control	77	1	98.7%
Improper Holding Temperature	237	41	85.3%
Inadequate Cooking	42	0	100.0%
Contaminated Equipment	183	34	84.3%
Food from Unsafe Source	158	0	100.0%
Poor Personal Hygiene	295	13	95.8%

Graph 1 shows hospitals are improving or holding above 90% IN Compliance for all CDC risk factors.

Graph 1 – Healthcare, Hospitals – Risk Factors Over Time



Long-term Care

This study included 14 long-term care establishments and 71 inspections were conducted over a three-year period. There were 5 establishments designated as high risk and 9 medium risk.

Results

Active Managerial Control – Compliance item number 2 was observed OUT of compliance twice and there were zero non-compliant/failing inspections.

Figure 3 below displays percent IN-compliance for each compliance item for each CDC risk factor. Compliance items 21, 22, and 33 are in “need of improvement” as they are below 90% IN compliance.

Figure 3 – Long-term Care – Percent IN-Compliance for each Compliance Data Item

Risk Factor	Compliance Item No.	# IN Compliance Observations	# OUT Compliance Observations	% IN Compliance
Active Managerial Control	2	68	2	97.1%
Improper Holding Temperature	18	3	0	100.0%
	19	21	1	95.5%
	20	48	1	98.0%
	21	58	7	89.2%
	22	44	13	77.2%
	23	6	0	100.0%
Inadequate Cooking	17	20	0	100.0%
	24	4	0	100.0%
Contaminated equipment	11	62	0	100.0%
	32	66	2	97.1%
	33	50	20	71.4%
Food from unsafe source	8	70	0	100.0%
	9	70	0	100.0%
	10	1	0	100.0%
Poor Personal Hygiene	4	70	0	100.0%
	5	67	2	97.1%
	6	66	0	100.0%
	7	63	7	90.0%
Total for ALL COMBINED DATA ITEMS		794	48	94.3%

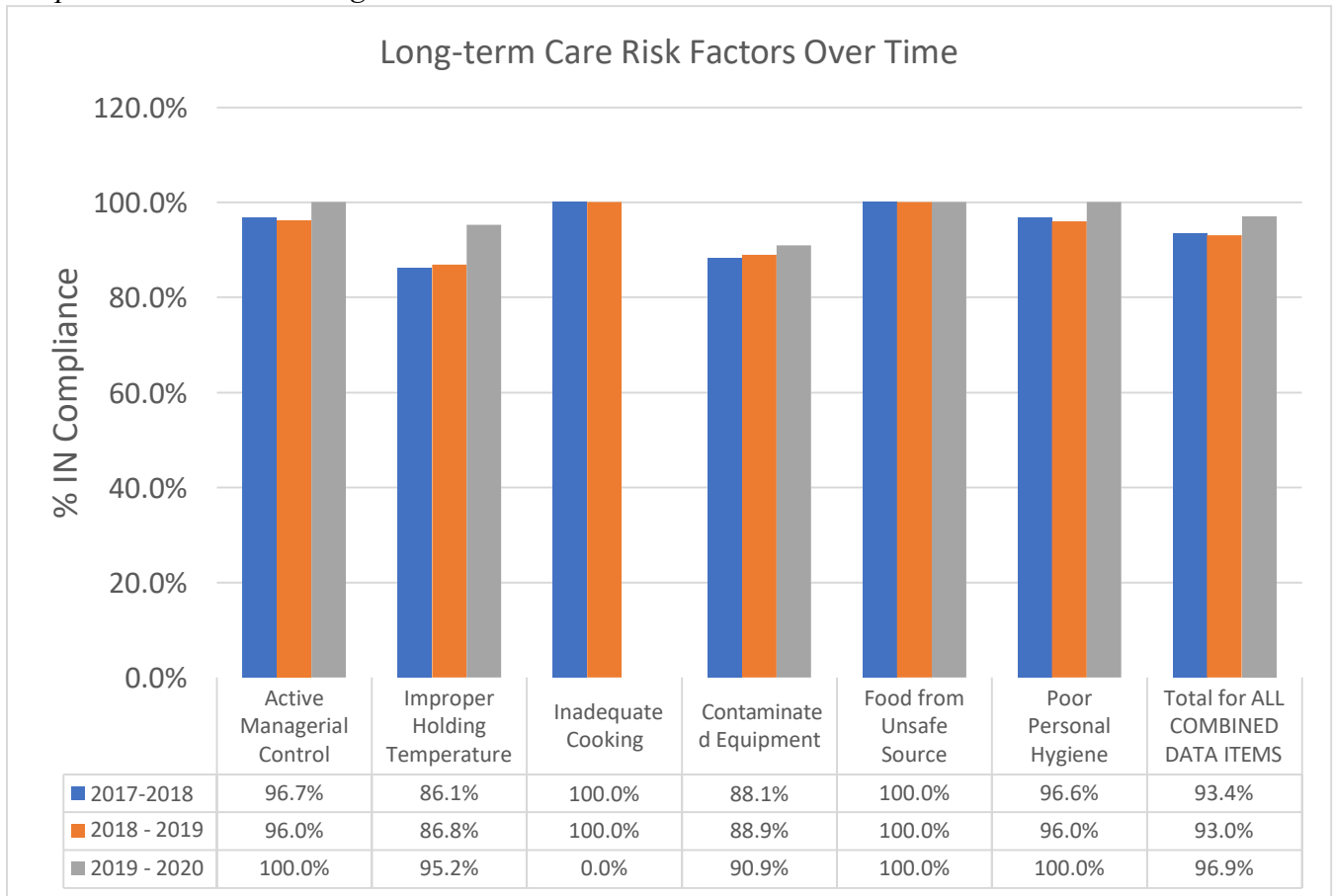
Figure 4 displays long-term care’s percent IN-compliance for each CDC risk factor. The lowest IN-compliance percentages are Improper Holding Temperature (89.1%) and Contaminated Equipment (89.0%).

Figure 4 – Healthcare, Long-term Care – Percent IN-Compliance for each Risk Factor

Risk Factor	TOTAL # IN Compliance Observations	TOTAL # OUT Compliance Observations	% IN Compliance
Active Managerial Control	68	2	97.1%
Improper Holding Temperature	180	22	89.1%
Inadequate Cooking	24	0	100.0%
Contaminated Equipment	178	22	89.0%
Food from Unsafe Source	141	0	100.0%
Poor Personal Hygiene	266	9	96.7%

Graph 2 shows long-term care establishments have improved from the mid-eighties to above 90% IN-compliance or are holding above 90% IN Compliance.

Graph 2 – Healthcare, Long-term Care – Risk Factors Over Time



B. Schools

This study included 232 schools and a total of 1494 inspections were completed over the three-year period. There were 3 establishments designated as high risk and 229 medium risk.

Results

Active Managerial Control – There were 2 non-compliant/failing inspections and compliance item number 2 was marked OUT compliance for both.

Figure 5 below displays percent IN compliance for each compliance item for each CDC risk factor. Most compliance items are over 90% IN compliance indicating schools have control over most compliance items. Compliance item 33 is in “need of improvement” because it is below 90% IN compliance at 87.7%. Figure 6 displays CDC risk factors overall and shows all risk factors are being controlled.

Figure 5 – Schools – Percent IN Compliance for each Compliance Data Item

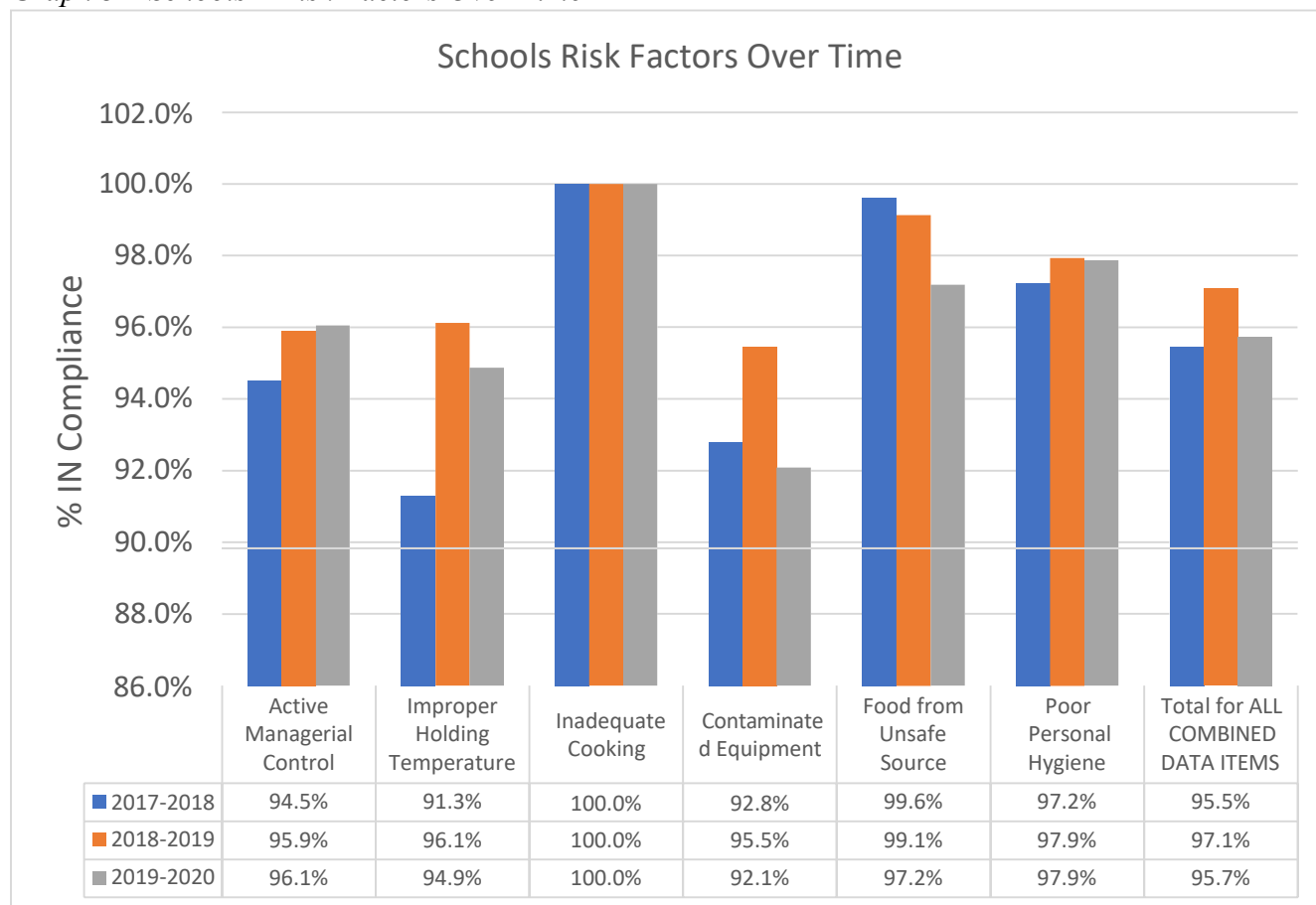
Risk Factor	Compliance Item No.	# IN Compliance Observations	# OUT Compliance Observations	% IN Compliance
Active Managerial Control	2	1210	59	95.4%
	18	154	0	100.0%
Improper Holding Temperature	19	155	5	96.9%
	20	793	39	95.3%
	21	1015	67	93.8%
	22	970	71	93.2%
	23	133	1	99.3%
Inadequate Cooking	17	256	0	100.0%
	24	57	0	100.0%
Contaminated equipment	11	1002	6	99.4%
	32	998	47	95.5%
	33	1087	152	87.7%
Food from unsafe source	8	1271	0	100.0%
	9	1244	26	98.0%
	10	31	0	100.0%
Poor Personal Hygiene	4	1271	0	100.0%
	5	1131	9	99.2%
	6	1055	3	99.7%
	7	1171	100	92.1%
Total for ALL COMBINED DATA ITEMS		15004	585	96.2%

Figure 6 – Schools – Percent IN-Compliance for each Risk Factor

Risk Factor	TOTAL # IN Compliance Observations	TOTAL # OUT Compliance Observations	% IN Compliance
Active Managerial Control	1210	59	95.4%
Improper Holding Temperature	3220	183	94.6%
Inadequate Cooking	313	0	100.0%
Contaminated Equipment	3087	205	93.8%
Food from Unsafe Source	2546	26	99.0%
Poor Personal Hygiene	4628	112	97.6%

Graph 3 shows schools have consistently been above 90% IN-compliance for each risk factor over the last three years.

Graph 3 – Schools – Risk Factors Over Time



C. Restaurants

Fast Food

This study included 1074 fast food restaurants with a total of 5205 inspections completed over the three-year period. There were 210 fast food establishments designated as high risk and 864 medium risk.

Results

Active Managerial Control – There were 68 non-compliant/failing inspections and compliance item number 2 was marked OUT compliance for 65 inspections.

Figure 7 below displays percent IN compliance for each compliance item for each CDC risk factor. Improper Holding Temperature, Contaminated Equipment and Poor Personal Hygiene are below 90% IN compliance with Active Managerial Control also showing below 90% IN Compliance. Data item 33 was the lowest IN compliance percentage at 62.2%. Figure 8 displays CDC risk factor totals. Improper Holding Temperature and Contaminated Equipment are in need of improvement. Poor Personal Hygiene is at 92.8% IN compliance overall.

Figure 7 – Fast Food – Percent IN Compliance for each Compliance Data Item

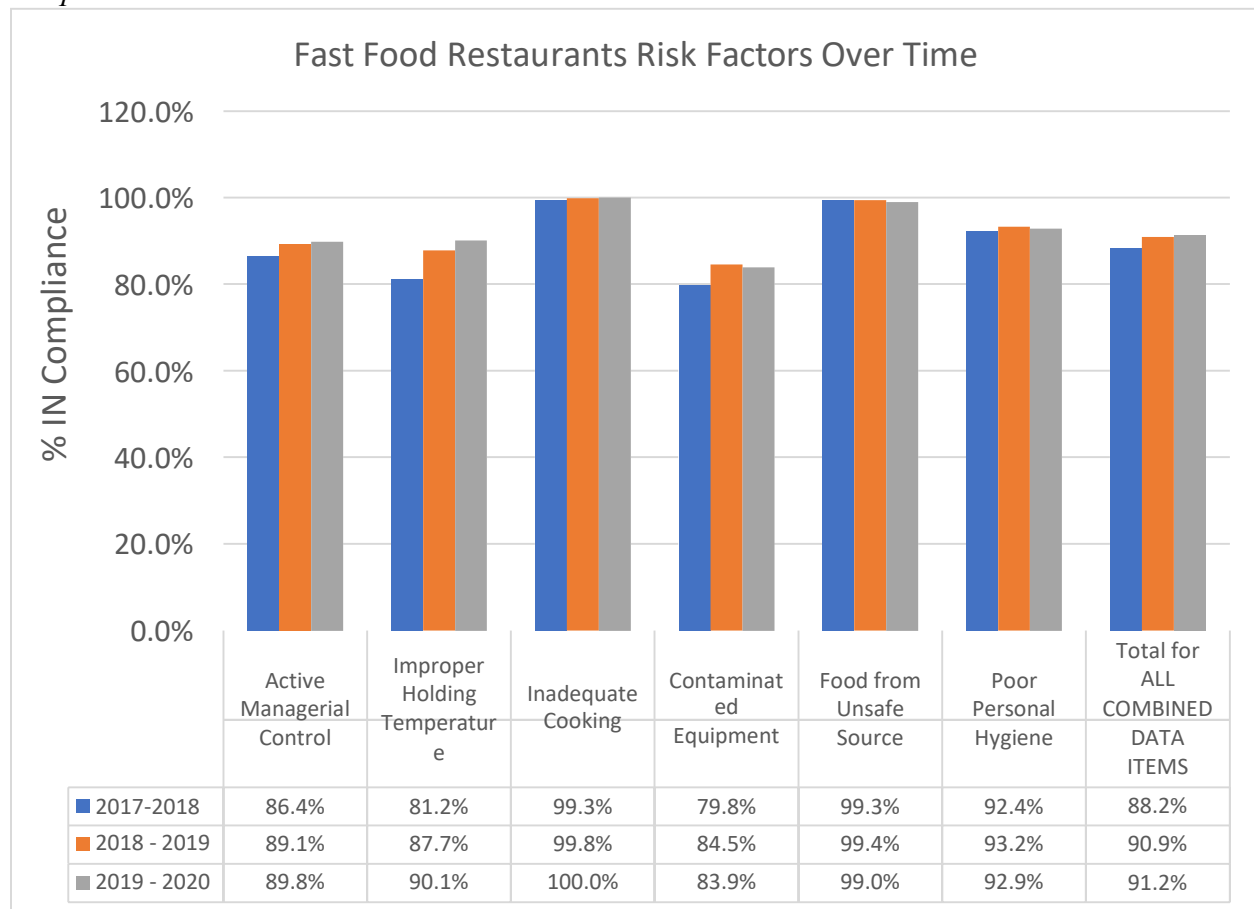
Risk Factor	Compliance Item No.	# IN Compliance Observations	# OUT Compliance Observations	% IN Compliance
Active Managerial Control	2	4581	611	88.2%
Improper Holding Temperature	18	502	12	97.7%
	19	868	103	89.4%
	20	3281	271	92.4%
	21	4222	716	85.5%
	22	3995	829	82.8%
Inadequate Cooking	23	1229	198	86.1%
	17	1381	4	99.7%
Contaminated equipment	24	221	1	99.5%
	11	4318	115	97.4%
	32	3948	338	92.1%
Food from unsafe source	33	3226	1961	62.2%
	8	5195	4	99.9%
	9	5128	71	98.6%
Poor Personal Hygiene	10	166	3	98.2%
	4	5194	2	100.0%
	5	4701	263	94.7%
	6	4715	98	98.0%
Total for ALL COMBINED DATA ITEMS	7	4112	1086	79.1%
		56871	5600	91.0%

Figure 8 – Fast Food – Percent IN-Compliance for each Risk Factor

Risk Factor	TOTAL # IN Compliance Observations	TOTAL # OUT Compliance Observations	% IN Compliance
Active Managerial Control	4581	611	88.2%
Improper Holding Temperature	14097	2129	86.9%
Inadequate Cooking	1602	5	99.7%
Contaminated Equipment	11492	2414	82.6%
Food from Unsafe Source	10489	78	99.3%
Poor Personal Hygiene	18722	1449	92.8%

Graph 4 shows fast food restaurants have held steady or made some improvement.

Graph 4 – Fast Food – Risk Factors Over Time



Full Service

This study included 783 full service restaurants with a total of 5014 inspections complete over the three-year period. There were 636 establishments designated as high risk and 147 medium risk.

Results

Active Managerial Control – There were 127 non-compliant/failing inspections and compliance item number 2 was marked OUT compliance for 118 inspections.

Figure 9 below displays percent IN compliance for each compliance item for each CDC risk factor. Data items 7, 19, 21, 22, 23, and 32 are in need of improvement and data item 33 is of priority since it is below 60% IN compliance at 49.2%. Figure 10 displays CDC risk factors in total, Improper Holding Temperature, Contaminated Equipment, and Poor Personal Hygiene are all in the “needs improvement” range.

Figure 9 – Full Service – Percent IN Compliance for each Compliance Data Item

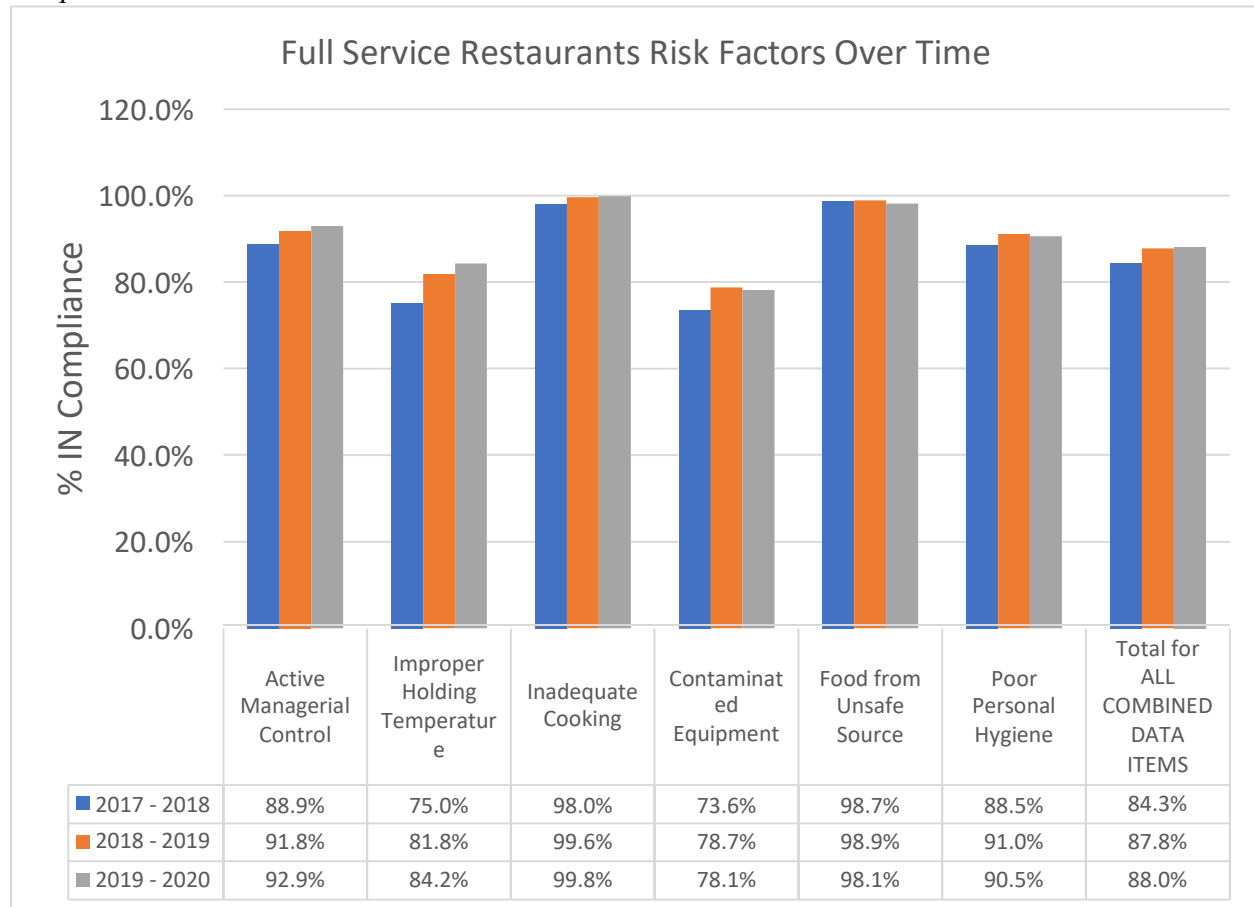
Risk Factor	Compliance Item No.	# IN Compliance Observations	# OUT Compliance Observations	% IN Compliance
Active Managerial Control	2	4551	457	90.9%
Improper Holding Temperature	18	780	25	96.9%
	19	1522	278	84.6%
	20	3605	353	91.1%
	21	3732	1074	77.7%
	22	3382	1386	70.9%
Inadequate Cooking	23	768	161	82.7%
	17	2107	10	99.5%
Contaminated equipment	24	367	14	96.3%
	11	4100	142	96.7%
	32	4068	573	87.7%
Food from unsafe source	33	2456	2538	49.2%
	8	5006	5	99.9%
	9	4897	111	97.8%
Poor Personal Hygiene	10	346	26	93.0%
	4	5007	0	100.0%
	5	4530	302	93.8%
	6	4459	227	95.2%
	7	3570	1439	71.3%
Total for ALL COMBINED DATA ITEMS		56871	55683	89.9%

Figure 10 – Full Service – Percent IN-Compliance for each Risk Factor

Risk Factor	TOTAL # IN Compliance Observations	TOTAL # OUT Compliance Observations	% IN Compliance
Active Managerial Control	4551	457	90.9%
Improper Holding Temperature	13789	3277	80.8%
Inadequate Cooking	2474	24	99.0%
Contaminated Equipment	10624	3253	76.6%
Food from Unsafe Source	10249	142	98.6%
Poor Personal Hygiene	17566	1968	89.9%

Graph 5 shows full service restaurants have made improvement for all combined data items and 4 of the five risk factors.

Graph 5 – Full Service – Risk Factors Over Time



C. Retail Food

Grocery

This study included 110 grocery establishments with a total of 776 inspections completed over the three-year period. There were 66 grocery establishments designated as high risk and 44 designated as medium risk.

Results

Active Managerial Control – There were 9 non-compliant/failing inspections and compliance item number 2 was marked OUT compliance for 7 inspections.

Figure 11 below displays percent IN compliance for each compliance item for each CDC risk factor. Data items 7, 9, 19-23 are in need of improvement and data item 33 is a priority at 55.1%. Figure 12 shows the top two CDC risk factors are Improper Holding Temperature and Contaminated Equipment.

Figure 11 – Grocery – Percent IN Compliance for each Compliance Data Item

Risk Factor	Compliance Item No.	# IN Compliance Observations	# OUT Compliance Observations	% IN Compliance
Active Managerial Control	2	704	72	90.7%
Improper Holding Temperature	18	55	2	96.5%
	19	112	18	86.2%
	20	466	64	87.9%
	21	622	132	82.5%
	22	563	160	77.9%
Inadequate Cooking	23	180	41	81.4%
	17	172	1	99.4%
Contaminated equipment	24	30	0	100.0%
	11	598	24	96.1%
Food from unsafe source	32	593	56	91.4%
	33	425	347	55.1%
	8	773	3	99.6%
Poor Personal Hygiene	9	661	115	85.2%
	10	114	9	92.7%
Total for ALL COMBINED DATA ITEMS	4	775	0	100.0%
	5	734	17	97.7%
	6	716	5	99.3%
	7	557	219	71.8%
Total for ALL COMBINED DATA ITEMS		8293	1066	88.6%

Figure 12 – Grocery – Percent IN-Compliance for each Risk Factor

Risk Factor	TOTAL # IN Compliance Observations	TOTAL # OUT Compliance Observations	% IN Compliance
Active Managerial Control	704	72	90.7%
Improper Holding Temperature	1998	417	82.7%
Inadequate Cooking	202	1	99.5%
Contaminated Equipment	1616	427	79.1%
Food from Unsafe Source	1548	127	92.4%
Poor Personal Hygiene	2782	241	92.0%

Graph 6 shows grocery establishments have made good improvement and maintained risk factors already well controlled.

Graph 6 – Grocery – Risk Factors Over Time



Convenience

This study included 783 convenience retail food stores with a total of 5014 inspections complete over the three-year period. There were 636 convenience establishments designated as high risk and 147 designated as medium risk.

Results

Active Managerial Control – There were 68 non-compliant/failing inspections and compliance item number 2 was marked OUT compliance for 65 inspections.

Figure 13 below displays percent IN compliance for each compliance item for each CDC risk factor. Data items 7, 19, 21-23, and 32 are in need of improvement and data item 33 at 49.2% is a priority. Figure 14 displays the top two CDC risk factors are Improper Holding Temperature and Contaminated Equipment.

Figure 13 – Convenience – Percent IN Compliance for each Compliance Data Item

Risk Factor	Compliance Item No.	# IN Compliance Observations	# OUT Compliance Observations	% IN Compliance
Active Managerial Control	2	4551	457	90.9%
Improper Holding Temperature	18	780	25	96.9%
	19	1522	278	84.6%
	20	3605	353	91.1%
	21	3732	1074	77.7%
	22	3382	1386	70.9%
Inadequate Cooking	23	768	161	82.7%
	17	2107	10	99.5%
Contaminated equipment	24	367	14	96.3%
	11	4100	142	96.7%
	32	4068	573	87.7%
Food from unsafe source	33	2456	2538	49.2%
	8	5006	5	99.9%
	9	4897	111	97.8%
Poor Personal Hygiene	10	346	26	93.0%
	4	5007	0	100.0%
	5	4530	302	93.8%
	6	4459	227	95.2%
	7	3570	1439	71.3%
Total for ALL COMBINED DATA ITEMS		56871	55683	89.9%

Figure 14 – Convenience – Percent IN-Compliance for each Risk Factor

Risk Factor	TOTAL # IN Compliance Observations	TOTAL # OUT Compliance Observations	% IN Compliance
Active Managerial Control	4551	457	90.9%
Improper Holding Temperature	13789	3277	80.8%
Inadequate Cooking	2474	24	99.0%
Contaminated Equipment	10624	3253	76.6%
Food from Unsafe Source	10249	142	98.6%
Poor Personal Hygiene	17566	1968	89.9%

Graph 7 shows convenience retail food stores have overall improved overtime.

Graph 7 – Convenience – Risk Factors Over Time



Discussion and Recommendations

The purpose of this study is to determine how well food establishment types in Tulsa County are managing CDC risk factors for food borne illness. Another purpose of this study is to gain insight on which CDC risk factors are in “need of improvement” or “priority”. As a result, FPS will tailor educational materials to address the top two CDC risk factors with the greatest need. FPS also plans to provide additional training to sanitarians to increase the use of resources available and educate further.

In Tulsa County the top two CDC Risk Factors in need of improvement for all establishment types are Improper Holding Temperature and Contaminated Equipment. The following recommendations will focus on the top two CDC risk factors and subsequent studies will address other risk factors as needed. Improper Holding Temperature showed an IN compliance percentage between 71% - 89% for all establishment types. This percentage range falls in the “needs improvement” priority category. Here are some recommendations Food Protection Services will present to food management and staff to improve Improper Holding Temperature issues:

- Develop and distribute an Improper Holding Temperature infographic.** The infographic will present a high statistical overview of Improper Holding Temperature as seen in this study. It will also provide information on what temperatures are *safe* and which fall into the *danger zone* or can lead to increased bacterial growth and therefore food borne illness. Also, the infographic will encourage the regular use of thermometers to ensure

proper temperature. The use of an infographic not only educates but also can serve as a reference when posted in view of employees at appropriate stations. All establishments with one or more data items 18-23 OUT of compliance (Improper Holding Temperature) will receive an infographic. This document will also be available on the Tulsa City-County Health Department's website and featured in the "Food Focus" newsletter. It is the responsibility and ultimately up to management staff on how the materials are used. To get the full benefit from the material repetition and reinforcement are a good way to increase positive habits and ensure proper temperatures are maintained.

- **Intervention monitoring forms** are another tool in managing CDC risk factors for food borne illness. These forms are available in multiple languages to address issues such as: cold holding, cooling, reheating, hot holding, etc. Typically, these forms are given to food establishments to better monitor issues seen during an inspection or upon request. Intervention monitoring forms are accessible to all and can be provided as a printout or digitally to establishments. The forms are accessible on the Tulsa Health Department's website: www.tulsa-health.org/food-safety/food-service-industry/forms-procedures. Internal training will be given to sanitarians to increase the use of forms available and to use these forms to encourage an open dialogue with food establishments.
- **Establishment Active Managerial Control Self Inspection Form** is a document recently developed by THD's Food Protection Services (Appendix B). The self inspection form includes the latest version of the Food Inspection Data Collection form, temperature observations, observations and corrective actions and, lastly, the violation data items with the associated Oklahoma food code subchapters and paragraphs. The Establishment Active Managerial Control Self Inspection form gives operators and management a comparable form to perform a mock inspection at their establishments. The goal is to increase awareness of the violation data items sanitarians look for and how they relate to food borne illness. The Establishment Active Managerial Control Self Inspection form will be given out to all high and medium risk establishments during a routine visit in the second quarter of the fiscal year. The 2nd visit is typically an Active Managerial Control consultative visit with emphasis on risk factors identified recently.

Contaminated Equipment showed an IN compliance percentage between 74% - 94% for all establishment types. It is worth noting there is one data item that consistently had the lowest IN compliance percentages of all data items, data item 33. Data item 33 is concerned with food contact surfaces of equipment & utensils clean. This data item's IN compliance percentages ranged from approximately 49%-62%. Schools (87.7%) and long term care establishments (71.4%) had higher IN compliance percentages when compared to all other establishment types. Recommendations to address Contaminated Equipment include:

- **Articles in Food Focus.** Food Focus is a bi-yearly newsletter produced by THD-FPS and sent to all food establishments. The newsletter is an opportunity to communicate with the public and all food establishments relevant food industry issues. Showing the results of the risk factor study and providing some educational spotlights in the newsletter can raise awareness about the CDC risk factor Contaminated Equipment issue.

- **On-site Corrective Actions** will be emphasized when data item 33 is marked OUT compliance. Developing and implementing policies that require on-site corrective actions appropriate to the type of violation will increase consistency among sanitarians and in turn food establishments.
- **Internal Training** through “Where to Mark It” training topic discussions during monthly team meetings. Data item 33 will be reviewed with violation focus areas on equipment and supplies cleaned between uses.
- **Risk Factor Profile** is a recently developed tool highlighting CDC risk factors using past inspection data for either several or individual establishments. The risk factor profile gives an overview of all five CDC risk factors for the last three to four years, violation comments examples, violation frequency, and several visual statistics. The goal of the profile is to be able to tangibly show where the establishment(s) are concerning the real risk they are exposing their customers to CDC risk factors for food borne illness. See Appendix C.

APPENDIX A

Consumer Protection Division

Oklahoma State Department of Health
 1000 NE 10th Street, Oklahoma City OK 73117-1299
 Telephone (405) 271-5243 Fax (405) 271-5286
 Website: www.ok.gov/health

Food Inspection Report State Code OAC 310:257

Inspection Date	Inspection Time	Mgr. Cert	County #	Establishment#	License Expiration	Type	Class	Priority
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Purpose of Inspection: 1 – Routine 2 – Compliance 3 – Issue License Application 4 – Complaint 5 – Other 6 – Out of Business 7 – Follow-Up Activity 8 – Reserved

Number of Repeat Risk Factor/Intervention Violations _____ **Follow-up:** _____ **On or Before Date:** _____

Establishment _____ **Owner** _____

Physical Address _____ **City** _____ **Zip Code** _____ **Phone #** _____
Cell Phone # _____

PRIORITY & PRIORITY FOUNDATION VIOLATIONS

Priority items are proven measures that are directly linked to the elimination, prevention or reduction of hazards associated with foodborne illness.
 Priority Foundation items incorporate specific actions, equipment or procedures to control risk factors that contribute to foodborne illness.
 NOTE: Items 1-35 Require Immediate Action or by date noted on Pg 2 - Not to exceed 10 days from date of inspection.

IN=in compliance **OT**=not in compliance **NO**=not observed **NA**=not applicable **CDI**=corrected on-site during inspection **R**=repeat violation

• CDC Risk Factors & Food Code Interventions					CDI	R	• CDC Risk Factors & Food Code Interventions					CDI	R		
I	O	N	N	A			I	O	N	N	A				
Supervision/Licenses															
1							17								
2							18								
3							19								
Employee Health															
4							20								
Control of Hands as a Vehicle of Contamination															
5							21								
6							22								
7							23								
Approved Source															
8							24								
9							25								
10							26								
Protection from Contamination															
11							27								
12							28								
13							Chemicals								
							29								
14															
							30								
15							Warewashing, Food Contact Surfaces								
							31								
16															
							32								
							33								
							Plumbing								
							34								
							35								

CORE VIOLATIONS

Core items relate to general sanitation & maintenance, equipment design & maintenance, and physical facilities & structures.

Food Temperature Controls					Physical Facilities				
36					48				
37					49				
Food Identification									
38					50				
Prevention of Food Contamination									
39					51				
40					52				
41					53				
42					54				
Proper Use of Utensils									
43					55				
44					56				
Utensils, Equipment and Vending									
45					57				
46					58				
47									

Supervision & Licenses (Priority/Priority Foundation)					
1	15-12; 15-21; 17-2c3 & d2; 17-3b&d, 17-4c&e; 17-5c	Valid License to Operate;non-transferable; Mobile pushcarts: Licensed Commissary; Mobile F. S. E. location; visible license; Mobile F.S.E.-Commissary Licenses	3	5-53,1; 5-64a, b4, c, & d2, C-E; 5-53,2; 5-63; 5-64b1, 2, 3, 5, 6; 5-64d1 & 2A, F, G, & H; 5-64d, 3 & 4; 5-64e2, 3, & 4; 7-35b; 15-4; 15-5,2; 15-9	Treat juice (HACCP); Reduced Oxygen Packaging Criteria; Treating juice (warning label); Molluscan Shellfish Tanks; Conformance w/ approved procedures; ROP without a variance; Molluscan Shellfish Tanks Req's; Variance; Contents, Documentation, justification
2	3-1; 3-2; 3-3	Assignment (PIC present); Demonstration (PIC Knowledge demo); Person in charge (PIC duties)			
Employee Health (Priority/Priority Foundation)					
4	3-4; 3-5; 3-6	Ill Workers-PIC & EMP Responsibility to report Exclusions & Restrictions, Remove adjust, retain	4	3-4c & f	PIC & EMP reporting
Control of Hands as a Vehicle of Contamination (Priority/Priority Foundation)					
5	3-9; 3-10; 3-12; 3-13; 3-14; 3-15	Clean hands and arms; how and when to wash; Prevent contamination from hands (wash); Where to Wash; Hand Sanitizers; nails trimmed no polish, gloves good repair	7	9-14a; 9-18a; 9-23; 9-26; 11-24; 11-25; 11-30	Handwashing Facility, installation; water at 100°F ; Numbers & Capacities, Location & Placement, Use; maintained, no other purpose; Cleanser availability; Hand drying provision; toilet paper available at toilets
6	5-21b; 5-34a; 5-21c	No BHC w/ RTE; alt methods; Glove Limitation Minimize bare hand contact w/ Non-RTE food			
Approved Source (Priority/Priority Foundation)					
8	5-2a,b; 5-3; 5-4; 5-5; 5-6; 5-7a; 5-8a; 5-11; 5-12; 5-14; 5-18a2; 5-28; 9-1; 9-3; 9-4; 9-5; 5-2c-e; 5-18a1; 9-6	Approved source, home prepared prohibited Food-Hermetically sealed; Milk & Milk Products, Fish, Molluscan Shellfish; Wild Mushrooms,; Game Animals, Eggs; Eggs and Milk Products, Pasteurized, Ice; Juice Treated; Ice Used as Exterior Coolant, Prohibited as Ingredient; Water; Approved system-Bottled drinking water; Quality, standards; Non-drinking water; Food Labeling; Juice treated –HACCP system; Sampling-non-community H ₂ O sampled	12	5-44a; 5-70; 11-38	Disposition of Returns; Previously Served; Discarding contaminated food
			13	11-21; 3-21a; 11-54a	Private homes and living or sleeping quarters use prohibition; Animals; employee may not touch; no live animals; Prohibiting animals (limitations)
			14	11-44	Sinks not contaminated with cleaning equip
9	5-1; 5-13	Safe, Unadulterated and Honestly Presented Package Integrity; Separate Distressed Products	15	7-1; 7-3; 7-4a; 7-5; 7-7; 7-12 1A-2A; 7-14; 7-28,5; 7-35a; 7-36; 7-15; 7-16 a-1 9-31,1; 9-37,1	Food Equipment Char., safe; Lead:China/crystal; Copper; Galvanized; Lead-Use: Pewter alloys: Singleuse service articles-safe; No glass thermometer; Dispensing Equip. for TSC Foods; Molluscan shellfish display tanks-indentification; Vending machine-automatic shutoff; Materials, Approved-(mobile water tank materials safe) Food contact surfaces, CIP equipment
10	5-49a; 5-15a; 5-16a; 5-20; 5-50a & c	Parasite destruction-fish freezing requirements Shucked Shellfish, Packaging and Identification; Shellstock-proper labels; 90 day label; frozen records/letter from supplier			
11	5-22; 5-23a,1&2; 5-30; 5-41; 5-43a; 7-79; 5-43b&c; 7-55	Food Contact w/ Equip. & Utensil; Food display: protect self-serve from contamination; Single-service/Single-use; Articles; Required use Self Service operations; customer self service	16	11-50 1-4	Controlling Pests
Time/Temperature Control for Safety (TCS) (Priority/Priority Foundation)					
17	5-46a 1-3 & b2; 5-48	Raw Animal Food cook temp; Plant food cooking	23	5-62b1,3,4 & c1,4,5; 5-62a, b2, c2,c3	Time as a Public Health Control, mark, temp, discard; RTE, Time Control/Safety Proc: Labeling, date marking
18	5-52 a-d	Re-heating for hot holding			
19	5-57; 5-58a	Cooling time-temperature parameters; Cooling Methods	24	5-48.1, 1-5; 5-48.1	Non-continuous cook of raw animal foods Written Procedures for above
20	5-9; 5-59 a	Hot Hold Temps			
21	5-9 a,b,c; 5-59 a,b; 5-9 e & f	Cold Hold Temps; Receiving TCS 41° or below, Frozen Food: Shipped & Received, no temp abuse	25	7-50; 17-2d4	Adequate equipment to maintain food temps
22	5-61; 5-60	RTE discarded after expiration; no date; RTEDate Marking-41° for 7 days; options	26	7-23; 7-24; 7-37e; 7-56; 7-78b	Thermometers: Food; Ambient Air & Water Accurate Thermometers: thin tip: Good Repair, Calibrated
Consumer Advisory: Highly Susceptible Population (Priority/Priority Foundation)					
27	5-46d2; 5-67b5; 5-69	Children's menu: raw animal food Allergens; Consumer adv. Discloserer/Reminder	28	5-25; 5-71	Pasteurized Foods: Prohibited Foods ; Prohibited Reservice
Chemicals (Priority/Priority Foundation)					
29	5-10; 5-26	Additives; Use approved; Protection from un-approved	30	13-1; 13-2; 13-4a; 13-5,3; 13-15a; 13-17	Onsite generation of chemicals, toxics & labels; Manufacturer Label; Common Name; Restrictions & Use; Application by Certified Operator; Restriction and storage of employee medicines; First aid supply storage
30	13-3; 13-5 1&2; 13-6; 13-7; 13-8a; 13-9; 13-10; 13-11; 13-12; 13-13; 13-14a; 13-15b; 13-16; 13-17,2; 13-19	Toxic:Stored separate; Proper use; Toxic:Restricted Container; Sanitizers, Wash Agents, Drying Agents, Lubricants, Pesticides, Rodent Bait Stations;Tracking Powders, Employee Meds-Labeled, Stored; Refrig. Meds; First Aid; Employee items separation			
Warewashing (WW), Food Contact Surfaces (Priority/Priority Foundation)					
31	7-40; 7-41; 7-42; 7-51, a&b; 7-58; 7-68; 7-77	WW, machine temps measured; Manual Equip; Auto Dispense Detergent; Alarms; 3-Compartment sink-Adequate-Test kits; Cleaning Agent Required; Chem. Sanitizer test	32	7-72; 7-75; 7-95; 7-70; 7-71; 7-73a	Sanitization: Hot Water, Chemical, Pressure; Wash Solution:Temp Manual and Mech.; Hot Water Sanitization Temp: mechanical
			33	7-83a,c; 7-94; 7-82a	Food contact surfaces-Clean & Sanitize Food contact surfaces-Clean, Sight, Touch
Plumbing (Priority/Priority Foundation)					
34	17-1; 9-8; 9-9; 9-10; 9-11	Sink construction; contamination of utensils by hand washing; Water delivery; Pressure; Capacity of hot & cold; Alternate water supply; mobile water requirements	35	9-2; 9-12; 9-13a; 9-15; 9-16; 9-21; 9-27a; 9-29; 9-30,1; 9-38; 9-41; 9-44a; 9-47a; 9-49; 9-52; 9-27b; 9-28; 9-50	Backflow Prevention Sewage conveying: Approv. Disposal System Approved delivery sys: indentified, serviced Commissary & Servicing Area Requirement; Mobile wastes

Establishment Active Managerial Control Self Inspection Form

Inspection Date:	Inspection Time:
------------------	------------------

Establishment Name:

Physical Address	City	Zip	Phone #
			Cell Phone #

PRIORITY & PRIORITY FOUNDATION VIOLATIONS

Priority items are proven measures that are directly linked to the elimination, prevention or reduction of hazards associated with foodborne illness.

Priority Foundation items incorporate specific actions, equipment or procedures to control risk factors that contribute to foodborne illness.

NOTE: Items 1-35 Require Immediate Action or by date noted on Pg 2 ·Not to exceed 10 days from date of inspection.

IN=in compliance OUT=not in compliance NO=not observed NA=not applicable CDI=corrected on-site during inspection

● CDC Risk Factors & Food Code Interventions					CDI	● CDC Risk Factors & Food Code Interventions					CDI
I	N	O	T	N	A	I	N	O	T	N	A
Supervision/Licenses						Time/Temperature Control for Safety (TCS)					
1						17					
Valid license to operate; non-transferable						Cooking time & temperatures; Plant food cooking					
2	•					18	•				
PIC present, demonstration of knowledge, performs duties						Reheating procedures for hot holding					
3						19					
Special processes (Variance, ROP, shellfish tanks, HACCP)						Cooling time & temp; cooling methods					
Employee Health						Consumer Advisory, Highly Susceptible Populations					
4	•					20					
Ill workers-PIC & EMP responsibilities: Report symptoms & diagnosis; Restrict/Exclude (removal, retain, or adjust)						Hot holding temps; received at proper temp					
Control of Hands as a Vehicle of Contamination						Chemicals					
5	•					21					
Hands clean, washed maintained; Hand antiseptics						Food additives; approved, properly used					
6	•					22					
No Bare Hand Contact with Ready-to-Eat foods Or alternate methods; Glove limitations						Toxic substances properly identified, stored, used					
7						23	•				
Adequate hand wash facilities: supplied, accessible; Toilets properly supplied						Warewashing, Food Contact Surfaces					
Approved Source						Plumbing					
8	•					24	•				
Food, water, ice: obtained from approved source						Water: adequate pressure, sufficient capacity					
9	•					25					
Food in good condition, safe, unadulterated, segregated						Plumbing sewage system: design, approved, installed					
10	•					26					
Required records (shellstock tags, parasite destruction)						Cross-connection prohibited, air gaps, disposal					
Protection from Contamination						CORE VIOLATIONS					
11	•					Core items relate to general sanitation & maintenance, equipment design & maintenance, and physical facilities & structures					
Food separated/protected; Proper tasting procedures; Self-serve operations; Single service use when required						Food Temperature Controls					
12						36					
Disposition of returns, previously served, Reconditioned, unsafe food						Approved thaw methods; Active cool containers stored properly					
13						37					
Prohibited animals; Prohibited food operation locations						Thermometers provided, accurate, conspicuous					
14						Food Identification					
Sinks used for intended purposes						Food properly labeled, original container, honestly presented					
15						Prevention of Food Contamination					
Food equipment: improper use, operation (Materials design)						Contamination prevented during food preparation, storage & display; Washing fruits/vegetables					
16						Proper Use of Utensils					
Insects, rodents, & other pests controlled						In-use utensils proper storage, cleaning frequency; Utensils equip & linens: properly stored, dried, handled; Linens clean					

● CDC Risk Factors & Food Code Interventions					CDI	● CDC Risk Factors & Food Code Interventions					CDI
I	N	O	T	N	A	I	N	O	T	N	A
Physical Facilities						Utensils, Equipment & Vending					
48						43					
Plumbing sys: maintained, backflow device installed, inspected						Single-use, single-service articles: properly stored, used					
49						44					
Toilet facilities: accessible, properly constructed, cleaned Self closures						Food & non-food contact surfaces cleanable, design					
50						45					
Break/locker areas: used, provided, maintained; Living areas separated; Laundry facilities						Manual/Mechanical warewashing facilities: maintained, operated; Pressure gauges, data plates; Use limitation, pre-cleaning					
51						46					
Hand wash sinks: designed, clean, used; Proper signage						Non-food contact surfaces clean; Cleaning frequency					
52						47					
Floors, walls, ceilings (premises): clean, free of litter Removal of pests											
53											
Floors, walls, ceilings (physical facilities): design maintained, good repair; Outer openings protected											
54											
Service Sinks; Maintenance & cleaning tools: use, storage											
55											
Outdoor areas: constructed, maintained clean											
56											
Garbage/refuse: properly disposed, fac constr, maintained											
57											
Ventilation: installed, maintained; Lighting: adequate, shielded											
58											
Other											

Supervision & Licenses (Priority/Priority Foundation)	
1	15-12; 15-21; 17-2c3 & d2; 17-3b&d 17-4c&e; 17-5c
2	3-1 ;-3-2; 3-3
3	5-53, 1; 5-64a, b4, c, & d2, C-E; 5-53,2; 5-63; 5-64b1, 2, 3, 5, 6; 5-64d1 & 2A, F, G, & H; 5-64d, 3 & 4; 5-64e2, 3, & 4; 7-35b; 15-4; 15-5,2; 15-9
Employee Health (Priority/Priority Foundation)	
4	3-4; 3-5; 3-6 - 3-4c & f
5	3,9; 3-10; J-12; 3-13; 3-14; 3-15
6	5-21 b; 5-34a; 5-21 c
7	9-14a; 9-188;9-23; 9-26; 11-24; 11-25; 11-30
Approved Source (Priority/Priority Foundation)	
8	5-2a,b; 5-3; 5-4; 5-5; 5-6; 5-7a; 5-8a; 5-11; 5-12; 5-14; 5-18a2; 5-28; 9-1; 9-3; 9-4; 9-5; 5-2c-e; 5-18a1; 9-6
9	5-1; 5-13
10	5-49a; 5-15a; 5-16a; 5-20; 5-50a & C
11	5-22; 5-23a,1&2; 5-30; 5-41; 43a; 7-79; 5-43b&c; 7-55
12	5-44a; 5-70; 11-38
13	11-21; 3-21a; 11-54a
14	11-44
15	7-1; 7-3; 7-4a; 7-5; 7-7; 7-12 1A-2A; 7-14; 7-28,5; 7-35a; 7-36; 7-15; 7-16 a-1 9-31, 1; 9-37,1
16	11-50 1-4
Time/Temperature Control for Safety (TCS) (Priority/Priority Foundation)	
17	5-46a 1-3 & b2; 5-48
18	5-52 a-d
19	5-57; 5-58a
20	5-9; 5-59 a
21	5-9 a,b,c; 5-59 a,b; 5-9 e & f
22	61; 5-60
23	5-62b1 ,3,4 & c1 ,4,5; 5-62a, b2, c2,c3
24	5-48.1, 1-5; 5-48.1
25	7-50; 17-2d4
26	7-23; 7-24; 7-37e; 7-56; 7-78b
Consumer Advisory: Highly Susceptible Population (Priority/Priority Foundation)	
27	5-46d2;c5-67b5 ;5-69
28	5-25; 5-71
Chemicals (Priority/Priority Foundation)	
29	5-10; 5-26
30	13-3; 13-51&2; 13-6; 13-7; 13-8a; 13-9; 13-10; 13-11; 13-12; 13-13; 13-14a; 13-15b; 13-16; 13-17,2; 13-19
Warewashing (WW), Food Contact Surfaces (Priority/Priority Foundation)	
31	7-40; 7-41; 7-42; 7-51, a&b; 7-58; 7-68; 7-77
32	7-72; 7-75; 7-95; 7-70; 7-71; 7-73a
33	7-83a,c; 7-94; 7-82a
Plumbing (Priority/Priority Foundation)	
34	17-1; 9-8; 9-9; 9-10; 9-11
35	9-2; 9-12; 9-13a; 9-15; 9-16; 9-21; 9-27a; 9-29; 9-30,1; 9-38; 9-41; 9-44a; 9-47a; 9-49; 9-52; 9-27b; 9-28; 9-50

OAC 310:257 - Subchapters & Paragraphs Listed Below
Good Retail Practices

Food Temperature Control		
36	Microwave, Slacking, Thawing, Cooling methods	5-47; 5-55; 5-56; 5-58 b
37	Equipment thermometers provided, conspicuous	7-37 a-d
Food Identification		
38	Food properly labeled, original container, honestly presented	5-2 f,g; 5-15 b; 5-19; 5-24; 5-39; 5-50 b; 5-65; 5-66; 5-67 a, b1-4, b6-7, c,d; 5-68
39	Contamination prevented during food preparation, storage & display	5-17; 5-21 d; 5-23 a3-8; 5-27; 5-29; 5-32; 5-36;
	Washing fruits and vegetables	5-37; 5-38; 5-40; 5-42; 5-44 b; 5-45; 5-71 8; 13-8 b
	Mobile pushcarts, retail food service establishment, commissary	17-2 a; 17-2 c; 17-4 d; 17-5 b; 17-6
40	Personnel: cleanliness, jewelry, hair restraints	3-16; 3-17; 3-20
41	Eating, drinking, tobacco; No discharge from eyes, nose, mouth	3-18; 3-19
42	Wiping cloths proper use & storage; Sponges prohibited	5-33; 7-6; 7-102
Proper Use of Utensils		
43	In-use utensils properly stored, cleaning frequency; Utensils, linens, equipment properly stored, dried, handled; Linens clean	5-31; 7-59 a,b; 7-96 thru 7-99; 7-101; 7-105 a,b,d 7-106, 7-107 b; 7-108; 7-109; 17-6
44	Single-use, single-service articles: properly stored, used	7-80; 7-81; 7-105 a,c; 7-106; 7-107 a,c
Utensils, Equipment & Vending		
45	Food / non-food contact surfaces: cleanable, designed, constructed used	5-34 b,c,d; 5-35; 7-1 2,3,4,5; 7-2; 7-9; 7-10; 7-11; 7-12 18, 28; 7-13; 7-16 a2,b; 7-17 thru 7-21; 7-27; 7-28 1-4; 7-29 thru 7-34; 7-46 thru 7-49; 7-60 thru 7-64; 7-103; 7-104; 17-1 c
46	Manual/Mechanical warewashing facilities: maintained, operated; Pressure gauges, data plates; Use limitation, pre-cleaning; Design; drain boards	7-25; 7-38; 7-39; 7-43; 7-44; 7-45; 7-51 c,d,e,f 7-52; 7-57; 7-65; 7-66; 7-67; 7-69; 7-74; 7-76; 7-87 thru 7-91
47	Non-food contact surfaces clean; Equip/utensil cleaning frequency	7-82 b,c; 7-84; 7-85
Physical Facilities		
48	Plumbing systems: maintained, backflow devices installed, inspected	9-14 b,c,d; 9-22; 9-24; 9-30 2; 9-31 2,3; 9-32 thru 9-36; 9-37 2-5; 9-39; 9-40; 9-42; 9-43; 9-44 b; 9-45; 9-47 b,c,d; 9-48; 9-51; 9-53
49	Toilet facilities: proper construction, accessible, supplied, cleaned; Self closures	9-19; 9-61; 11-14; 11-36; 11-47; 11-48
	Mobile pushcarts, retail food service establishment,	17-2c2,d1; 17-4f
50	Break rooms, Locker areas: used, provided, maintained; Living areas separate; Laundry facilities	7-54; 7-59 c; 7-100; 11-22; 11-33; 11-37; 11-49
51	Hand washing sinks designed, clean, used; Proper signage	9-13 b; 11-26; 11-27; 11-47
52	Floors, walls, ceilings (premises): clean, maintained free of litter Removal of pests	11-41; 11-42; 11-51; 11-53
53	Floors, walls, ceilings (physical facilities): properly designed, maintained, good repair; Outer openings protected	11-1; 11-3 through 11-10; 11-15; 11-16; 11-40; 11-46
	Mobile food service establishment	17-3 a
54	Service sinks; Maintenance and cleaning tools properly used & stored	7-86; 9-20; 11-45; 11-52
55	Outdoor areas: constructed, maintained, clean	11-2; 11-17; 11-18; 11-19
	Mobile Commissary & servicing area	17-5 e
56	Garbage & refuse: properly disposed, facilities constructed, maintained	9-55 thru 9-60; 9-62 thru 9-73; 11-20
57	Ventilation: installed, maintained; Lighting: adequate, shielded	7-22; 7-26; 7-53; 11-11; 11-12; 11-31; 11-32; 11-43

APPENDIX C

- CDC Foodborne Illness Risk Factor Profile

There are five major risk factors related to employee behaviors and preparation practices that cause most food borne illnesses. The following IN Compliance percentages demonstrate how well [redacted] has managed these risk factors compared to other Tulsa County Restaurants between 2017-2020

	[redacted]	TULSA COUNTY
Active Managerial Control	68.5%	90.9%
1. Improper Food Holding/Time and Temp	82.7%	84.7%
2. Inadequate Cooking	100.0%	99.0%
3. Contaminated Equipment	69.1%	96.7%
4. Food Obtained from an Unsafe Source	97.8%	98.6%
5. Poor Personal Hygiene	86.8%	96.4%



Inspections

97 Inspections completed from 2017-2021

964 Total Violations Observed OUT of Compliance

206 Total Risk Factor Violations Observed OUT of Compliance

Risk Factor Violations OUT of Compliance 21% of the time

28 Active Managerial Control Violations

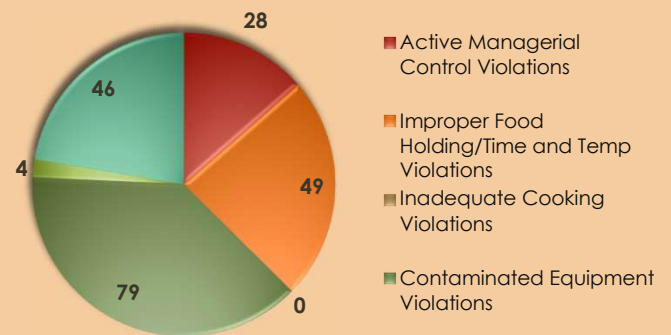
49 Improper Food Holding/Time and Temp Violations

0 Inadequate Cooking Violations

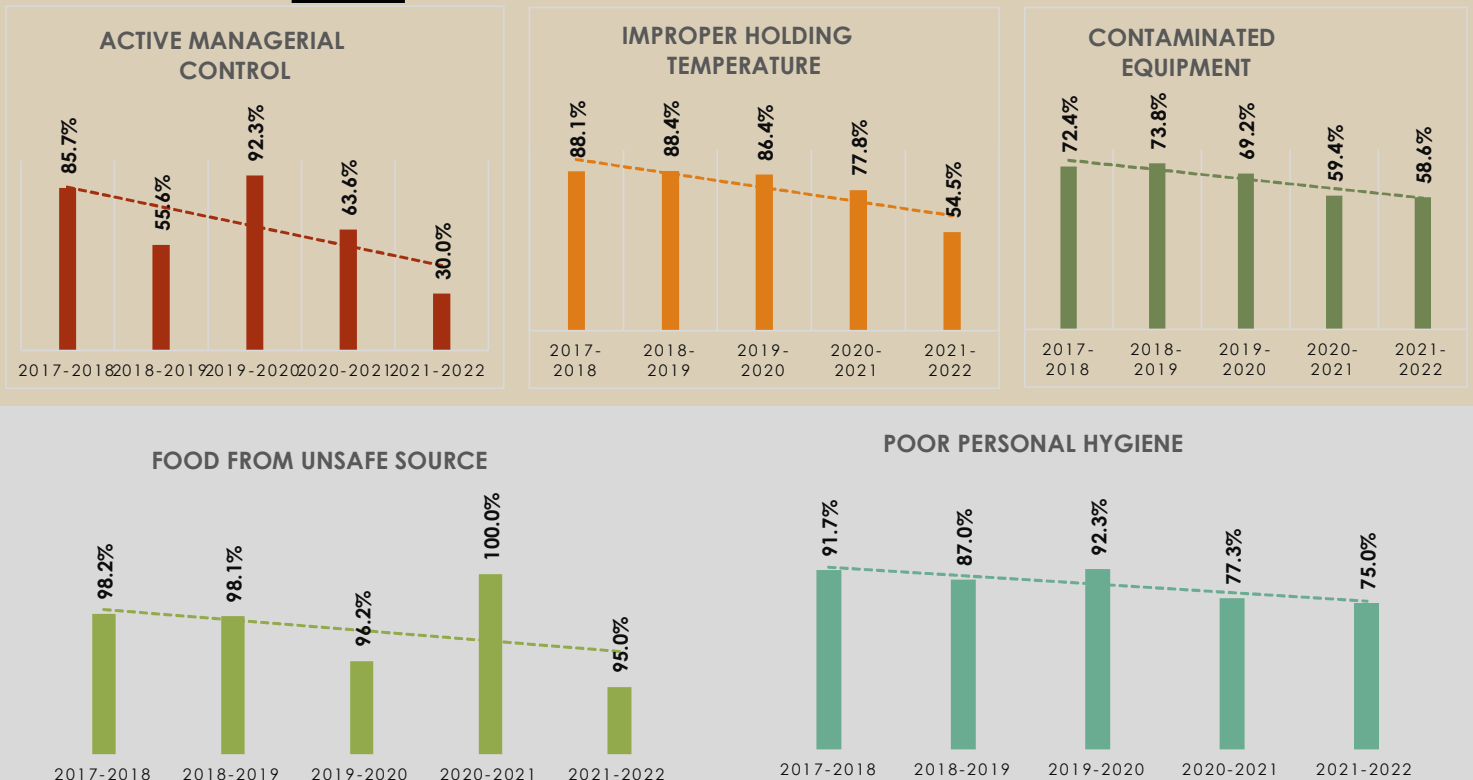
79 Contaminated Equipment Violations

4 Food Obtained from an Unsafe Source Violations

46 Poor Personal Hygiene Violations



Foodborne Illness Risk Factor Trends (%IN Compliance)



- CDC Foodborne Illness Risk Factor Profile

Warnings were issued on **41** out of 97 inspections.
Follow-up Notices issued on **32** out of 97 inspections, only 8 returned.

Violation Frequency

28 inspections = No Certified Food Manager present
11 inspections = Hand washing issues
35 inspections = Hand sink issues with either no hot water, no paper towels, no soap, was blocked or contained dirty ware
21 inspections = Hot holding temperature issues; food discarded 16 times
20 inspections = Cold holding temperature issues; food discarded 13 times
69 inspections = Contaminated equipment issues



Violations Comments - July 2021

Hand washing and Hand Sink

No paper towels at hand sink located by 3-compartment sink
Hand sink in dishwashing area is not operational and dirty with buildup.
No paper towel for hand sink at cookline.
Wet wipe rag stored inside front hand sink.

Hot Holding

Brisket, pulled pork, and Cholula Chicken at hot holding table measured at 92F-102F.
White rice, brown rice, cilantro rice, and chicken stored in heated cabinet not maintained at 135°F or above.
Chicken in steamer not held at 135F or above.

Cold Holding

Containers of lettuce stored in non-working refrigerator at front service line overnight.
Diced tomatoes stored at preparation table and in cold-hold unit measured at 80F.
Milk in refrigerator in front service area not held at 41F or above.

Contaminated Equipment

Several insert pans at shelf by warewash area stored as clean dirty with build up.
Plastic containers on clean dish shelf dirty with food waste.
Knives stored on magnetic strip as clean, dirty with buildup.
Equipment food-contact surfaces not clean

Risk Factor Occurrence 2017-2021

Active Managerial Control

70% of the time a certified food manager was not present

Improper Holding Temperature

50% of the time hot or cold holding was out of temperature

Contaminated Equipment

40% of the time some equipment was stored dirty or food contact surfaces were dirty

Poor Personal Hygiene

25% of the time hand washing was an issue