

# **Addressing the contributing factors which lead to non-standardized enforcement of Connecticut's public health code by local health department Certified Food Inspectors 2010-2011**

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## **EXECUTIVE SUMMARY:**

Having a standardized regulatory workforce in Connecticut is important for ensuring the State Public Health Code is enforced in a uniform manner. Connecticut's Department of Public Health Food Protection Program is responsible for certifying and providing training to all local health department foodservice inspectors. Looking at the historical means of accomplishing this feat, we find that with all the effort and resources put towards standardization, there continues to be inconsistent enforcement of the regulations by individual inspectors. With ever decreasing resources, including staff and funds, we must be sure that the methods used to standardize our food inspectors are both beneficial and effective.

An elementary, but significant, analysis showcased a gap between Connecticut's local health department routine foodservice inspections and state and federal inspections with regard to the frequency of risk-factor violations debited during foodservice inspections. This gap proves that a true standardization of inspections and enforcement is currently not occurring within Connecticut's individual local health departments. This project aims to discover the antecedents regarding inconsistent enforcement of regulations and discover new means and methods of addressing the contributing factors so a true statewide standardization can occur. Without ever addressing these antecedents and viewing standardization as a system, the historical method of providing classroom training to gain standardization is never going to accomplish the goal.

The goal of this project is to address the antecedents that contribute to non-standardized enforcement. This includes demonstrating how an absence of adequate staff necessary to carry out mandated activities contributes to non-standardized enforcement and insufficient follow-up, how involvement of the local director of health in the food inspection programs has a direct correlation to the manner in which inspections are conducted, and how competing priorities among Connecticut's Certified Food Inspectors leads to a less than ideal job performance, which contributes to employees "cutting corners" to get the job done but not necessarily in the standardized method of which they were trained. The project is also working towards developing a self-assessment program for local health departments to audit their own in-house foodservice inspection programs and recognize non-standardized enforcement early on at the local level.

## **INTRODUCTION/BACKGROUND:**

Currently in Connecticut, there are approximately 350+ individuals who are actively certified to conduct food inspections throughout the state. These individuals are responsible for enforcing the public health code for over 20,000 foodservice establishments<sup>1</sup>. Experience of Connecticut's Certified Food Inspectors ranges from less than two years to over 30 years spent conducting inspections!

In order for an individual to conduct inspections at foodservice establishments throughout Connecticut, they first must complete a certification program, as stated in the Connecticut Public Health Code regulations. These regulations require a candidate for certification to be sponsored by a local director of health, and possess as minimum requirements a bachelor's degree or three

years experience in a food safety or regulatory food protection program acceptable to the State Department of Public Health. The certification program itself consists of a two-stage process, the first of which is to successfully complete a classroom training component and passing score on a final written exam. The second component is for the candidate to complete a series of inspections at actual foodservice establishments with a Standardization Officer from the Connecticut Department of Public Health Food Protection Program. Upon successful completion of these two components, a candidate is then issued a certification and expiration date. Certified Food Inspectors are required to renew their certifications every three years by successfully completing sixteen hours of approved food protection classroom training within the three-year timeframe. The Food Protection Program at the state level has a regulatory responsibility to ensure continuing education credits (contact hours) are *provided* to the Certified Food Inspectors in the form of training opportunities.<sup>2</sup>

***Problem Statement: This current certification program has created an avenue that deals with a short-term fix of providing continuous classroom training and expecting such training to initiate change and progress towards standardization instead of working towards long-term solutions such as self-evaluation, participation by local Directors of Health, resource availability, staffing issues, political issues, and morale of the inspectors for their performed work.***

Despite ever increasing budget deficits and reduction of resources to both the State and Local health departments, the Food Protection Program has consistently provided training to Certified Food Inspectors in order to achieve statewide-standardized enforcement of the Connecticut Public Health Code. Despite of these efforts, there continues to be a gap between the standardized training taught to inspectors during the initial certification process and what is practiced once employed by a local health department. The inconsistencies seen from one local health jurisdiction to another is recognized by our industry partners and could be perceived as a fault of the current inspection system throughout Connecticut. In order for the Food Protection Program and local inspection programs to be viewed by industry, consumers, and sister agencies as the “experts” of food safety issues in Connecticut, Certified Food Inspectors need to perform consistent standardized inspections and enforcement. Without doing so, the system can be viewed as flawed, contradictory, and unpredictable, which could lead to a lack of confidence among Connecticut’s foodservice partners.

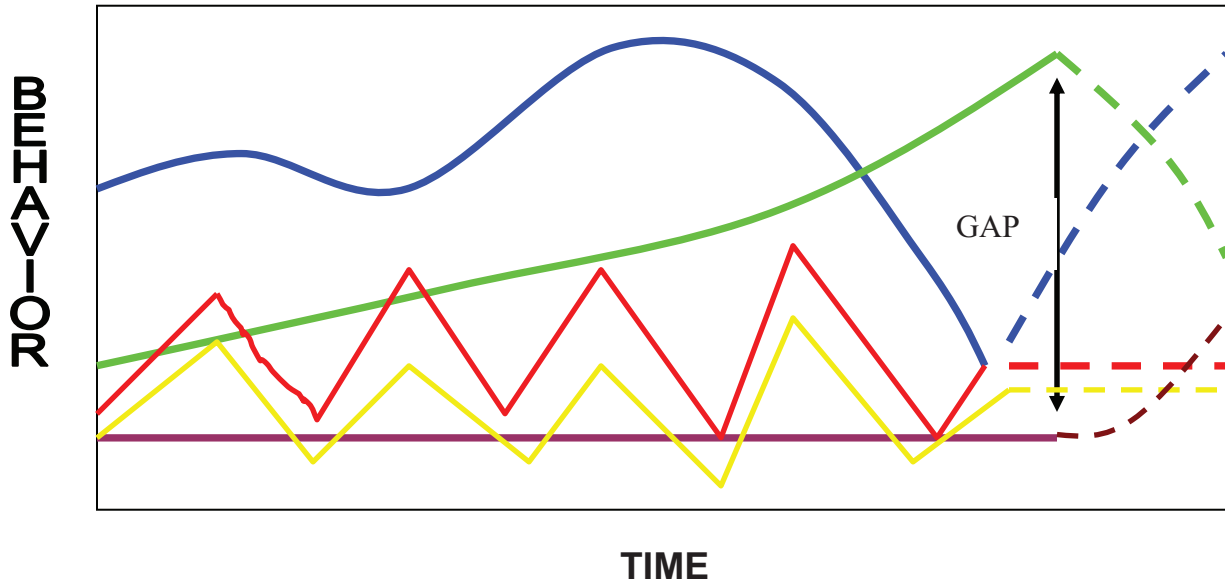
A recent review of data showcasing inspection violations by the State Standardization Officer and various local health departments has brought awareness that the current standardization process is not continued once employed with a local health department and over time during a Certified Food Inspector’s career. This information led to the development of a survey, which was administered to all 350+ Certified Food Inspectors asking questions related to inspection activities, specific local health department policies, as well as enforcement actions. The responses generated from this survey showed an imperfect system where those responsible for enforcement of the public health code relating to food establishments possess varying levels of commitment, awareness, and motivation related to their job. These variations are the leading contributing factors to the non-standardized enforcement currently occurring throughout Connecticut. Elimination of these contributing factors can take place when all stakeholders understand the big picture and realize that blame is not being placed on any one stakeholder for

the gap currently existing in the system. The system has been allowed to develop into this current model for a variety of reasons, none of which fall upon the shoulders of any one stakeholder. But, in order for change to occur, all stakeholders must accept responsibility for the system and work in collaboration to create the positive change needed to make a cohesive statewide food protection and inspection system.

	<i>CHANGING</i>	<i>NOT CHANGING</i>
<i>BENEFITS</i>	<p><b><i>1-Benefits of changing</i></b></p> <ul style="list-style-type: none"> <li>▪ <i>Increased standardized enforcement can lead to a reduction in risk factors associated with food-borne illness</i></li> <li>▪ <i>Increased confidence and respect of industry partners in the system, leading to greater collaboration</i></li> <li>▪ <i>Motivation of environmental workforce, leading to increased productivity and enforcement</i></li> <li>▪ <i>Better working relationships between stakeholders for future issues</i></li> <li>▪ <i>Less backlash by industry to local health departments that consistently enforce adequately and appropriately</i></li> <li>▪ <i>A more informed and educated Certified Food Inspector workforce</i></li> </ul>	<p><b><i>3-Benefits of not changing</i></b></p> <ul style="list-style-type: none"> <li>▪ <i>Additional time and resources not needed to create change</i></li> <li>▪ <i>Local health departments not burdened by another “additional duty” regarding self-assessment program</i></li> <li>▪ <i>Not needing to recognize and acknowledge flaws in the current system</i></li> <li>▪ <i>Able to accept non-standardized enforcement as adequate job performance</i></li> </ul>
<i>COSTS</i>	<p><b><i>4-Cost of changing</i></b></p> <ul style="list-style-type: none"> <li>▪ <i>Development of a pilot-program and self-assessment program</i></li> <li>▪ <i>Recognizing and acknowledging a gap within the current system exists</i></li> <li>▪ <i>Establish and facilitate relationships with stakeholders</i></li> <li>▪ <i>Producing training and educational materials for stakeholders</i></li> </ul>	<p><b><i>2-Cost of not changing</i></b></p> <ul style="list-style-type: none"> <li>▪ <i>Unmotivated certified food inspectors</i></li> <li>▪ <i>Continued lack of accountability regarding individual inspections</i></li> <li>▪ <i>Loss of respect and confidence from industry partners</i></li> <li>▪ <i>Legal liability when enforcement is not performed or not performed consistently</i></li> <li>▪ <i>No long-term solution</i></li> <li>▪ <i>Lack of behavior change among Certified Food Inspectors</i></li> <li>▪ <i>Loss of consumer confidence in food safety system</i></li> </ul>

In order to create change, additional time and resources are necessary to initiate and work toward the goals of the project. It is not uncommon for local health departments to lack these two ingredients so in those instances, it’s easier to ignore the problem and accept the status quo as sufficient. Acknowledgment of the gaps within the current system may lead some to believe they are at fault and produce a negative, defensive attitude and foster uncooperative working relationships. Because of this, stakeholders have been reluctant to address the system and its gaps and therefore have not developed strategic goals and solutions to the issue at hand.

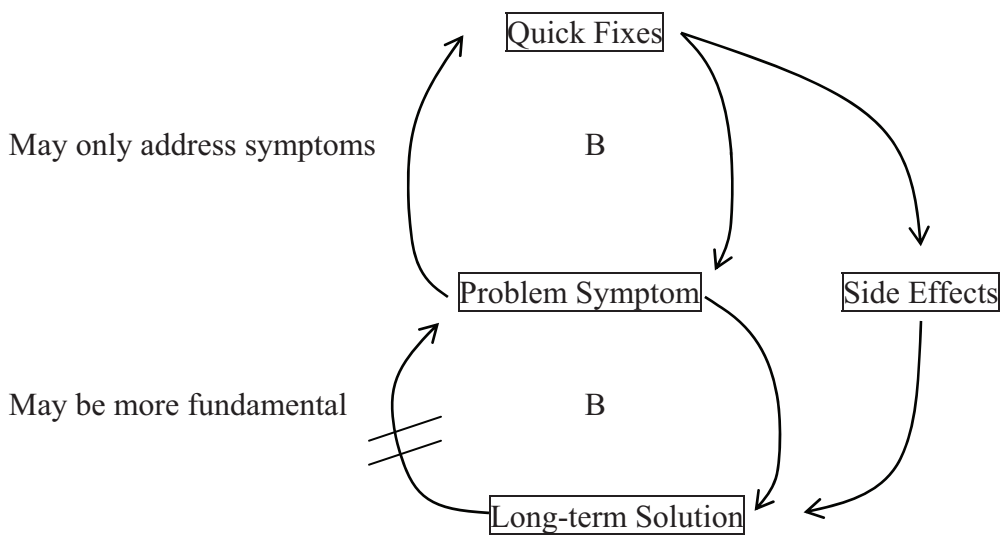
*Behavior Over Time Graph:*



- Resources and funding available to local health
- Multiple duties required of inspectors
- Individual level of food safety
- Enforcement by local Directors of Health
- Standardization process

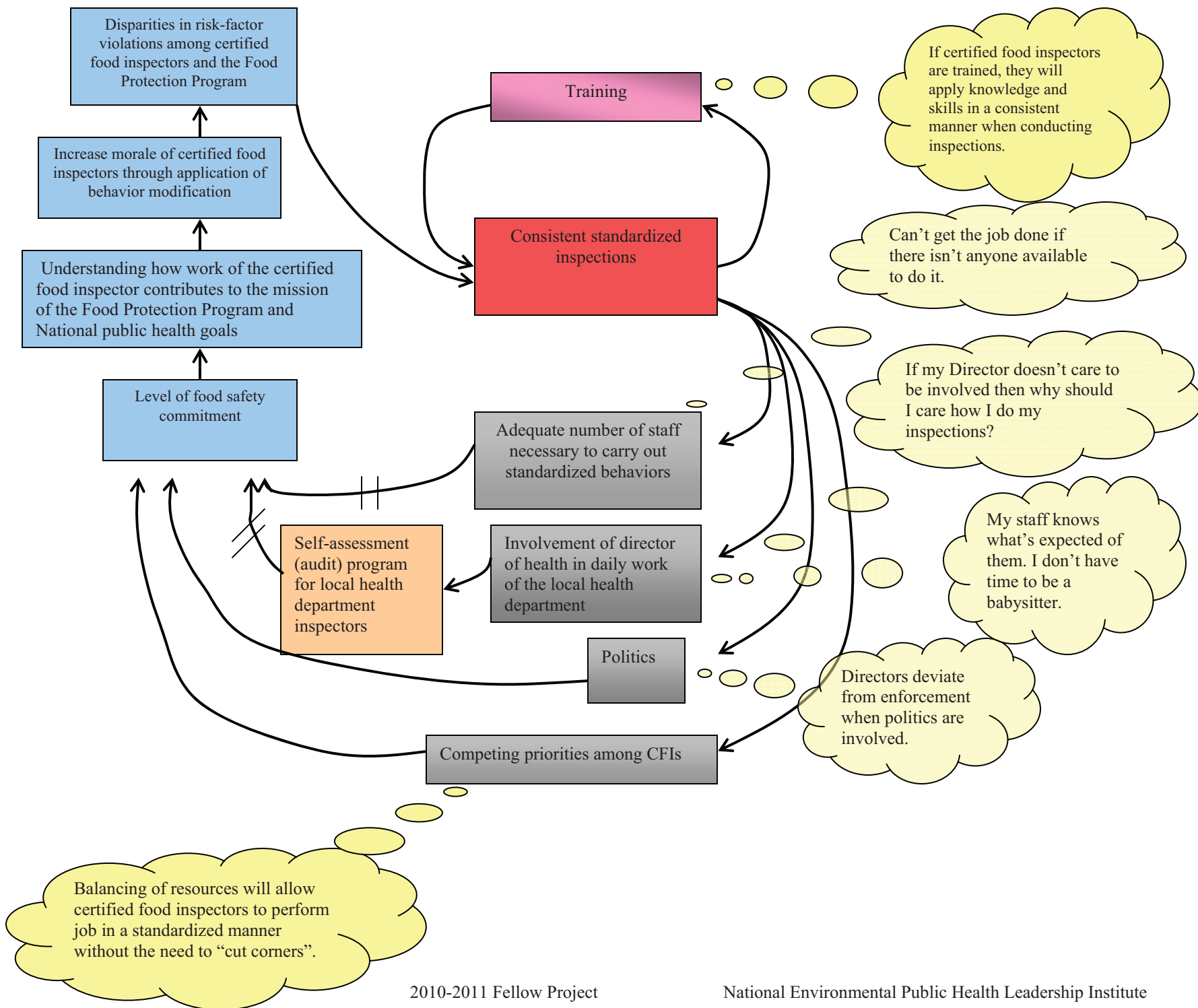
*Causal Loop Diagrams and applicable Archetypes:*

**Shifting the burden:**



**Figure 1: System Archetypes, Shifting the Burden**

Source: 2008 [www.appliedsystemsthinking.com](http://www.appliedsystemsthinking.com)



### 10 Essential Environmental Health Services<sup>3</sup>:

This project is intended to bridge the gap and reinforce:

- Essential Service #9 “Evaluate the effectiveness, accessibility, and quality of personal and populations based environmental health services”
- Essential Services #6 “Enforce laws and regulations that protect health and ensure safety”
- Essential Services #8 “Assure a competent environmental health workforce”



Figure 2: Ten Essential Public Health Services

Source: Public Health Functions Steering Committee (September, 2002)

**Project Logic Model:**

**Goal: Improve the standardized manner in which the public health code is enforced by Connecticut’s Certified Food Inspectors.**



<p><b>Partners:</b></p> <ul style="list-style-type: none"> <li>• CT DPH FPP</li> <li>• CT Directors of Health Assoc.</li> <li>• Local Directors of Health</li> <li>• Certified Food Inspectors</li> <li>• CT Environmental Health Assoc.</li> <li>• Academia</li> </ul> <p><b>Financial:</b></p> <ul style="list-style-type: none"> <li>• Grants</li> <li>• Funding from partner organizations</li> </ul> <p><b>Supplies:</b></p> <ul style="list-style-type: none"> <li>• Data analyst</li> <li>• Materials resources</li> </ul>	<p><b>Research:</b></p> <ul style="list-style-type: none"> <li>• <b>Competing priorities</b></li> <li>• <b>Enforcement tactics</b></li> <li>• <b># of staff available to carry out mandated duties</b></li> </ul> <p><b>Evaluate and analyze Certified Food Inspector survey responses</b></p> <p><b>Review risk-factor disparities data</b></p> <p><b>Develop self-assessment tool</b></p>	<ul style="list-style-type: none"> <li>• # of local health departments utilizing the self-assessment tool</li> <li>• # of available and employed Certified Food Inspectors</li> <li>• Resources available to local health departments for food safety program</li> </ul>	<ul style="list-style-type: none"> <li>• Standardized enforcement of the public health code</li> <li>• Increased level of food safety commitment</li> <li>• Decrease of disparities in risk-factor violations cited by local and state inspectors</li> <li>• Increased accountability at the local level</li> </ul>	<ul style="list-style-type: none"> <li>• Increased compliance among foodservice establishments</li> <li>• Reduction in number of foodborne illness outbreaks</li> <li>• Safer food in Connecticut</li> <li>• Increased consumer confidence</li> </ul>
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## **PROJECT OBJECTIVES/DESCRIPTION/DELIVERABLES:**

**Program Goal:** Inconsistencies within Connecticut's food inspection programs at local health departments are creating discrepancies across the state regarding standardized enforcement of the Public Health Code. Antecedents related to these inconsistencies can be due to resources available to carry out the mission of the program. This project will showcase these inconsistencies to key stakeholders in an effort to decrease enforcement discrepancies and also to expand the current certification program after the initial field-standardization process to include an in-house self-assessment program for use throughout Connecticut's local health departments.

**Health Problem:** Despite having an initial standardization process in place for training Connecticut Certified Food Inspectors, there continues to be non-standardized enforcement of the Public Health Code once employed by a local health department.

### **Outcome Objective:**

1. Staffing and resources available to local health department food inspection programs will be increased by a percentage to coincide with current mandated activities required for foodservice inspections and follow-up activities.
2. The disparity in risk-factor violation frequencies between local and state inspections will decrease by 25% of the current value.
3. The number of local health departments utilizing the self-assessment tool will increase to 75%.

By December 1, 2012 we will present the outcome of the self-assessment pilot study to all local health directors and make recommendations regarding implementation of such program in all local health departments throughout Connecticut.

**Impact Objective:** The objective of the program is to create opportunities for all local health department food inspection programs to have the staffing and tools necessary to carry out effective food safety inspections and follow-up activities, potentially resulting in a decreased risk of foodborne illness in Connecticut. Additional objectives are to create a system of accountability for work activities within local health department food inspection programs, which will decrease the opportunity for non-standardized enforcement of the Public Health Code, and to create an increase in the level of food safety commitment at the local level, which will lead to behavior modification regarding inspectors' enforcement techniques, which in turn will lead to a decrease in the disparities in risk-factor violations among state and local inspectors.

### **Contributing Factors:**

1. Lack of adequate staff necessary to carry out the initial and follow-up functions of a local health department food inspection program.
2. Competing priorities among Certified Food Inspectors results in a decreased amount of time available for proper enforcement and follow-up of foodservice establishments.
3. An absence of accountability relating to individual inspections conducted.
4. Politics

### ***Process Objectives:***

1. By June 1, 2010, conduct assessment of Certified Food Inspectors to gather data related to individual health department food inspection programs through an on-line survey.
2. Review current data by June 1, 2011 to determine inconsistencies related to violation frequencies cited during inspections between the local food inspectors and state food inspectors.
3. By December 1, 2011, identify individual enforcement and follow-up activities conducted by local health department food inspection programs for violations cited at food establishments.
4. By December 1, 2011, determine the number of Certified Food Inspectors available at each local health department to compare with the desired number needed to adequately carry out mandated food protection activities.
5. Develop a self-assessment (audit) program through the DPH Food Protection Program, which can be utilized by local health department supervisors and Directors of Health to determine the effectiveness and consistency of individual Certified Food Inspectors' enforcement of the Public Health Code by January 1, 2012.
6. Conduct a pilot-study of self-assessment program with limited number of local health departments to evaluate its impact on increasing standardized enforcement by December 1, 2012.

### **METHODOLOGY:**

***Event:*** Certified Food Inspector on-line survey (June 1, 2010)

***Activity:***

- Develop survey through [www.SurveyMonkey.com](http://www.SurveyMonkey.com) site
- Administer survey to all Certified Food Inspectors utilizing known email
- Compile individual responses to survey
- Evaluate data

***Results:***

- Documented the type of workforce currently employed as certified food inspectors in CT i.e credentials, # of years worked, training attendance, etc.
- Evaluated current training methods.
  - Are inspectors able to attend trainings?
  - Which type of training do inspectors prefer?
  - Are the trainings beneficial?
  - Are trainings being conducted in-house as well?
- Evaluated how the Food Protection Program is performing according to the local health departments.
- Evaluated current enforcement styles of individual local health departments and directors of health and the effectiveness of such enforcement.
- Evaluated the individual inspection styles of certified food inspectors with regard to Class 3 and 4 foodservice establishments.

**Next Steps:**

1. Develop a statistically significant data set, which showcases the disparities in risk-factor violations.
2. Calculate the number of certified food inspectors needed throughout Connecticut to effectively enforce mandated activities related to foodservice inspections and follow-up activities.
3. Develop self-assessment (audit) program.
4. Conduct pilot-study of self-assessment program.

**Expected Outcomes:**

It is believed that if we can address the contributing factors associated with non-standardized enforcement of the Connecticut Public Health Code, then we will create change not only within our individual local health departments, but also within individual foodservice establishments and those responsible for them. We are hoping to see a direct correlation between standardized enforcement and compliance among individual foodservice establishments. If we increase one, the other will follow suit. It is only natural that if foodservice establishments are operating in greater compliance that we will experience a decrease in the number of foodborne illness outbreaks associated with Connecticut, a trend that has actually been increasing in recent years (unpublished data). And, safer food in Connecticut will lead to an increase in consumer confidence of our food supply, a concern that is at the forefront of current issues within the nation as a whole.

**LEADERSHIP DEVELOPMENT OPPORTUNITIES:***Christine Applewhite*

Reflecting back on my involvement with the EPHLI program, I am amazed at all I have learned over the past year as well as the contacts made through my cohort fellows. One of the most beneficial aspects of the program for me was learning who I am as an employee, how I deal with conflict and change, and how I typically view problems and issues within the workplace. Learning the systems thinking approach and understanding myself, I now possess the capability to look at an issue and see “the big picture”, solicit ideas and suggestions to create change, and utilize creative tension to help solve the problem instead of creating a larger conflict. It was refreshing to learn through my cohort fellows that the problems faced in Connecticut are not unique. Our problems are the same as those that are being seen nationally and having an avenue such as EPHLI to bring environmental professionals together in one place to discuss these issues was an experience I am proud and thrilled to have been a part of! Thank you so much to my team, mentor, coach, and the EPHLI staff as well as the CDC for providing me this fantastic opportunity.

## **ABOUT THE EPHLI FELLOW**

Christine Applewhite began her career as a Microbiologist for various pharmaceutical and biotechnology firms conducting drug research before discovering a career within the public sector. Her public service began at the federal level, working for the United States Department of Agriculture at Plum Island, performing tests to diagnose foreign animal diseases. Ms. Applewhite then moved to state service, procuring a position within the Connecticut Department of Public Health Reference Culture and STD Laboratories as a Microbiologist. During her tenure at the laboratory, Ms. Applewhite attended culinary school as a hobby and subsequently was hired part-time at a local health department to help conduct routine foodservice establishment inspections. This unique mix of microbiology, culinary experience, and public health influence paved the way for a career in food safety. Ms. Applewhite moved to the local sector in 2003 and began working full-time as a Certified Food Inspector until 2008 when she returned to state service for her current position within the Connecticut Department of Public Health Food Protection Program as an Environmental Sanitarian II.

Ms. Applewhite holds a Bachelor of Arts degree in Biology from the University of North Carolina-Wilmington and is licensed as a Registered Sanitarian in Connecticut. She is a member of the Connecticut Environmental Health Association as well as the National Environmental Health Association and volunteers her time for the Humane Society of the United States National Disaster Animal Response Team.

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