

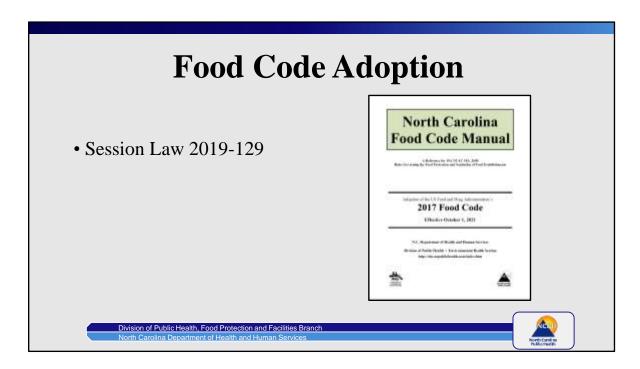
-This presentation will highlight the major changes that have occurred since the 2009 Food Code and what will be required in the 2017 Food Code.

## **Training Overview**

- 2017 Food Code Adoption Process and Acknowledgements
- Important Changes in Chapters 1-8
- Food Establishment Inspection Report Changes
- Marking Instructions Updates
- Evaluating Demonstration of Knowledge
- Kahoot! Review and Questions



- -Please make sure to have a copy of the NC 2017 Food Code Manual, 2017 Food Establishment Inspection Report, and 2107 NC Food Code Marking Instructions to reference during this training.
- -Make sure to get rid of any old materials such as Food Code manuals, inspection reports, marking instructions, etc.



- It's been a long process over 2 years!
- Session Law 2019-129 via HB 735 was put into place on 7/9/19.
- Allowed the Commission for Public Health to incorporate all or part of the 2017 FDA Food Code to the Administrative Code.

#### **Food Code Timeline**

- Internal Planning/Review: December 2019 mid-January 2020 ✓
- 2. Stakeholder Engagement: February-April 2020 🗸
- 3. Final rule language by April 30, 2020 🗸
- Fiscal Note Development/RRC Counsel Pre-Review: May-August 2020 ✓
- Incorporate Pre-Review Feedback/Adjust Fiscal Note: September 2020- Nov./Dec 2020 ✓
- OSBM approval of fiscal note + final rule text by <del>9/30/2020</del> January 2021 ✓
- 7. Send for Department Review: 10/1/2020 January 2021 ✓
- 8. CPH approval to start formal rulemaking: <del>11/4/2020; 2/3/2021;</del> 5/5/2021 ✓
- 9. File at OAH: <del>11/5/2020;</del> 5/6/2021 ✓
- 10. Public Comment Period: <del>12/1/2020 2/1/2021;</del> 6/1/2021 − 8/1/2021 **✓**
- 11. CPH adoption: February 2021 or May 2021; 8/4/2021 ✔
- 12. RRC meeting: March 2021 or June 2021; 9/16/2021 ✔
- 13. Effective date: 4/1/2021 or 7/1/2021 10/1/2021

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Here is the timeline that tracks our progress:

- 1 NC DHHS reviewed changes from 2009 to 2013 to 2017 created summary of changes document
- 2 NC DHHS led workgroups to work on .2600 rule language to adopt the 2017 FDA Food Code (recognize individuals on initial workgroups on next slide)
- 3 Language from committee was sent to leadership 2/28/20 for review; shown to additional industry partners at FSAC in March; language has been approved by internal legal team
- 4 NC DHHS had starter preliminary fiscal note
- 5 FPFB staff worked with legal on fiscal note completed in September; RRC Pre-Review was not received until November; DHHS leadership met end of November and December to make necessary changes took a few issues (technicalities of ambiguous wording such as sanitary, clean, good hygienic, effective) back to the committee and no concerns were raised needed to re-word .2670 a little to avoid additions of definitions
- 6/7 Goal to have OSBM approval by 9/31/20 and submit for Department Review by 10/1/20 pushed back to January since RRC Pre-review was late
- 8/9 Commission for Public Health Meeting was 11/4/20 gained approval to start formal rulemaking process; file on 10/5/20 if approved pushed back to February

and then again to May

10/11 - 60-day public comment period 12/20 - 2/1/21; CPH adoption pushed back to August 4, 2021; we successfully passed through CPH!

12 – Presented to RRC on September 16, 2021, passed.

13 – 2017 FC effective October 1, 2021!

## A Special Thanks To...

- Shane Smith, NC DHHS
- Terri Ritter, NC DHHS
- Cheryl Slachta, NC DHHS
- Josh Jordan, NC DHHS
- Michael Roberson, NC DHHS
- Jennifer Moore, NC DHHS
- Greg Gartner, NC DHHS
- Teresa Clark , NC DHHS
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- Felissa Vazquez, Buncombe County
- Ginger Johnson, Wake County
- Jo Hill, Pender County
- Alyssa Barkley, NC Restaurant & Lodging Association
- Lindsey Kueffner, NC Retail Merchants Association

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-Here is a list of individuals and agencies that assisted with the adoption process.

# A Special Thanks To...

- Chris Salter, Durham County
- Traci Stevens, Richmond County
- Aimee Lee, Mecklenburg County
- Monica Kiker, Union County
- Britney Hargett, Pitt County
- Tammy Rodriquez, NC DHHS
- Joy Wilson, Buncombe County
- Thomas Jumalon, NC DHHS



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# 2013 Food Code-Key Changes

- Reduced Oxygen Packaging (ROP) requirements
- · Refillable containers
- Nontyphoidal Salmonella added to pathogens that prompt employee exclusion/restriction
- Non-continuous cooking minimum cook temperatures

- Cleaning and sanitizing equipment used in preparing raw foods that are major food allergens
- Bare hand contact with ready-to-eat food
- Labeling clarification requirements for food packaged at retail



- -Most of the changes in the 2013 FDA Food Code reflect consensus recommendations developed at the 2012 biennial meeting of the Conference for Food Protection.
- -The key changes for the 2013 Food Code include:
- 1) Includes Nontyphoidal *Salmonella* among the illnesses that food workers are required to report to their management to exclude or restrict employees from working with food.
- 2) Requirements that better address emerging trends in food establishments, such as the use of reduced oxygen packaging methods and the reuse and refilling of take-home food containers.
- Revisions to the minimum cooking temperatures associated with procedures for non-continuous cooking and associated with the exception to the no bare hand contact rule.
- 4) Strengthening the regulations for cleaning and sanitizing equipment used in preparing raw foods that are major food allergens.

## **2017 Food Code-Key Changes**

- Addition of new term: Intact Meat
- Person in Charge is now Certified Food Protection Manager
- New Provision: Bandages, Finger Cots or Finger Stalls
- Written procedures for clean-up of vomiting and diarrheal events
- Revised cooking time/temperature parameters
- New exception criteria for continuing operations during an extended water or electrical outage

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-Most of the changes in the Supplement to the 2013 FDA Food Code reflect consensus recommendations developed at the 2016 biennial meeting of the Conference for Food Protection.

#### **Preface**

- Foodborne illness estimates, risk factors, and interventions
- PHS model codes history, purpose, and authority
- Public Health and consumer expectations
- Advantage of uniform standards
- Modifications and improvements in this edition

- Discussion of the Food Code as a HACCP model and the intention to incorporate other models
- Code adoption/certified copies
- Information to assist the user
- The code revision process
- Acknowledgements



- -The Preface is provided at the front of the FDA Food Code manual.
- -The Preface provides information such as foodborne illness risk factors and interventions, modifications and improvements from previous editions, the Food Code as a HACCP model, how to use the Food Code, and how the Food Code is revised.

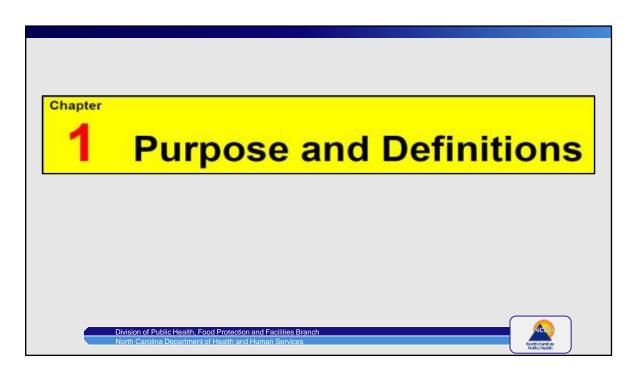
### **Updates to .2600 Rules**

#### Major changes and updates:

- LFSE permits expire one year from date of permit issuance (instead of expiring December 31)
- Revised definitions for food stand, mobile food unit, and TFE/TFE commissary
- Removed all references to 45°F with regards to cold holding
- Added allowance for reuse of mollusk and crustacea shells per G.S. 130A-248
   (c3)
- Changed hot water requirement of 100°F at hand sinks from Pf to Core under 5-202.12(A)
- Removed 10-day verification requirement per 8-405.11
- 2017 FDA Food Code and 2017 FDA Food Code Supplement



- -These rules changes were made in conjunction with the adoption of the 2017 Food Code.
- -References to 45°F still in the Food Code for some receiving temperatures (eggs, milk, live shellfish).
- -Other minor changes were made as well. Review the latest version of the Rules to familiarize yourself with the changes.



-For Chapter 1, several new definitions have been added.

#### **Intact Meat**

A cut of whole muscle(s) MEAT that has not undergone COMMINUTION, MECHANICAL TENDERIZATION, <u>vacuum tumbling with solutions</u>, or reconstruction.





- -In this presentation, words listed in ALL CAPS are defined terms in the Food Code.
- -Added vacuum tumbling with solution in the 2017 FC Supplement to clarify products prepared in that manner are no longer intact.
- -INTACT is a term that is frequently used but was not defined in the Food Code. As FDA worked towards harmonizing cooking temperatures with USDA/FSIS, it became apparent that there was a need to clarify:
- 1) what INTACT meat means, and
- 2) make clear what criteria applies to intact meet (ex. paragraph 3-401.11(A)).
- -This new definition enables the cooking provision to more clearly define what specific cooking criteria applies to meats that are INTACT.



#### Revised definition in the Supplement:

- To be consistent with the USDA FSIS description of "mechanically tenderized" in the 2015 final rule titled Descriptive Designation of Needle-or Blade-tenderized (Mechanically Tenderized) Beef Product (80 FR 28153).
- The rule established labeling requirements for raw or partially cooked mechanically tenderized beef products and clarified that products injected with a marinade or solution are considered mechanically tenderized. (CFP Issue 2018-I-013).

### **Mobile Food Unit**

#### **Revised definition:**

- Clarifies that no permanent utility connections are allowed, except for an on-site electrical connection
- The unit cannot provide their own seating





- -A mobile food unit must remain MOBILE. It cannot be permanently connected to electrical, water, or wastewater supplies. It cannot be underpinned or have the wheels removed.
- -Clarifies non-permanent setup with no seating.

# **Packaged**

- (1) "Packaged" means bottled, canned, cartoned, bagged, or wrapped, whether PACKAGED in a FOOD ESTABLISHMENT or a FOOD PROCESSING PLANT.
- (2) "Packaged" does not include wrapped or placed in a carry-out container to protect the FOOD during service or delivery to the CONSUMER, by a FOOD EMPLOYEE, upon CONSUMER request.



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-The definition of packaged was amended to clarify the intent of what the term packaged includes and does not include. This definition was revised in response to requests that FDA provide clarification on which types of foods packaged in a food establishment are not required to be labeled. Rather than determine the need for labeling on the basis of the durability of the packaging material, the language clarifies that labeling need not be provided if the packaged food is provided by the employee to the consumer upon request.

- -2013 amended "Packaged":
- (1) to delete the term <u>"securely"</u> to avoid undue emphasis on nature of the package
- (2) to remove the phrase "<u>or other non-durable container</u>" to clarify when foods packaged at retail needs to be labeled so that it reads:

"Packaged" does not include wrapped or placed in a carry-out container to protect the food during service or delivery to the consumer, by a food employee upon consumer request.

-Foods packaged in a retail food establishment that are held for display for consumer self- service would still require labeling.

# **Reduced Oxygen Packaging**

"Sous vide packaging" in which raw or partially cooked food is vacuum packaged in an impermeable bag, cooked in the bag, rapidly chilled, and refrigerated at temperatures that inhibit the growth of psychrotrophic pathogens.







- -2013 Code Citation
- -Revised "Reduced Oxygen Packaging" subparagraph (2) e, to delete the phrase "placed in hermetically sealed, impermeable bag" and replace it with "vacuum packaged in an impermeable bag" so it clearly defines the sous vide process as outlined in Annex 6(2)(B)(4)(b).
- -It now reads: "Sous vide packaging, in which raw or partially cooked food is vacuum packaged in an impermeable bag, cooked in the bag, rapidly chilled, and refrigerated at temperatures that inhibit the growth of psychrotrophic pathogens."
- -This revision makes the sous vide definition consistent with the process of sous vide described in Annex 6.
- Psychrotrophic pathogens can grow in refrigerated environments. Examples include Pseudomonas, Bacillus, Clostridium, and Listeria to name a few.

# Shiga toxin-producing Escherichia Coli (STEC)

"Shiga toxin-producing Escherichia coli" (STEC) means any E.coli capable of producing Shiga toxin (also call verocytotoxins)...





- -2013 Food Code citation, new definition
- -In an effort to keep up with current terminology used throughout the scientific community, the definition was updated and incorporated the previously defined term Enterohemorrhagic *Escherichia coli (EHEC)* into the definition of STEC.

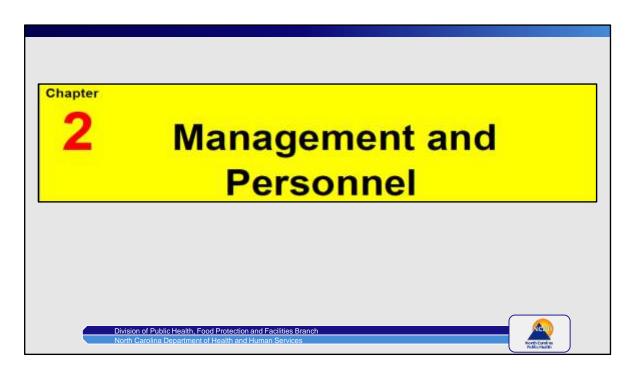
# Time/Temperature Control for Safety Food (TCS)

- "Potentially Hazardous Food" phased out throughout the Food Code
- Time/Temperature Control for Safety Food or TCS Food is now the term used to identify foods that require cold holding or hot holding during storage and display





- -Potentially Hazardous Food has been removed from the Food Code.
- -Now, TCS Foods.



-Changes to Chapter 2 in the 2017 NC Food Code.

### 2-102.11 Demonstration

<u>Three</u> options for demonstration of knowledge:

• No violations of *Priority* items during the current inspection

#### OR

- Being a Certified Food Protection Manager
- Correctly responding to the inspector's questions as they relate to the specific operation (17 listed in the Code)





- -Points can be taken for incompliance with #1 since this is an opportunity for the PIC to gain the point if they are not a CFPM. CDI is based on education/discussion and the development of answers for the 17 questions.
- -Demonstration of knowledge and CFPM requirement was all one item and listed under #1 (previously up to 2 points). This has been separated into #1 and a new #2 (up to 1 point each).
- -The PIC shall demonstrate to the Regulatory Authority knowledge of food-borne disease prevention, application of the HACCP principles and the requirements of the Code.
- (A) Complying with this Code by having no violations of PRIORITY ITEMS during the current inspection (if marked OUT, regardless if points were deducted); or
- (B) Being a certified FOOD protection manager who has shown proficiency of required information through passing a test that is part of an ACCREDITED PROGRAM; or
- (C) Responding correctly to the inspector's questions as they relate to the specific FOOD operation . The areas of knowledge include 17 questions.

### 2-102.11(C) Demonstration

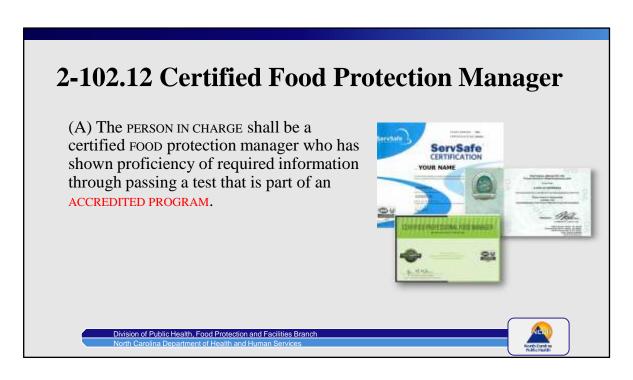
PIC can demonstrate knowledge by responding to food safety concepts using the 17 questions in this section, including:

- Importance of good personal hygiene
- Exclusion and restriction of sick employees
- Time/temperature control
- · Raw/undercooked food
- Food protection practices/cross-contamination
- Allergens
- · Cleaning/sanitizing of food contact surfaces
- HACCP principles
- Storage of toxic materials





- -This is a new option for demonstration of knowledge by the PIC.
- -The 17 questions are listed under 2-102.11 (C). Typically, these questions can be asked as the inspection progresses. For example, evaluation of PIC knowledge about cleaning/sanitizing of food contact surfaces can be assessed when discussing cleaning/sanitizing of a food slicer, prep sink, cutting boards, etc.
- -Failure to demonstrate knowledge of questions #2, #3, and #17 are to be addressed under #3 on the inspection report per the marking instructions, not #1.
- -Describe CDI on the inspection; compliance is based on the inspector's assessment; provide list of questions and help the PIC fill out the answers on-site; encourage them to post answers in the establishment as a reference tool
- -If one of the questions doesn't apply to the establishment, they are not required to know the answer



- -The CFPM requirement is now separated from demonstration of knowledge and will be its own violation # on the inspection report (#2).
- -2017 Food Code Amended paragraph 2-102.12 (A) to state that the Person in Charge shall be the Certified Food Protection Manager .2652 (4)(B).
- -This section does not apply to congregate nutrition sites and Risk Category 1 food establishments as defined in 10A NCAC 46.0213. This also applies to shared-use kitchens in accordance with the Position Statement dated 12/19/17.
- -ANSI (old language) vs. CFP recommendations (2017 FC language)

### 2-103.11 Person In Charge Duties

#### Additional duties added:

• (F) Employees are verifying that FOODS delivered to the FOOD ESTABLISHMENT during non-operating hours are from APPROVED sources and are placed into appropriate storage locations such that they are maintained at the required temperatures, protected from contamination, UNADULTERATED, and accurately presented.





- -2013 amended to add new paragraph (f): key-drop deliveries
- -PIC must ensure that food being delivered during non-operating hours are from an approved source, stored at the required temperatures, and stored to prevent contamination. Ask PIC if they get key-drop deliveries and how they are handled.
- -This happens all of the time!

### 2-103.11 Person In Charge Duties

#### Additional duties added:

documentation required by an RCP.

- (I) Employees are properly maintaining the temperatures of TIME/TEMPERATURE CONTROL FOR SAFETY FOODS during hot and cold holding through daily oversight of the EMPLOYEES' routine monitoring of FOOD temperatures.
- (P) Written procedures and plans, where specified by this Code and as developed by the FOOD ESTABLISHMENT, are maintained and implemented as required.



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-2017 amended to add new paragraph (I) to address additional duty requirement for the Person in Charge to ensure employees are routinely monitoring food temperatures during hot and cold holding (completes all five risk factors of foodborne illness) and re-designate paragraphs (I)-(O) as new paragraphs (J)-(P).

-(P) would include required procedures and plans including TPHC procedures, HACCP/Variance paperwork, non-continuous cooking procedures, and any

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### 2-201.11 Reportable Diagnosis

- (2) Has an illness diagnosed by a HEALTH PRACTITIONER due to:
  - Norovirus
  - Hepatitis A virus
  - Shigella spp.
  - Shiga-toxin producing Escherichia coli
  - Typhoid fever (caused by Salmonella Typhi)
  - Salmonella (nontyphoidal)
- "Big 6 Diseases"



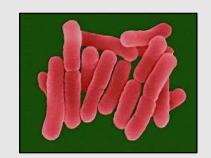


- -Big 6 now instead of 5, added non-typhoidal Salmonella.
- -A revised employee health policy agreement will be available before implementation date.
- -We'll have to produce a new acronym, such as "Send Severely Sick Employees Home Now"!
- -Salmonella spp. Is not acceptable to describe both Salmonella Typhi and nontyphoidal Salmonella.

### Salmonella vs. Salmonella

#### Salmonella Typhi

- · Causes typhoid fever
- Typically associated with ready-to-eat foods and beverages
- Transmitted through sick food workers and poor personal hygiene
- Prevention through excluding sick food workers, practicing good personal hygiene, preventing cross-contamination, and cooking food to the required final cook temperatures





#### Salmonella vs. Salmonella

#### Salmonella (nontyphoidal)

- Naturally carried by many farm animals
- Typically associated with poultry, eggs, meat, dairy products, and produce
- Transmitted through sick food workers, crosscontamination, and failure to properly cook food
- Prevention through excluding sick food workers, preventing cross-contamination, and cooking food to the required final cook temperatures

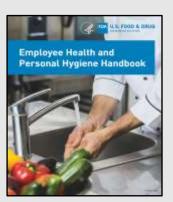




- -Over the past decade, Nontyphoidal *Salmonella* (NTS) *enterica* serotypes have been among the most common and important foodborne pathogens.
- -NTS serotypes are estimated to cause more than one million domestically acquired foodborne illnesses in the United States each year (Scallan et. al. 2011) and are the leading cause of hospitalizations and deaths due to foodborne illness in the United States (Barton-Behravesh et al. 2011, CDC 2011).
- -While a reduction in the incidence of many other foodborne pathogens has been achieved in recent years, no significant change in incidence of NTS infections has occurred since the start of FoodNet surveillance during the period 1996–1998 (CDC 2011).
- -Therefore, further interventions were needed to reduce the incidence of NTS infections.

### **Food Employee Reporting Agreement**

- New Form 1-B has been created to reflect the addition of nontyphoidal *Salmonella* as a reportable illness
- Includes the requirement to report to the REGULATORY AUTHORITY when an employee is jaundiced
- Updated exclusion and restriction requirements
- Included language from Form 1-B in the 2017 Employee Health & Personal Hygiene Handbook





- -Form 1-B handout is available for use and can be found on the DEH website.
- -The 2017 Employee Health & Personal Hygiene Handbook can also be found on the DEH website. This document has helpful information, including decision trees for illnesses.
- -For an HSP, need to educate the PIC on exclusion of food employees experiencing sore throat with fever per 2-102.12 (H).

#### **2-301.14** When To Wash

- FOOD EMPLOYEES shall clean their hands and exposed portions of their arms as specified under 2-301.12 immediately before engaging in FOOD preparation including working with exposed FOOD, clean EQUIPMENT and UTENSILS, and unwrapped SINGLE-SERVICE and SINGLE-USE ARTICLES and:
- (H) Before donning gloves to initiate a task that involves working with food





- -2013 amended to clarify that the requirements to wash hands before donning gloves is specific to the beginning of a task involving working with food and not during the task.
- -Section 3-304.15 titled Gloves, Use Limitations, conveys the expectation that when gloves are used to handle food, hands should be washed and cleaned prior to donning gloves to begin a task.
- -The codified language in paragraph (H) of the When to Wash provision was amended to clarify that when gloves are used to handle food, hands should be washed and cleaned prior to donning gloves to BEGIN a task. However, if there is no change in the task being performed and there are no activities which could potentially result in cross contamination, the Food Code does not specify hands are to be washed between each change of gloves.



- -2017 added new Section 2-401.13 Use of Bandages, Finger Cots, or Finger Stalls.
- -Clarifies previous requirement listed in employee health restriction guidance for open wounds.
- -When a food employee has a wound on their finger, hand, or wrist and covers it with an impermeable cover such as bandage, finger cot or finger stall there is the possibility for the impermeable cover to become a physical contaminant of food during preparation. Additionally, bandages, finger cots or finger stalls may not be effectively cleaned during normal handwashing procedures. The use of a single-use glove can help prevent these impermeable covers from entering the food and becoming a physical hazard.

# 2-501.11 Clean-up of Vomiting and Diarrheal Events

A FOOD ESTABLISHMENT shall have written procedures for EMPLOYEES to follow when responding to vomiting or diarrheal events that involve the discharge of vomitus or fecal matter onto surfaces in the FOOD ESTABLISHMENT. The procedures shall address the specific actions EMPLOYEES must take to minimize the spread of contamination and the exposure of EMPLOYEES, consumers, FOOD, and surfaces to vomitus or fecal matter.



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REHS to take 0 points on the first inspection after FC implementation. CDI is based on education/discussion + the handouts. Take the time to discuss the plan and see what is available onsite for the development of a kit.

- -New item on the inspection report (#5) worth up to one point deduction.
- -2013 added requirement
- -2017 amended Section 2-501.11 requiring written procedures for the clean-up of vomiting and diarrheal events
- -A template plan will be available as a handout.

## Vomit & Diarrhea Clean-up Plan

#### Plan should include the following components:

- Containment and removal of any discharges, including air-borne particulates
- Procedures for the cleaning and disinfection of any surfaces that may have become contaminated
- Procedures for the evaluation and disposal of any food that has been exposed to discharges
- Availability of an effective disinfectant
- Procedures for the disposal and cleaning of tools used to clean up vomit or fecal matter
- Procedures for employees wearing PPE when cleaning and disinfecting an affected area



## Vomit & Diarrhea Clean-up Plan

#### Plan should include the following components:

- Training procedures for food employees on the proper use of PPE for containing, cleaning, and disinfecting a contaminated area
- Segregation of areas that may have been contaminated to minimize unnecessary exposure to employees, customers, and food in the facility to the discharges, surfaces, and food that may have been contaminated
- Minimize risk of disease transmission through exclusion and restriction of ill employees
- Minimize risk of disease transmission through prompt removal of ill customers and others from food preparation areas, service, and storage
- The condition under which the plan will be implemented





-Changes to Chapter 3 in the 2017 Food Code.

### **3-201.11(A)** Compliance with Food Law

#### Statement added per 15A NCAC 18A .2653(1):

Food from food establishments in states adjacent to North Carolina may be sold within North Carolina if the food establishments are under jurisdiction of the local or state enforcement body in that **originating** state and approved by the regulatory authority in North Carolina in accordance with **G.S. 130A-248(b)**. To determine the extent of compliance with this Code, the regulatory authority shall obtain reports regarding compliance and compliance history from responsible authorities in other jurisdictions where the food establishments are located.



- -This amended statement was added to 3-201.11(A) per 15A NCAC 18A .2653(1) to clarify the <u>need for a permit in NC</u>, as required under G.S. 130A-248(b). NC addition to the Food Code.
- -Reciprocity

# $\begin{array}{c} \textbf{3-301.11(D)(2)} \\ \textbf{Preventing Contamination from Hands} \end{array}$

- (D) Paragraph (B) of this section does not apply to a FOOD EMPLOYEE that contacts exposed, READY-TO-EAT FOOD with bare hands at the time the READY-TO-EAT FOOD is being added as an ingredient to a FOOD that:
- (2) does not contain a raw animal FOOD but is to be cooked in the FOOD ESTABLISHMENT to heat all parts of the FOOD to a temperature of at least 145°F





- -The intent of Section 3-301.11 is to address bare hand contact with ready-to-eat food when that food will not receive a full pathogen kill step.
- -Language was previously added to the 2009 Food Code that clarified when ready-to-eat foods are added to another product as an ingredient, such as RTE toppings on a sandwich and the combined product will be heated, bare hand contact was prohibited unless that ready-to-eat food was heated to at least 165°F.
- -We have now modified this exception to clarify that:
- -The NBHC rules do not apply when handling RTE food to be used as an ingredient that will be subsequently heat treated to 145°F or greater if it does not contain a raw animal food.
- -The Conference for Food Protection recommended that FDA make this change to acknowledge that the reduction of risk associated with bare hand contact should be considered adequate if the product reaches 145°F or greater.

# 3-302.11 Packaged and Unpackaged Food - Separation, Packaging, and Segregation

Fruits and vegetables, <u>washed or</u> <u>unwashed</u>, shall be kept separated from raw animal foods to prevent cross-contamination.



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- -2013 amended to remove subparagraph (A)(3) and renumbered the remaining paragraphs as (4)-(8).
- -2017 added new subparagraph 3-302.11(A)(1)(c) to indicate separating raw animal food during storage, preparation, holding and display from fruits and vegetables before they are washed and re-designated existing subparagraph 3-302.11 (A)(1)(d). -Fruits and vegetables, washed or unwashed, shall be kept separated from raw animal foods. Prior language in Section 3-302.11 did not account for the protection from cross contamination by the storage of unwashed fruits and vegetables. Adding a new subparagraph (A)(1)(c) to the paragraph establishes that any fruit or vegetable whether washed (as described in (A)(1)(a) or unwashed (as described in new (A)(1)(c), should be stored separately from any raw animal food to protect from cross-contamination.

## 3-304.17 Refilling Returnables

#### Old Code

- · Does not allow for refilling with TCS food
- Allows for refilling of beverages only

#### New Code

- Clarifies allowances for refilling with TCS food
- Container must meet 4-1/4-2 and must be inspected by employee upon reuse
- Container must be washed, rinsed, and sanitized prior to refilling
- Initially provided by the FOOD ESTABLISHMENT to the CONSUMER









- -Discuss info on the slide. (there are a handful of places that have variances to do this that will no longer need the variance) (can come from another permitted establishment).
- -Section 3-304.17 was revised to allow refilling a multi-use take-home food container with TCS and non-TCS food. Previously this practice was restricted to non-TCS foods. However, this practice is becoming more desirable as retail food establishments, particularly institutions, attempt to utilize green practices to limit waste. The current interventions in the Food Code pertaining to cleaning and sanitization are sufficient to ensure this practice is conducted safely, so long as these interventions are performed in conjunction with establishment-issued containers that meet the requirements in Parts 4-1 and 4-2 along with a visual inspection of the containers upon return.
- -In conjunction with this change, the following specific revisions were made:
- Paragraph 3-304.17(B) was revised to provide prescriptive requirements for food establishments that accept for reuse returned take-home containers.
- The exception for consumer-owned water containers to be refilled at a water vending machine or system was relocated from Paragraph 4-603.17(C) to Paragraph 3-304.17(E) (but no changes were made to the language).
- The exception for take-home food containers to be refilled with non-TCS beverages

- was relocated from Paragraph 4-603.17(B) to Paragraph 3-304.17(C). (Slight changes were made to the language).
- The exception for personal take-out beverage containers to be refilled with a contamination-free process was relocated from Paragraph 3-304.17(C) to Paragraph 3-304.17(D) (but no changes were made to the language).
- Section 4-603.17 was deleted in its entirely from Chapter 4. This section was no longer necessary because the information previously contained in this section was either relocated to Section 3-304.17 or it was deleted.

### 3-401.11 Raw Animal Foods

Changes were made to the time a food must maintain the appropriate final cook temperature

- 165°F (instantaneous)
- 155°F (at least 17 seconds)
- 145°F (no change, at least 15 seconds)

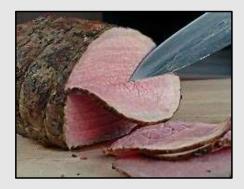
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- -Discuss info on slide.
- -FDA CFSAN and USDA FSIS have been working together to harmonize cooking times and temperatures in the Food Code with established USDA FSIS guidelines. In that effort, FDA and USDA submitted a joint issue to the 2016 Conference for Food Protection to propose Food Code changes which would include the following:
- 1) clarify cooking criteria that applied to intact meat (145°F for 15 sec) (as it may not have been completely clear that  $sub\P(A)(1)$  only applies to intact products);
- 2) revise the minimum cooking time that applies to non-intact meats from 155°F for 15 seconds to 155°F for 17 sec based on FSIS guidance on safe cooking of **non-intact meat chops, roasts and steaks and non-intact products**. This FSIS guidance indicates that non-intact meats should be held at 155°F for 17 sec to provide a 5-log reduction of Salmonella in these products;
- 3) revise the minimum cook time for poultry products from 165°F for 15 sec to 165F or above for <1 sec instantaneous based on FSIS guidance in the Time/Temperature Tables for Cooking RTE Poultry Products indicating that **poultry, baluts, and wild game products** can be cooked to 165°F instantaneous to achieve a 7-log reduction of Salmonella.
- -No time associated with foods cooked to 135°F.

## 3-401.11(B) Raw Animal Foods

Removed the restriction of only cooking whole meat roasts in an oven.



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- -Amended ¶3-401.11(B) to clarify the misperception that the provision as written meant whole meat roast could only be cooked in an oven.
- -The intent of paragraph 3-401.11(B) was not to restrict the cooking of whole meat roasts to ovens. By reversing the order of the subparagraphs (B)(2) and (B)(1) it adds clarity that whole meat roasts are not limited to only being cooked in an oven but may be cooked using other equipment as well.
- -The change emphasizes the time/temperature parameters and if you use an oven, cook with oven settings in the table.

### 3-401.13 Plant Food Cooking for Hot Holding

- Plant FOODS that are cooked for hot holding shall be cooked to a temperature of 135°F
- Removed "fruits and vegetables"





- -2017 amended Section 3-401.13 to delete the phrase "fruits and vegetables' and replace it with the term "plant foods."
- -This section was amended to remove the terms "fruits and vegetables" and replace with "plant foods" so as to clarify the intent of this provision in that it does include roots and grains or other foods that may be under the "plant" category.
- -Roots and grains (ex. rice, pasta) once heat treated are often held for hot holding. Past editions of the Code were not explicit in inclusion of all "plant" products because the provision specifically indicated fruits and vegetables. This amendment should clarify the true intent of this provision that it applies to any plant product that is heat treated and then hot-held.

#### 3-401.14(D) Non-Continuous Cooking of Raw Animal Foods

#### **Old Code**

• Required final cooking to be 165°F for 15 seconds

#### **New Code**

 Allows final cooking temperature and time based on type of food





- -When using a non-continuous cooking process to cook raw animal food, the initial partial heat treatment may not eliminate the pathogens of concern. Therefore, the second and final heating process is necessary to eliminate the hazards associated with these products before service.
- -The language in the 2009 Food Code required the raw animal food to be subjected to a final cook temperature of at least 165°F for 15 seconds when using a noncontinuous cooking process.
- -After being presented with further research, it was determined that the cooking temperatures in Paragraphs 3-401.11 (A)-(C) of the Food Code are adequate for the second and final heating process based on anticipated microbial load and thermal destruction needed for different types of raw animal products and the pathogens of concern. (Ex. Chicken= 165°F, comminuted meat= 155°F, etc.).
- -Therefore, the language in this provision was amended by:
- Removing the final cook temperature of 165°F for 15 seconds; AND
- Revising paragraph (D) to clarify that prior to sale and service, raw animal foods
  cooked using a non-continuous cooking process shall be cooked to a temperature
  and for a time as specified under Paragraphs (A) through (C) of 3-401.11.

## **Non-Continuous Cooking**

A facility has approved written procedures to prepare pork chops using non-continuous cooking. Based on 3-401.14 (D), what final cook temperature will be required for the pork chops prior to serving to the customers?

At least 145°F for 15 seconds #18 Cooking

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-Example

### 3-402.11(B)(2) Parasite Destruction

...This section does not apply to:

(2) A scallop product consisting only of the shucked adductor muscles





- -Section 3-402.11 conveys the requirements for parasite destruction. Specifically, this section identifies specific freezing requirements for certain fish products. (variances regarding this allowance will no longer be needed).
- -The 2009 FDA Food Code defines "Molluscan Shellfish" as any edible species of fresh or frozen oysters, clams, mussels, or scallops, or edible portions of such species, except when the scallop product consists entirely of the shucked adductor muscle. The Food Code definition for molluscan shellfish originates from federal regulations (21 CFR 123.3) and has the same wording as that found in The Fish and Fishery Products Hazards and Controls Guidance.
- -The FDA Fish and Fishery Products Hazards and Controls Guidance: Fourth Edition does not identify a parasite hazard for scallops. The exemption for molluscan shellfish from parasite destruction, as indicated in Section 3-402.11 of the 2009 Food Code, also extends to scallop products that consist entirely of the shucked scallop adductor muscle.
- -For the 2013 Food Code, the language in this provision was amended to clarify that scallop products consisting solely of the shucked adductor muscle are excluded from the requirements for parasite destruction.

## **3-501.13** Thawing

- (E) REDUCED OXYGEN PACKAGED FISH that bears a label indicating that it is to be kept frozen until time of use shall be removed from the reduced oxygen environment:
  - (1) Prior to its thawing under refrigeration as specified in ¶(A) of this section; or
  - (2) Prior to, or immediately upon completion of, its thawing using procedures specified in ¶ (B) of this section.





- -2013 amended to add new § (E) specifying frozen fish packaged using a ROP method be removed from the ROP environment either prior to initiating thawing procedures under refrigeration as specified in § (A) or prior to, or immediately upon completion of, its thawing using procedures specified in § (B) of this section.
- -2017 amended §§'s 3-501.13 (A)-(C) to re-designate <u>from a Core Item to a Priority</u> <u>Foundation (Pf) item. (E) is a Core Item.</u>
- -Slide shows language for frozen fish; need to emphasize that all thawing is now Pf (2017 Supplement Change)
- -There is a risk of C. *botulinum* formation if packaged fish are thawed and then stored under refrigeration for extended period of time.
- -As a result, requiring the removal of frozen fish products from their vacuum package or otherwise reduced oxygen package environment prior to thawing under refrigeration, or immediately upon completion of thawing under running water, provides an extra margin of safety.
- -Therefore, Section 3-501.13 was amended with a new Paragraph (E). The new paragraph specifies that frozen fish packaged using a ROP method must be removed from the ROP environment, either prior to initiating thawing procedures under refrigeration as specified in Paragraph (A), or prior to, or immediately upon

completion of thawing under running water as specified in Paragraph (B) of this section.

-This new Paragraph applies to frozen fish that was packaged using a reduced oxygen packaging method AND that are labeled "Keep Frozen."

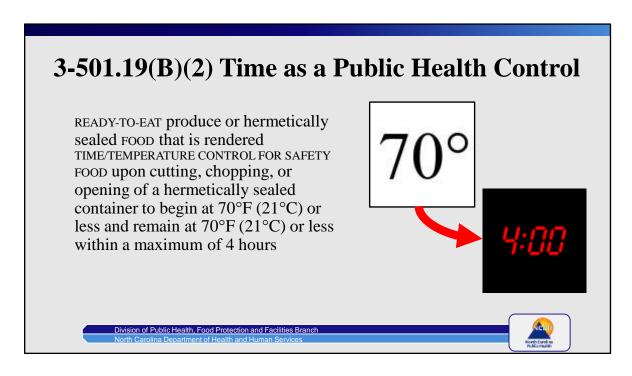
## **3-501.17(F) Date Marking**

- Date marking is not required for:
  - Live in-shell molluscan shellfish
  - Shelf-stable dry fermented sausages produced in USDAregulated facilities





- -2013 amended to add new § (F) that exempts raw, live in-shell molluscan shellfish from date marking and re-designated former § (F) as new § (G).
- -Amended existing subparagraphs 3-501.17 (F)(6) to clarify that the exemption from date marking for shelf stable dry fermented sausages produced in USDA-regulated facilities is not dependent on the product retaining the original casing: Renumbered existing  $\S$  (F)(6) as new  $\S$  (G)(6) as a result of the addition of new  $\S$  (F).
- -The Food Code was clarified to indicate that date marking is not required for raw, inshell molluscan shellfish. This is because LM proliferation is not a public health concern for raw, in-shell molluscan shellfish (ex. oysters, clams, mussels, scallops).



-The Conference for Food Protection (CFP) at its 2018 meeting recommended that section 3-501.19 be amended to allow raw agricultural commodities (RACs) that are cut on-site (such as tomatoes, melons, or leafy greens) or shelf-stable hermetically sealed containers (such as canned tuna) opened on-site have an initial temperature of 70°F or less when time without temperature control is used as a public health control for a maximum of 4 hours. Peer-reviewed scientific literature and pathogen modeling has shown *Salmonella spp.* and *L. monocytogenes* will not exceed a 1-log increase in growth when started and maintained at 70°F or less for up to 4 hours.

-Keep in mind that the 6-hour TPHC procedure cannot be used here.

#### **Existing Variance Approvals**

- Some are no longer necessary:
  - ROP raw meat/poultry stored at or below 41°F up to 30 days (HACCP plan required)
  - ROP cook-chill/sous vide food cooled to 41°F and stored there up to 7 days (HACCP plan required)
  - ROP of TCS food labeled with production time/date, held at or below 41°F and removed from ROP in the establishment within 48 hours after packaging (No HACCP plan required)
- HACCP plans previously approved by the NC Variance Committee remain approved.

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- -Certain variances no longer exist with the adoption of the 2017 FC. Counties can notify variance committee of places so a letter can be issued.
- -Approved HACCP plans are still required even though a variance is not for the first 2 bullets and the fact that no HACCP plan is required for the ROP 48 hrs or less. Freezing is not included as a step to pause the 48 hours. The intention is food is put in ROP and used or discarded within 48 hrs of packaging.
- -Counties do not have to re-review/re-approve what the VC has already done.

#### **Existing Variance Approvals**

- No longer necessary:
  - Approvals for refilling returnables with TCS foods
  - Approvals for hand sinks without 100°F water
- Action needed for existing approvals:
  - Notify <u>nevariancecommittee@dhhs.nc.gov</u> if your county needs a letter confirming the variance is not necessary.
  - No risk or penalty for having a variance approval that is not needed
- HACCP plans from chain/franchise establishments still go to Variance Committee.



- -Hand sinks without 100°F water will still be in violation of 5-202.12, but NC is making this a Core violation. No verification visit required.
- -If a county wants a letter "removing" an unnecessary variance approval, they need to email the VC the establishment name and owner/email address the original request would have come from and identify themselves (county).
- -NC HACCP Committee has not been needed in a long time. VC will take on the franchise/chain HACCP plans for now.
- -Remind attendees that Jennifer and Angie will assist counties with HACCP plan review if they are unfamiliar/untrained.
- -Verification visit on existing approved HACCP plans are important to help counties and state staff see if what has been approved is actually being done. Let Jennifer know if you need help with verification visits (HACCP plans).

## 3-502.11(D) Variance Requirement

Clarifies that the requirement for a variance to conduct ROP <u>only</u> applies to TCS foods that are prepared/packaged using methods that do not control for growth of and toxin formation by *Clostridium botulinum* and the growth of *Listeria monocytogenes* 



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-Paragraph (D) in Section 3-502.11 indicates when a variance is required for reduced oxygen packaging methods. The language in this section was revised to make it clear that a variance is required for reduced oxygen packaging only if TCS foods are packaged using ROP methods, and the method does not control for *growth of and toxin formation by Clostridium botulinum and the growth of Listeria monocytogenes*.

-Non-TCS foods that contain pH and aw intrinsic factors that prevent the growth of *C. botulinum* and *L. monocytogenes.* Therefore, these foods are exempt from ROP HACCP requirements of sections 3-502.11 or 3-502.12, provided they are received and not modified in the operation.

# 3-502.12(B) Reduced Oxygen Packaging Without a Variance

- ROP packages held at 41°F, shelf life extended from 14 days to 30 days
- HACCP plan is provided to the Regulatory Authority prior to implementation



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- -In the 2009 Food Code, 3-502.12 (B) allows for a 14-day shelf life when a TCS food is reduced oxygen packaged and there are two barriers that inhibit the growth of *Clostridium botulinum* and *Listeria monocytogenes*.
- -However, there is supporting data showing no growth of *C. botulinum* and possible minimal growth of *L. monocytogenes* for 30 days if a food has a pH below 5.0 and a temperature of 41°F or below.
- -Therefore, the maximum shelf life in 3-502.12(B) was extended from 14 days to 30 days.
- -A HACCP plan is required to be submitted and approved to the Regulatory Authority prior to implementation.

# 3-502.12(C) Reduced Oxygen Packaging Without a Variance

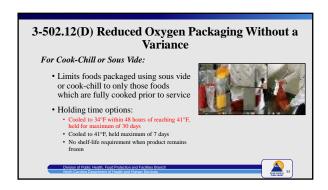
Except for FISH that is frozen before, during, and after PACKAGING and bears a label indicating that it is to be kept frozen until time of use, a food establishment may not PACKAGE FISH using a REDUCED OXYGEN PACKAGING method.



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- -The Food Code establishes a minimum regulatory requirement for controlling the risk of *C. botulinum* toxin formation in food establishments by stating that the ROP method of packaging fish cannot be done in the food establishment except if it is frozen before, during and after the process.
- -A control strategy used at the manufacturer level to ensure that the fresh fish packaged using an ROP method remains frozen is the use of a label clearly identifying that the product be held frozen throughout the distribution. This control approach is also a strategy that the Conference for Food Protection felt necessary to be adhered to at the retail level if ROP'ing frozen fish.
- -With this change to the 2017 Food Code, the exception in section 3-502.12(C) specifies that a food establishment cannot ROP fish unless it is frozen before, during and after packaging and bears a label indicating that it be kept frozen until time of use.



- -The codified language in the 2009 Food Code requires food that is packaged using a cook-chill or sous vide method to be cooked to heat all parts of the food to one of the time/temperature parameters specified in Section 3-401.11. These paragraphs provide time and temperature parameters that achieve an appropriate level of lethality. This change precludes an operator from undercooking a raw animal food when using a cook-chill or sous vide reduced oxygen packaging method.
- -There is data which shows no growth of *C. botulinum* during the first seven days of storage at 41°F or less. Additionally, *L. monocytogenes* growth is prevented since this pathogen would have been eliminated through the cook step during the sous vide or cook chill process.
- -FDA acknowledged that a strict reading of Section 3-502.12 could lead to the interpretation that you have 30 days at 34°F OR 7 days at 41°F for cook chill/sous vide holding, but no combination of the two temperature variations. Therefore, the Food Code allows cook-chill/sous vide to be:
  - -Cooled to 34°F and held a max of 30 days
  - -Cooled to 41°F and held a max of 7 days
- -Cooled to 34°F, moved to 41°F holding, and held at 41°F for a max of 7 days provided the product is not held under refrigeration for more than a total of 30 days.
- -Available science supports the safety of food held at 34°F for 30 days and at 41°F for 7 days. Holding foods for 7 days at 41°F within the 30-day window does not present an increased risk.

# 3-502.12(F) Reduced Oxygen Packaging Without a Variance

- If using ROP methods, a HACCP plan **is not** required when the package is held at 41°F or below for **no more than 48 hours.**
- Package must be labeled with production time and date.



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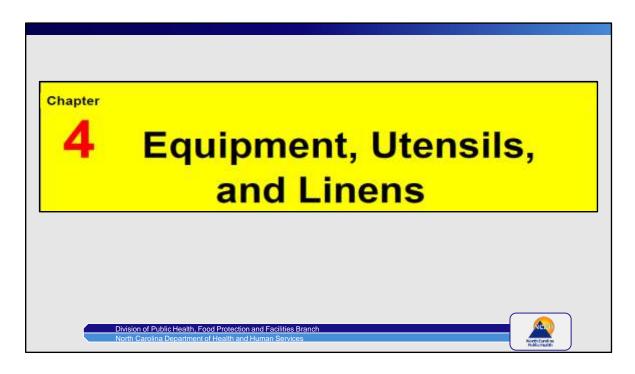
- -3-502.12(F) allows the ROP package to be held at 41°F or less for no more than 48 hours without the requirement of having a HACCP plan. Food must be removed from the packaging within 48 hours.
- -The package will need to be labeled with production time and date.

## **3-602.11(B)(2) Food Labels**

If made from two or more ingredients, a list of ingredients and subingredients in descending order of predominance by weight, including a declaration of artificial colors, artificial flavors and chemical preservatives, if contained in the FOOD. MORECUENTS KOMAINE LETTING, CONCIEN BREAST WITH HIS MEAN CHOCKNERGEST WITH HIS MEAT WITTER SCIENT LACTORY, SCIENTING (SALT, RETECUL CHOCKNERGES) WITH HIS MEAT WITTER SCIENT ACCOUNT (SALT, RETECUL CHOCKNERGES) WITH HIS MORECULAR COCCURN MOREOUS COSCIENT MORECULAR COCCURN MORECULAR COCCURN MORECULAR COCCURN HORSENG COCCURN LACTORY COCCUR HORSENG COUNTRY CONTROL MORECULAR COCCUR HORSENG COUNTRY CONTROL MORE COCCUR HORSENG COUNTRY CONTROL COCCUR CONTROL COCCUR CONTROL COCCUR CONTROL COUNTRY CONTROL CONTROL CONTROL CONTROL COUNTRY CONTROL CONTROL COUNTRY CONTROL CONTROL COUNTRY COUNTRY CONTROL COUNTRY CONTROL COUNTRY COUNTR



- -In the 2013 Food Code, the term "sub-ingredients" was added to this subparagraph to clarify that individual component ingredients of a main ingredient must be disclosed in the statement of ingredients.
- -This clarification helps to make clear that all individual ingredients in a packaged food will be disclosed in the statement of ingredients.



-Changes to Chapter 4 in the 2017 Food Code.

### 4-302.13 Temperature Measuring Devices, Manual and Mechanical Warewashing

- (A) In manual warewashing operations, a TEMPERATURE MEASURING DEVICE shall be provided and readily accessible for frequently measuring the washing and SANITIZING temperatures.
- (B) In hot water mechanical warewashing operations, an <u>irreversible registering</u> <u>temperature indicator</u> shall be provided and readily accessible for measuring the UTENSIL surface temperature.



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- -2013 Code Citation
- -Amended the tag line to add "mechanical warewashing"
- -Amended to re-designate the existing section into (A) and new (B) to <u>require the</u> <u>availability of irreversible registering temperature indicators</u>.
- -The availability of irreversible registering temperature indicators will enable food employees to verify that the hot water mechanical warewashing operation is achieving the appropriate utensil surface temperature for sanitization.
- -Both are Pf violations.

### 4-303.11 Cleaning Agents and Sanitizers

(A) Cleaning agents that are used to clean EQUIPMENT and UTENSILS as specified under Part 4-6, shall be provided and available for use during all hours of operation.

**(B)** Except for those that are generated on-site at the time of use, chemical SANITIZERS that are used to sanitize EQUIPMENT and UTENSILS as specified under Part 4-7, shall be provided and available for use during all hours of operation.





- -Amended to add **new Subpart 4-303**, Cleaning Agents and Sanitizers.
- -New Subpart and 4-303.11 added to clarify need for certain chemicals.

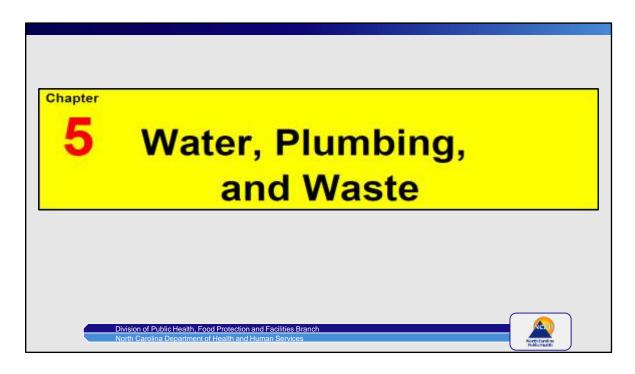
## 4-602.11 Equipment Food-Contact Surfaces and Utensils

- (A) EQUIPMENT FOOD-CONTACT SURFACES and UTENSILS shall be cleaned:
  - (1) Except as specified in ¶ (B) of this section, before each use with a different type of raw animal FOOD such as beef, FISH, lamb, pork, or POULTRY
- (B) Subparagraph (A)(1) of this section does not apply if the FOOD CONTACT SURFACE or UTENSIL is in contact with a succession of different types of raw MEAT and POULTRY each requiring a higher cooking temperature as specified under 3-401.11 than the previous type





- -2013 Food Code
- -Equipment food contact surfaces and utensils may become a source for allergen cross-contact if they contact a raw animal food that is a major food allergen followed by different types of raw animal foods without intermediate cleaning and sanitizing.
- -This change will delete the allowance for equipment and utensils to contact a raw animal food that is a major food allergen such as fish, followed by other types of raw animal foods without intermediate cleaning and sanitizing.
- -For example, you will not have to clean the food contact surface if preparing raw meat directly followed by raw poultry because the cooking temperature of poultry is higher than the cooking temperature of raw meats. However, if you preparing fish, and then subsequently used the same surface to prepare chicken, you would need to clean the surface first because fish is identified as a major food allergen.



-One change to Chapter 5 in the 2017 Food Code.

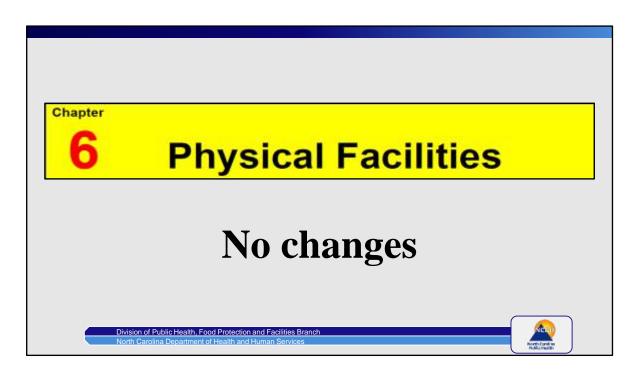
#### 5-202.12(A) Handwashing Sink, Installation

- A HANDWASHING SINK shall be equipped to provide water at a temperature of at least 100°F through a mixing valve or combination faucet.
- NC change to Core, previously Pf

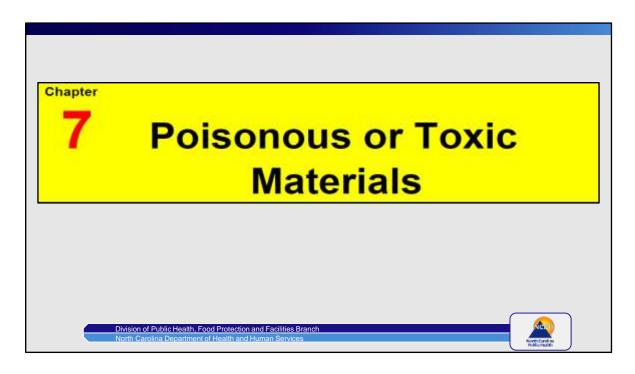




- -NC change regarding the 100°F water temperature at the handwashing sinks.
- -5-202.12(A) will now be core instead of Pf.
- -There are existing variances for water less than 100°F at handwashing sinks those variances will still be valid; no violation if following the variance. Facilities are still allowed to pursue variances if they choose to do so.



<sup>-</sup>There are no changes in Chapter 6.



-One change to Chapter 7 in the 2017 Food Code.

## 7-204.12 Chemicals for Washing, Treatment, Storage and Processing Fruits and Vegetables, Criteria

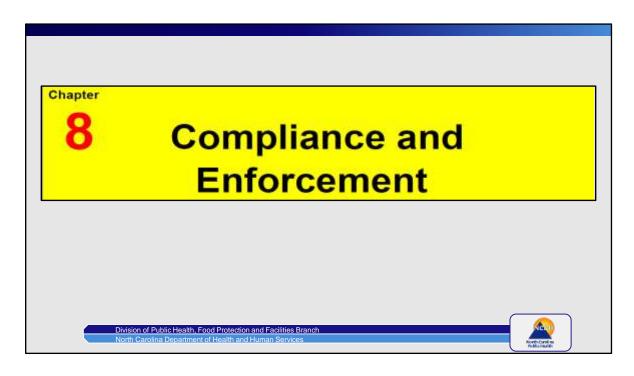
Chemicals, including those generated on-site, used to wash or peel raw, whole fruits and vegetables or used in the treatment, storage, and processing of fruits and vegetables shall:

- (A) Be an approved food additive listed for the intended use in 21 CFR 173, or
- (B) Be generally recognized as safe (GRAS) for this intended use, or
- (C) Be the subject of an effective food contact notification for this intended use (only effective for the manufacturer or supplier identified in the notification), and
- (D) Meet the requirements in 40 CFR 156 Labeling Requirements for Pesticides and Devices

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- -(A) 21 CFR 173 was in the old code
- -(B)-(D) are added options
- -This provision allows for the use of any permitted food ingredient, without regard to the approval type.
- -This can be marked in two different places on the inspection sheet depending on what you observe:
- -If the chemical used to wash/peel produce is unapproved, mark #28.
- -If the chemical used to wash/peel produce exceeds recommended concentration, mark #42.



-Changes to Chapter 8 in the 2017 Food Code.



- -2017 Food Code Supplement
- -Amended §8-103.12 to include new  $\P(A)$  addressing maintenance of APPROVED VARIANCE at the FOOD ESTABLISHMENT; Existing  $\P$ 's (A) and (B) renumbered to  $\P$ 's (B) and (C).
- -Must maintain variance on-site at the FSE variance committee has already requested this in past.

### 8-201.13(B) When a HACCP Plan is Required

Before engaging in REDUCED OXYGEN PACKAGING without a VARIANCE as specified under 3-502.12, a PERMIT applicant or PERMIT HOLDER shall submit a properly prepared HACCP PLAN to the REGULATORY AUTHORITY





- -2013 Food Code
- -Amended § 8-201.13 (B) to add new language to have the food establishment notify the Regulatory Authority through submission of a HACCP plan that they will be conducting ROP operations that conform with procedures in § 3-502.12.
- -Clarifies HACCP plan needs to be provided and approved before engaging in ROP like cook-chill or sous vide.

#### 8-404.11 Ceasing Operations and Reporting

- (C) Considering the nature of the potential hazard involved and the complexity of the corrective action needed, the REGULATORY AUTHORITY may agree to continuing operations in the event of an extended interruption of electrical or water service if:
  - (1) A written emergency operating plan has been APPROVED;
  - (2) Immediate corrective action is taken to eliminate, prevent, or control any FOOD safety risk and IMMINENT HEALTH HAZARD associated with the electrical or water service interruption; and
  - (3) The REGULATORY AUTHORITY is informed upon implementation of the written emergency operating plan.



- -2017 Food Code (Veronica Bryant has a checklist that is a great resource to help evaluate an emergency operating plan; franchise/chain establishments seeking an approval, should submit their information to Veronica)
- -Amended by adding subparagraphs 8-404.11 (C) (1)-(3) as new exception criteria indicating that the regulatory authority may agree to continuing operations during an extended water or electrical outage if written operational plans have been approved by the regulatory authority.
- -Imminent health hazards are often associated with emergencies related to extended interruptions of electrical or water service. The continued operation of some food establishments during emergencies related to power or water outages may serve to support communities and emergency response efforts. Subparagraphs(C)(1)-(3) provide criteria that, if met by the permit holder, allow the regulatory authority to decide if continued operation of a food establishment during extended interruptions of electrical or water service should be allowed.
- -Variances have already been approved using this portion of the Code to allow limited food service during emergencies.

## 8-405.11 Timely Correction

(B) Considering the nature of the potential HAZARD involved and the complexity of the corrective action needed, the REGULATORY AUTHORITY may agree to or specify a longer time frame, not to exceed:

**8** Verification

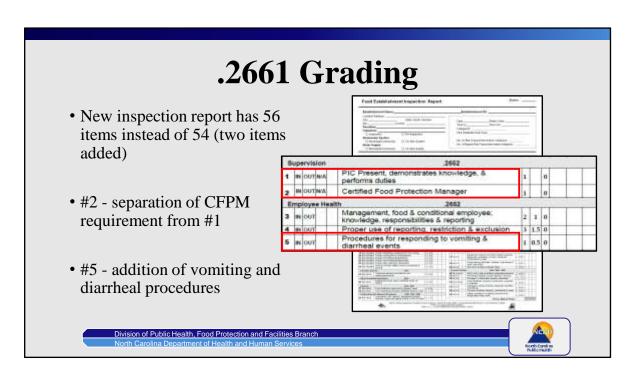
(1) 72 hours after the inspection, for the PERMIT HOLDER to correct violations of a PRIORITY ITEM; or

(2) 10 calendar days after the inspection, for the PERMIT HOLDER to correct violations of a PRIORITY FOUNDATION ITEM or HACCP PLAN deviations.

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-8-405.11: 10 days for Pf items and 72 hours for Priority items – not thought to be too cumbersome to meet since most Priority items are corrected during the inspection (ill employees, handwashing, cooking, cooling, reheating, cold and hot holding, etc.)
-Use the marking instructions and Food Code to determine P and Pf violations.



- -Inspection Report is Form 3-A in 2017 FDA Food Code
- -Re-ordering of paragraphs and minor changes in point values for (1), (2), (3), (5), (6), (9), (24), (32), (47), (50).

# **Marking Instructions**

- Changes were made to the existing marking instructions to reflect the addition of new item numbers and additional codes
- Overall format is the same with guidance for marking items IN/OUT, N/A, or N/O
- Make sure that the most current version of the marking instructions are being used in the field

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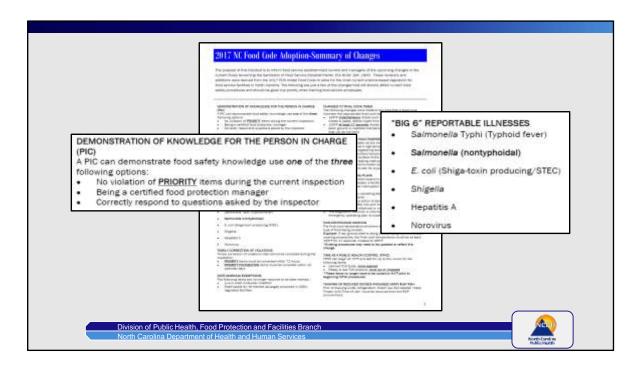
# **Training Materials**

- Several new handouts have been provided for guidance and training of operators:
  - Food Employee Reporting Agreement
  - Vomit & Diarrhea Clean-up Placard
  - Vomit & Diarrhea Clean-up Plan
  - 2017 Food Code Adoption-Summary of Changes
  - Demonstration of Knowledge Questions
- Other training materials are available on the DEH website



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- -Here is a screenshot of the Summary of Changes document for the 2017 Food Code adoption.
- -This document covers the major changes in NC by adopting the 2017 Food Code.
- -This document is designed to be a handout for PICs and REHSs to reference.

# **Progression Towards Compliance**

Item#	Citation	Observation	Correction for 1st Inspection	
3	2-201.11 (A-C) & (E)	Employee Health Policy does not include Salmonella (nontyphoidal)	Educate and provide the PIC an updated Employee Health acknowledgement form to properly inform food employees.	
5	2-501.11	Establishment does not have written procedures for the clean-up of vomiting & diarrheal events.	Educate and provide the PIC a template plan to be implemented.	
48	4-302.13 (B)	An establishment uses hot water as the sanitization method in their mechanical warewashing operation and they do not have an irreversible registering temperature indicator.	Educate the PIC on appropriate equipment that they must provide in order to comply.	

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-Use the guidance in this chart to work with the PIC on the first inspection to achieve compliance with these new requirements.



## **Evaluating Demonstration of Knowledge**

- In this activity, we will discuss the questions listed under 2-102.11(C).
- For each question, you will be asked to provide an example of how you would determine if the PIC has adequate knowledge of the food safety concept.

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-Read and discuss information on the slide.

1) Describe the relationship between the prevention of foodborne disease and the personal hygiene of a food employee.

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#### **Possible Questions**

- What do you do when an employee calls in sick?
- What do you do if an employee comes to work sick or gets sick at work?
- When do you restrict/exclude ill employees?
- How do you respond to vomit or diarrheal incidents that occur at work?
- What actions do you take if an employee tells you they have been diagnosed with an illness communicable through food? Such as Norovirus, E. coli, Salmonella, etc.

#### **PIC Answer**

• Employees with poor personal hygiene can contaminate food and food contact surfaces which could cause illnesses.

2) Explain the responsibility of the Personin-Charge for preventing the transmission of foodborne disease by a food employee who has a disease or medical condition that may cause foodborne disease.

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#### **Possible Questions**

- What do you do when an employee calls in sick?
- What do you do if an employee comes to work sick or gets sick at work?
- When do you restrict/exclude ill employees?
- How do you respond to vomit or diarrheal incidents that occur at work?
- What actions do you take if an employee tells you they have been diagnosed with an illness communicable through food? Such as Norovirus, E. coli, Salmonella, etc.

- Sick employees are sent home and not allowed to work.
- I follow what is written in the employee health policy.
- I will contact the Health Department for help.
- I will contact my corporate office as required in our internal policy. Employee is not allowed to work.
- #3 on inspection report per the marking instructions

3) Describe the symptoms associated with the diseases that are transmissible through food.

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#### **Possible Questions**

- Can you name to symptoms that are associated with diseases that are transmissible through food?
- Do you have these symptoms posted anywhere? Are they listed in a policy?

- Jaundice, diarrhea, vomiting, nausea, sore throat with a fever, and a lesion containing pus such as a boil or infected wound that is open or draining and is on the hands or wrists.
- #3 on inspection report per the marking instructions

4) Explain the significance of the relationship between maintaining the time and temperature of Time/Temperature Control for Safety Food (TCS) and the prevention of foodborne illness.

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#### **Possible Questions**

Why do time-temperature control for safety (TCS) foods need to be kept out of the "danger zone?"

Why is it unsafe to keep TCS foods at room temperature too long?

#### **PIC Answers**

 If food is kept in the temperature danger zone (between 41°F and 135°F) longer than four hours, it is considered time-temperature abused and could result in a foodborne illness if eaten. 5) Explain the hazards involved in the consumption of raw or undercooked meat, poultry, eggs, and fish.

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#### **Possible Questions**

- What are the hazards of serving raw or undercooked TCS foods?
- What TCS food do you serve raw or undercooked?
- Do you have a consumer advisory for these foods? How are customers notified?

- Raw or undercooked meat, poultry and eggs can contain microorganisms that could cause a foodborne illness.
- Eggs, hamburgers, shellfish, raw eggs in Caesar dressing, etc.
- Consumer advisory on menu, placard, table tents, etc.

6) State the required food temperatures and times for safe cooking of TCS food including meat, poultry, eggs, and fish.

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#### **Possible Questions**

- What are the cooking procedures for \_\_\_\_\_?
- Describe your methods for preparing \_\_\_\_\_\_? How do know if TCS foods are cooked to the proper temperature?
- To what temperature do you cook \_\_\_\_\_?
- What do you do with foods that aren't at the proper temperature? How is this verified?
- Do you have thermometers for checking the temperatures of TCS foods?
- How often are your thermometers calibrated?

- PIC provides the required final cook temperatures
- Finish cooking foods that do not meet final cook temperature when checked
- Properly demonstrates how to use and calibrate a food thermometer

7) State the required temperatures and times for the safe refrigerated storage, hot holding, cooling, and reheating of TCS food.

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#### **Possible Questions**

- What are your hot holding procedures? What is the required temperature?
- What do you do with foods that aren't at the proper temperature?
- What temperature do you keep cold foods? What is the required temperature?
- What are your reheating procedures? How is this verified?
- What foods do you cool?
- What are your cooling procedures? What are the cooling parameters?
- How do you know that foods cool properly?
- Do you have thermometers for checking the temperatures of TCS foods?
- How often are your thermometers calibrated?

- 135°F or above for hot TCS foods, 41°F or below for cold TCS foods
- Discard any foods that have been in the temperature danger zone for more than 4 hours
- Reheat foods to at least 165°F within 2 hours
- Discard foods that have not reached at least 165°F within 2 hours
- Foods cooled from 135°F to 70°F or below within 2 hours, then from 70°F to 41°F or below within a total of 6 hours
- Foods cooled using an ice bath, small/thin quantities, ice paddle, adding ice as an

- ingredient, etc.
- Check the foods during the cooling process to ensure proper cooling, cooling logs, dataloggers, etc.
- Properly demonstrates how to use and calibrate a food thermometer

- 8) Describe the relationship between the prevention of foodborne illness and the management and control of the following:
  - (a) Cross-contamination,
  - (b) Hand contact with ready-to-eat foods,
  - (c) Handwashing, and
  - (d) Maintaining the food establishment in a clean condition and in good repair

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#### **Possible Questions**

- Why should food employees prevent cross-contamination?
- What steps do you take to prevent cross-contamination?
- What do food workers use to handle RTE foods?
- Where and when do food workers wash their hands?
- Describe the employee handwashing procedures.
- What is your monitoring procedures for handwashing?
- Why is it important to have handwashing sinks located near all food preparation areas?

- Cross-contamination, bare hand contact with ready-to-eat foods, lack of hand washing, and an unclean restaurant can all contribute to the contamination of food and food contact surfaces which could lead to foodborne illness.
- Proper food storage in refrigerated units and in

- storage areas.
- Separation of raw and ready to eat food prep using space or time, along with proper cleaning and sanitizing procedures.
- Use gloves, tongs, deli paper, etc.
- Handwashing signs posted at hand sinks, handwashing monitored by PIC, training on when to wash hands, placards posted on the wall reminding employees when to wash hands.
- A clean establishment can prevent contamination of food and food contact surfaces.

9) Describe foods identified as major food allergens and the symptoms that a major food allergen could cause in a sensitive individual who has an allergic reaction.

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#### **Possible Questions**

- Can you name any menu items in your establishment that contain food allergens?
- Do you know some of the common symptoms of an allergic reaction from a food allergy?
- What steps do you take to train employees on food allergen awareness?
- Why is it important to train employees on food allergens?
- Describe how you train your employees on the eight major food allergens/understand food allergen ingredients and labeling/avoid cross-contact during food preparation and service.

- Dairy products, egg products, wheat, soy products, etc.
- Common symptoms could include; itching in and around the mouth, face, or scalp, tightening in the throat, wheezing or shortness of breath, hives, swelling of the face, eyes, hands, or feet,

- gastrointestinal symptoms including abdominal cramps, vomiting or diarrhea, loss of consciousness and possibly death.
- Placards posted reminding staff of common allergens, list of allergens in menu items offered, train staff to direct questions about allergens to the PIC, chef, or other designated person.

- 10) Explain the relationship between food safety and providing the equipment that is:
  - a) Sufficient in number and capacity, and
  - b) Properly designed, constructed, located, installed, operated, maintained, and cleaned

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#### **Possible Questions**

- What are the food safety hazards associated with equipment not clean or in good repair?
- Why is it important to have handwashing sinks located near food preparation areas?
- Why is important to have the capacity of equipment to properly cold hold/hot hold TCS foods?
- What are the hazards for not having properly operating equipment (freezers, refrigerators, prep units, warewashing etc.)?

- It is important to provide equipment that is designed to enhance workflow to minimize the time food spends in the temperature danger zone, the number of times food is handled, and the possibility of cross contamination.
- Maintaining cleanliness and sanitation will help

prevent food from becoming contaminated and keep away pests.

11) Explain correct procedures for cleaning and sanitizing utensils and food-contact surfaces of equipment.

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#### **Possible Questions**

- How do you clean and sanitize equipment and utensils?
- What kind of sanitizer do you use and how do you determine its concentration?
   What is the contact time for the sanitizer?
- What is your procedure for wash, rinsing, sanitizing in a 3-compartment sink?
- What kind of sanitizer does your dishmachine use? Do you know how to check the sanitizer (or hot water sanitizing temperature)?
- How do you clean CIP equipment?

- Wash surface with hot soapy water, rinse, then sanitize. I leave the sanitizer on the surface for \_\_\_\_\_\_\_\_. (double-check using manufacturer's specs)
   I use sanitizer. The concentration is supposed to be
- ppm. (let them demonstrate how to check the concentration)
- Pre-scrape, wash, rinse, sanitize, air-dry
- Chemical or hot water (let them demonstrate how to check the sanitizer, do they have an irreversible thermometer for hot water sanitization?)
- For CIP, same as bullet 1 above

12) Identify the source of water used and measures taken to ensure that is remains protected from contamination such as providing protection from backflow and precluding the creation of cross-connections.

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#### **Possible Questions**

- What is your water source? If on a well, has the water been tested as required? Where is the well located?
- What is your source of ice?
- What steps do you take to avoid cross-connections in this facility? Do you know what a cross-connection is? Do they know where backflow prevention devices are located?

- · Municipal water or well
- Made on-site or purchased from \_\_\_\_\_\_\_.
- Cross-connection is a direct connection between a potable water source and a non-potable water source where backflow of contaminants into the potable water supply is possible.
- Cross-connections prevented through air-gaps, backflow prevention devices.

13) Identify poisonous or toxic materials in the food establishment and the procedures necessary to ensure that they are safely stored, dispensed, used, and disposed of according to Law.

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#### **Possible Questions**

- How do you store poisonous or toxic materials?
- What toxic chemicals are used in the establishment?
- Where are toxic chemicals stored in the facility?
- How do you dispose of toxic chemicals?

- Stored in the chemical storage closet, in the mop area, in the dish area on a low shelf, etc.
- Disposed of down the drain, in the garbage, on the ground outside?

14) Identify critical control points in the operation from purchasing through sale or service that when not controlled may contribute to the transmission of foodborne illness and explaining the steps taken to ensure that the points are controlled in accordance with the requirements of this Code.

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#### **Possible Questions**

 What are the CCP's in your operation and what steps are you taken to ensure that they are controlled from receiving to serving.

### PIC Answers (could vary between different types of facilities)

- Purchasing Source of food is
- Receiving We inspect delivery and refrigerate perishables ASAP, receive food at 41°F.
- Storing TCS food storage is 41°F or below, or frozen.
- Preparing Work with small batches, clean and sanitize utensils and work area, practice good personal hygiene and store food properly.
- Cooking Cook to correct internal temperatures.

- Holding Hold food at 41°F or below, or 135°F or above.
- Cooling Use two-step cooling method.
- Reheating Reheat items to at least 165°F for 15 seconds within 2 hours.
- Serving Use clean and sanitized utensils, carry food properly, avoid cross-contamination and bare hand contact.

15) Explain the details of how the Person-in-Charge and food employees comply with the HACCP plan if a plan is required by the law, this Code, or an agreement between the regulatory authority and the food establishment.

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#### **Possible Questions**

- Do you have a HAACP plan? How are you complying with your HACCP Plan? What records do you have for your HACCP Plan?
- Do you do any specialized processes in your facility? Do you have a variance? Do you have records?
- Do you use TPHC? Do you have written procedures?
- Do you use non-continuous cooking? Do you have approved written procedures?
- Do you have any SOPs?

#### **PIC Answers**

 PIC should be able to respond to the questions above and provide records/paperwork when required.

- 16) Explain the responsibilities, rights, and authorities assigned by this Code to the:
  - (a) Food employee;
  - (b) Conditional employee;
  - (c) Person-in-Charge
  - (d) Regulatory authority

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#### **Possible Questions**

 What are the responsibilities of each food employee and the Person in Charge to keep food safe in this facility?

- The PIC has the responsibility to keep unauthorized personnel out of food preparation, food storage, and dishwashing areas.
- The PIC and employees are responsible for focusing on the five most common risk factors responsible for foodborne illness:
  - Purchase food from safe sources
  - Cook food adequately
  - Hold food at proper temperatures
  - Clean and sanitize equipment

- Practice good personal hygiene
- All employees are required to report symptoms or illness to the PIC in accordance with the facility's employee health policy.
- The regulatory authority is required to ensure that the facility is operating in compliance with the Code in order to keep food safe and prevent foodborne illness.

17) Explain how the Person-in-Charge, food employees, and conditional employees comply with reporting responsibilities and exclusion or restriction of food employees.

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#### **Possible Questions**

- What is the role of the PIC to ensure that employees properly report certain information abut their health status as it relates to diseases that are transmitted by food?
- How does the PIC verify that food employees and conditional employees are informed of their responsibility to report such information?
- Does your facility have an employee health policy/signs/pocket cards/placard?
- #3 on inspection report per the marking instructions



- -The main thing to remember with this new requirement is that most of the questions that are will be asking for Demonstration of Knowledge are included in the list of questions that you ask the PIC during a normal risk-based inspection.
- -You will be getting a lot of this information through standard questioning (QA field assessment).
- -Remember that these questions will be required when used as the option for compliance with Demonstration of Knowledge requirement. However, assessment of these items should be done during each inspection, regardless if they meet one of the other two options for Demonstration of Knowledge.
- -Thank you for participating in this training.
- -Please reach out to your Regional Specialist if you have any questions.