

Industry Food Safety Challenges in The Crazy-quilt of Governmental Codes

Chuck Catlin R.S. M.P. A

Director of Quality Assurance & Food Safety

P.F. Chang's China Bistro Inc.



Who is Responsible For Food Safety at Foodservice and Retail food Stores?

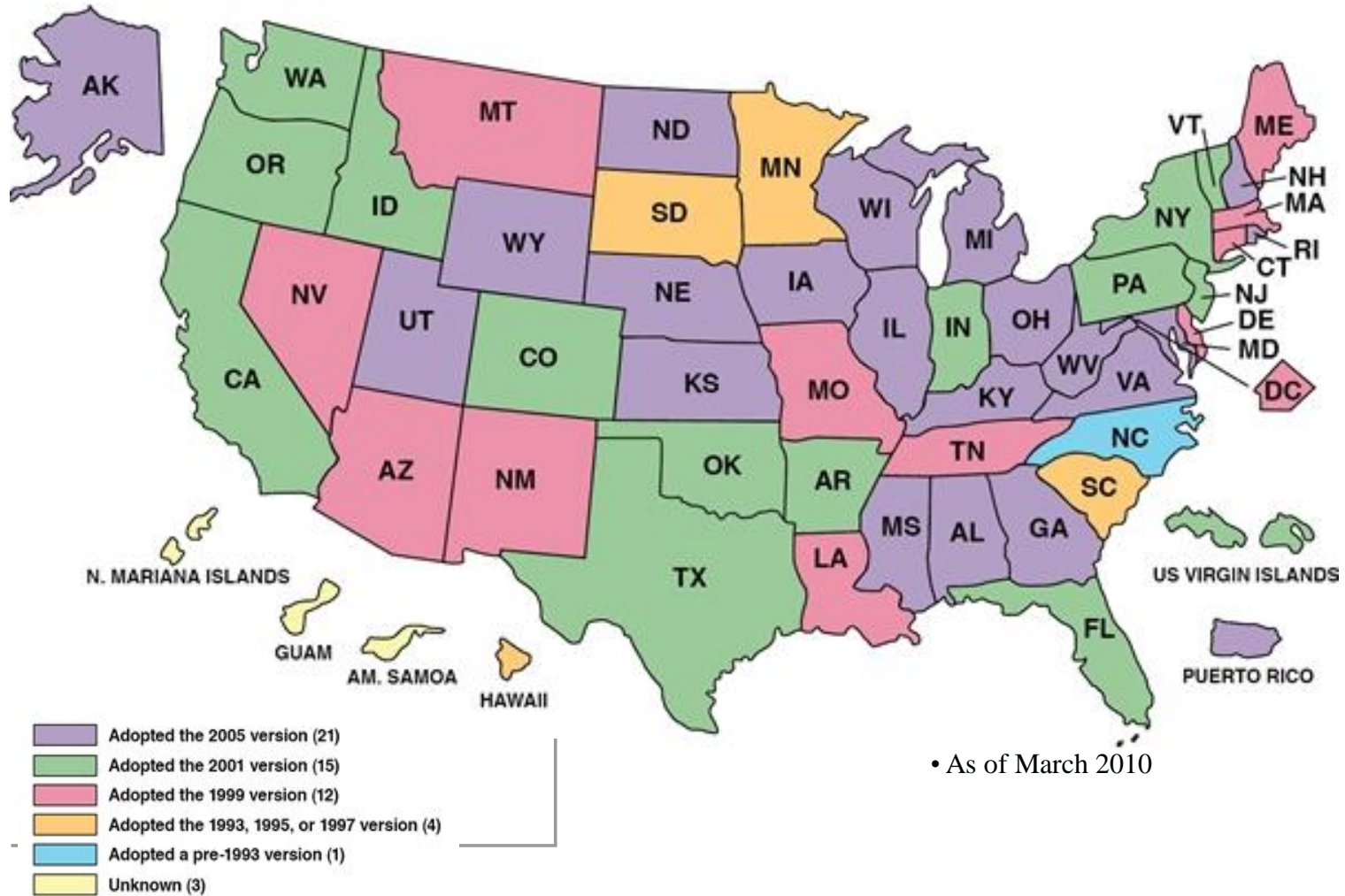
- Government?
- Academia?
- General Public?
- Industry?

- Answer.....INDUSTRY IS RESOPNSIBLE

What Do I mean by Crazy-quilt of Government Codes?

- There are over 3000 units of government and many of them have a role in food regulation.
- Numerous jurisdictions have “their version” of the food code.
- Each has their version highlighting their favorite violations that are prominently noted on their forms.

Forty-nine (49) of the 50 States adopted codes patterned after the 1993, 1995, 1997, 1999, 2001 or 2005 versions of the Food Code. **These represent 95.5% of the US population.**



The Crazy-quilt of Governmental Codes

Source: FDA.gov

With all these codes how do you know what the rules are?

- We have shared responsibilities at the national level between CDC, FDA, USDA and EPA.
- At the state level you have either the state health department or the department of agriculture.
- At the local level you can have the county or the local municipality regulating food safety.
- What you have is thousands of units of government inspecting food service operations.



Who Owns Food Safety?

- FDA creates the food code as if they are choosing a new Pope:
 - It starts out with recommendations from the Conference for Food Protection
 - After starting the revision it's a secret process
 - FDA makes arbitrary decisions despite the fact that topics are still in committees. (i.e. new terms)
- States then “tweak” the code to meet current laws or traditions.
- Counties and municipalities then “massage” the code.

What Else?

- Each jurisdiction has their own inspection form.
- Inspector competencies vary from Registered Sanitarians to the mayor's grandson Billy Joe-Bob Buford.

What kind of training is required for regulatory inspectors?

- There is currently no standard training required.
- And no required CEU's.

The Process is Broken!

What Are The solutions?

- One federal agency handling food safety
- One Food Code for the entire country
- Arizona HACCP Alliance had the solution

What is the definition of Food Safety?

- Active managerial control of the risk factors.

What was the Arizona HACCP Alliance?

- It was a partnership between the government and industry to see if regulatory verification programs can be developed to focus on the active managerial control of CDC risk factors.
- The partnership included industry training to help retail food establishments effectively use food safety management systems. Code name....HACCP

The Arizona HACCP Alliance

- Enhance communication between regulatory and industry partners.
- Develop a regulatory inspection methodology that:
 - Encourages industry to create food safety systems
 - Reinforces industry developed systems
 - Improve consistency in regulatory inspections
 - Train inspectors / Industry
 - Measuring active managerial control of the risk factors

ARIZONA HACCP ALLIANCE PROJECT

PROJECT DESIGN AND METHODOLOGY

Arizona HACCP Alliance (1997)

- FDA (Regional Food Specialist)
- AZ Department of Health Services
- 5 AZ Counties:
 - Coconino
 - Maricopa
 - Pima
 - Pinal
 - Yavapai
- Industry Participants

AZ HACCP ALLIANCE PROJECT'S SCOPE

Facilities

• Darden		
-	Red Lobster	12
-	Olive Garden	12
• Jack in the Box		114
• Taco Bell		113
<hr/>		
	TOTAL	251

AZ HACCP ALLIANCE PROJECT'S SCOPE

Facilities

- **Independent Restaurants:**
 - **Participation in Workshops** **38**

HACCP ALLIANCE PROJECT DESIGN

- **Participants Were Divided Into Two Tiers:**
 - **Tier One – have food safety systems**
 - **System Verification**
 - **Tier Two – one or more components missing**
 - **Risk Control Plans**

FOOD SAFETY ACTION PLANS DATA ANALYSIS - TIER TWO

- **Industry Food Safety Action Plan/Time Lines:**
 - **38 Independent Industry Operations Represented @ Workshops**
 - **38 Of These Independent Operators Developed Food Safety Action Plans @ the Workshops (100%)**
 - **25 Independent Operators Attempted to Implement their Action Plans (66%)**

FOOD SAFETY ACTION PLANS DATA ANALYSIS - TIER TWO

- **Industry Food Safety Action Plan/Time Lines:**
 - **22 Independent Operators were successful in implementing some aspects of their action plan within the 6 month period (58%)**
 - **18 Independent Operators successfully developed management systems to control a specific foodborne illness risk factor within their facility (47%)**

FOOD SAFETY ACTION PLANS DATA ANALYSIS - TIER TWO

- **Industry Food Safety Action Plan/Time Lines:**
 - **12 Independent Operators developed additional action plans to address other foodborne illness risk factors (31.5%)**

FOOD SAFETY ACTION PLANS DATA ANALYSIS - TIER TWO

- **Independent Restaurant Operators comments on the process:**
 - **Understood the HACCP management principles.**
 - **The process approach to HACCP worked best for their operations.**
 - **Human behavior issues were the most challenging issue in developing / implementing a food safety system.**
 - **Successful implementation requires management commitment to the process.**
 - **Regulatory support is essential for maintaining industry's commitment to the process.**

ARIZONA HACCP ALLIANCE PROJECT

**TIER ONE
INDUSTRY OPERATIONS
WITH
FOOD SAFETY MANAGEMENT SYSTEMS**

SYSTEMS VERIFICATION METHODOLOGY - TIER ONE

Interview Session with Industry Operators:

- Are the 7 principles of HACCP effectively used**
- Regulatory understood the system**
- Regulatory does NOT change the system**

AVERAGE INSPECTION TIME

- **RED LOBSTER**
 - 1st Quarter (66 Minutes)
 - 4th Quarter (61 Minutes)
- **OLIVE GARDEN**
 - 1st Quarter (67 Minutes)
 - 4th Quarter (56 Minutes)

AVERAGE INSPECTION TIME

- **JACK IN THE BOX**
 - 1st Quarter (59 Minutes)
 - 4th Quarter (60 Minutes)
- **TACO BELL**
 - 1st Quarter (44 Minutes)
 - 4th Quarter (46 Minutes)

DATA ANALYSIS

TOTAL OBSERVATIONS

Total number of Items Verified 7900

**Total number/(%) In Compliance with
Industry Standards 7200 (92%)**

Total number of Regulatory Items Verified 4574

**Total number/(%) In Compliance with
Regulatory Standard 4321 (94%)**

**Total number/(%) of items
NOT OBSERVED 1441 (15%)**

DATA ANALYSIS

OBSERVATIONS - COOKING PROCESS

Total number of Items Verified	600
---------------------------------------	------------

Total number/(%) In Compliance with Industry Standard	578 (96%)
--	------------------

Total number/(%) In Compliance with Regulatory Standards	587 (98%)
---	------------------

Total number/(%) NOT OBSERVED	367 (38%)
--------------------------------------	------------------

DATA ANALYSIS

OBSERVATIONS - COOLING PROCESS

Total number of Items Verified	85
Total number/(%) In Compliance with Industry Standards	74 (87%)
Total number/(%) In Compliance with Regulatory Standards	82 (96%)
Total number/(%) NOT OBSERVED	255 (75%)

DATA ANALYSIS

OBSERVATIONS - COLD HOLD PROCESS

Total number of Items Verified	848
Total number/(%) In Compliance with Industry Standards	728 (86%)
Total number/(%) In Compliance with Regulatory Standards	809 (95%)
Total number/(%) NOT OBSERVED	26 (3%)

DATA ANALYSIS OBSERVATIONS - HANDWASHING

Total number of Items Verified	545
Total number/(%) In Compliance with Industry Standards	511 (94%)
Total number/(%) In Compliance with Regulatory Standards	518 (95%)
Total number/(%) NOT OBSERVED	36 (6%)

AZ HACCP ALLIANCE DATA TRENDS

- **High % Compliance with Industry Critical Limits for Identified CCPs.**
- **Even Higher % Compliance with Regulatory Critical Limits Established for these same CCPs**

AZ HACCP ALLIANCE TAKE AWAYS

- **High % of Not Observed on key CCPs may indicate need to vary inspection times**
- **Significant number of items would NOT be verified as part of traditional routine inspections because they are not specific Food Code Items.**

AZ HACCP ALLIANCE TAKE AWAYS

- **The Pilot Study raised some interesting insights into potential flaws in the traditional inspection form as an accurate data collection tool for assessing the active managerial control of risk factors at the retail level.**

AZ HACCP ALLIANCE TAKE AWAYS

- **For industry operations that have food safety management systems, the traditional inspection form provides very little information on the effectiveness of their systems and is a poor communication tool.**

AZ HACCP ALLIANCE TAKE AWAYS

- **Custom Verifications of industry food safety management systems did not increase the inspection time.**

AZ HACCP Alliance SUMMARY

- A program where industry and government were working together.
- The program used industry established systems.
- The health inspector and industry management were speaking to front line employees using the same terms.
 - When the health inspector and management used the same terms a powerful impactful message was sent to front line employees.

- We saw significantly higher compliance rates
 - Better behaviors leads to improved food safety
- These effective “custom” inspections don’t take any additional staff time and may be faster over time

What Happened to the Alliance?

- Some of the many of our learning's were put into the state code adoption (1999)
- The program worked!
- Industry is willing to pay for this type of system.
- So let's go! Let's 86 "The Crazy Quilt of Government Codes"

Questions

ARIZONA/RED LOBSTER HACCP PROCEDURES AND SYSTEMS GUIDE

This guide is intended to assist a Regulatory Official in identifying Red Lobster procedures and systems to verify that we are in compliance with the new Arizona Food Code. Please leave the card at the restaurant.

Cooking, Holding & Cooling Temperature Controls

- y n n/o n/a Potentially hazardous foods cooked to proper temperature. **(Gr. Beef \geq 160F; Fish & Shrimp \geq 150F; Chicken, Soup, Stuffed items and Rice \geq 165F, Beef/Steaks \geq 150F.)**
- y n n/o n/a Cooked potentially hazardous foods held at 130°F or above. **(Rice and butter on line held at \geq 150F; Chowder and Gumbo in service area held at \geq 150F; all items labeled with discard time.)**
- y n n/o n/a Potentially hazardous foods reheated properly. **(Rice and Soup \geq 165F.)**
- y n n/o n/a Cooked potentially hazardous foods cooled properly. **(Rice and Linguini immediately cooled in ice water bath to \leq 40F within 4 hours.)**
- y n n/o n/a Potentially hazardous foods held at proper cooling temperature. **(Rice, Soup, Hot Butter and Bread held at \geq 150F.)**

Food/Equipment	Temp	Food/Equipment	Temp
Chicken/Grill		Rice, Linguini/Walk-in	
Fish/Grill		Whipped Butter/Service Area	
Gumbo/Service Area		Freezers	
Chowder/Service Area		Line Boxes	

Employee Health & Hygiene

- y n n/o n/a Employees hands and exposed arms clean and properly washed.
- y n n/o n/a Hand washing facilities available and functional.
- y n n/o n/a Employees using proper hand and arm cleaning procedures.
- y n n/o n/a Live animals handled properly. **(Lobsters)**
- y n n/o n/a Person in charge requires employees to report illnesses.
- y n n/o n/a Employees eating, drinking, or using tobacco only in designated areas. **(Covered drink cups with straw stored below work area.)**
- y n n/o n/a Persons with discharges from eyes, nose and mouth prohibited from working with exposed food.
- y n n/o n/a Food handlers preventing contamination of ready-to-eat food by limiting bare hand contact to approved methods. **(Disposable gloves or tongs used.)**
- y n n/o n/a Food handlers tasting food properly.

Food Condition & Source

- y n n/o n/a All foods are from approved sources, safe, unadulterated and honestly presented
- y n n/o n/a Food received in proper condition and temperature.
- y n n/o n/a Shellfish tags kept as required.

Prevention of Contamination

- y n n/o n/a Food separation, packaging, segregation and substitution methods are preventing food and ingredient contamination.
- y n n/o n/a Effective food contact controls are preventing food contamination. **(Color coded tong system in use.)**
- y n n/o n/a Food contact surfaces and equipment are cleaned frequently and properly to prevent food contamination. **(Red bucket sanitizer at 100 ppm.)**
- y n n/o n/a Food contact surfaces sanitized properly and approved equipment being used.

Date Marking & Disposal

- y n n/o n/a Foods are correctly date marked.

Consumer Advisories & Protection

- y n n/o n/a Consumer advisories conducted properly. **(Present in menu and/or table tent when applicable.)**

Demonstration of Food Safety Knowledge

- y n n/o n/a Person in charge assigned, and demonstrates adequate food safety knowledge applicable to operation. **(Manager and Assistant Manager(s) should have NRA ServSafe Certification and know Vital Few and Vital Knowledge.)**

Time Only as a Food Safety Control

- y n n/o n/a Food holding and storage time is within food safety limits. **(N/A-Time only is not an approved control at Red Lobster.)**

HACCP Plan Followed

- y n n/o n/a HACCP plan followed properly. **(Quick-Check in use and temperatures recorded on HACCP forms.)**

Standard Operating Procedures

- y n n/o n/a Other critical and non critical items in compliance (if not, specify violations under comment section).

NEED MORE INFORMATION?

Please call 407-245-5162 if you have any questions on Red Lobster procedures, products, or systems.

ARIZONA/OLIVE GARDEN HACCP ALLIANCE GUIDE

This guide is intended to assist a Regulatory Official in identifying Olive Garden procedures and systems to verify that we are in compliance with the new Arizona Food Code. Please leave the card at the restaurant.

Cooking, Holding & Cooling Temperature Controls

- y n n/o n/a Potentially hazardous foods cooked to proper temperature. **(Gr. Beef $\geq 160F$; Fish & Shrimp $\geq 150F$; Chicken, Soup, and Lasagna, Stuffed Mushrooms $\geq 165F$, Beef/Steaks $\geq 150F$.)**
- y n n/o n/a Cooked potentially hazardous foods held at 130°F or above. **(Lasagna, Manicotti, Cannelloni and hot foods in “Crescor” holding units $\geq 150F$.)**
- y n n/o n/a Potentially hazardous foods reheated properly. **(Soups and Sauces $\geq 165F$ using boiling water in tilt-kettle.)**
- y n n/o n/a Cooked potentially hazardous foods cooled properly. **(Pastas, soups and sauces immediately cooled in ice water bath (1/3 water, 1/3 ice & 1/3 product) to $\leq 40F$ within 4 hours. Bag chill soups and sauces stored with no more than 4 per sheet tray in walk-in. Pastas placed on sheet pans for storage in walk-in.)**
- y n n/o n/a Potentially hazardous foods held at proper cooling temperature.

Food/Equipment	Temp	Food/Equipment	Temp
Chicken/Grill-Hot		Pastas/Walk-in	
Fish/Grill-Hot		Line Boxes	
Soups/Service Area-Hot		Freezers	
Lasagna, Manicotti/Crescor-Hot		Lasagna, Manicotti/Steam tables-Hot	

Employee Health & Hygiene

- y n n/o n/a Employees hands and exposed arms clean and properly washed.
- y n n/o n/a Hand washing facilities available and functional.
- y n n/o n/a Employees using proper hand and arm cleaning procedures.
- y n n/o n/a Live animals handled properly. **(N/A)**
- y n n/o n/a Person in charge requires employees to report illnesses.
- y n n/o n/a Employees eating, drinking, or using tobacco only in designated areas.
- y n n/o n/a Persons with discharges from eyes, nose and mouth prohibited from working with exposed food.
- y n n/o n/a Food handlers preventing contamination of ready-to-eat food by limiting bare hand contact to approved methods. **(Disposable gloves or tongs used.)**
- y n n/o n/a Food handlers tasting food properly.

Food Condition & Source

- y n n/o n/a All foods are from approved sources, safe, unadulterated and honestly presented
- y n n/o n/a Food received in proper condition and temperature.
- y n n/o n/a Shellfish tags kept as required. **(N.A. at Olive Garden)**

Prevention of Contamination

- y n n/o n/a Food separation, packaging, segregation and substitution methods are preventing food and ingredient contamination.
- y n n/o n/a Effective food contact controls are preventing food contamination. **(Color coded tong system in use. Yellow sheet trays for raw chicken.)**
- y n n/o n/a Food contact surfaces and equipment are cleaned frequently and properly to prevent food contamination. **(Red bucket sanitizer at 100 ppm.)**
- y n n/o n/a Food contact surfaces sanitized properly and approved equipment being used.

Date Marking & Disposal

- y n n/o n/a Foods are correctly date marked.

Consumer Advisories & Protection

- y n n/o n/a Consumer advisories conducted properly.

Demonstration of Food Safety Knowledge

- y n n/o n/a Person in charge assigned, and demonstrates adequate food safety knowledge applicable to operation. **(Manager and Assistant Manager(s) should have NRA ServSafe Certification and know Vital Few and Vital Knowledge.)**

Time Only as a Food Safety Control

- y n n/o n/a Food holding and storage time is within food safety limits. **(N/A-Time only is not an approved control at Olive Garden.)**

HACCP Plan Followed

- y n n/o n/a HACCP plan followed properly. **(Quick-Check in use and temperatures recorded on HACCP forms.)**

Standard Operating Procedures

- y n n/o n/a Other critical and non critical items in compliance (if not, specify violations under comment section).

NEED MORE INFORMATION?

Please call 407-245-4787 if you have any questions on Olive Garden procedures, products, or systems.

ARIZONA/JACK IN THE BOX HACCP ALLIANCE GUIDE

This guide is intended to assist a Regulatory Official in identifying Jack in the Box procedures and systems to verify that we are in compliance with the new Arizona Food Code. Please leave the card at the restaurant. (See Box below to obtain paper copy).

Cooking, Holding & Cooling Temperature Controls

- y n n/o n/a Potentially hazardous foods cooked to proper temperature. **(Gr. Beef >155F; Fish >155F; Eggs -Yolk Hard; Bacon, Sausage, Egg Rolls, Chili and ALL CHICKEN are Fully-cooked at USDA Plant then heated to palatability - no minimum temperature.)**
- y n n/o n/a Cooked potentially hazardous foods held at 130°F or above. **(No hot holding over 30 mins; all items labeled with discard time.)**
- y n n/o n/a Potentially hazardous foods reheated properly. **(n/a No reheating of food at Jack in the Box.)**
- y n n/o n/a Cooked potentially hazardous foods cooled properly. **(n/a No cooling of food at Jack in the Box.)**
- y n n/o n/a Potentially hazardous foods held at proper cooling temperature. **(All Jack sauces and sliced cheeses meet criteria for non-potentially hazardous food as defined in AZ Code.)**

Food/Equipment	Temp	Food/Equipment	Temp
Grill Surface (1 lane may be 375°)	350°F not <325	Cooked Rice	≥140°F
Fryers (Shortening)	365°F not <350		

- **Grill and fryer cooking timers used 100% of the time (n/a for eggs)**
- **Minimum of one Certified Grill Employee working Grill.**
- **Cook visually inspects hamburger patties (not pink) and eggs (not runny).**

Employee Health & Hygiene *

- y n n/o n/a Employees hands and exposed arms clean and properly washed.
- y n n/o n/a Hand washing facilities available and functional.
- y n n/o n/a Employees using proper hand and arm cleaning procedures.
- y n n/o n/a Live animals handled properly. **(n/a at Jack in the Box.)**
- y n n/o n/a Person in charge requires employees to report illnesses.
- y n n/o n/a Employees eating, drinking, or using tobacco only in designated areas. **(Jack in the Box is a non-smoking facility.)**
- y n n/o n/a Persons with discharges from eyes, nose and mouth prohibited from working with exposed food.
- y n n/o n/a Food handlers preventing contamination of ready-to-eat food by limiting bare hand contact to approved methods. **(See State of Arizona guidance document on the back of this card.)**
- y n n/o n/a Food handlers tasting food properly. **(n/a at Jack in the Box.)**

* Hourly Handwash Program

When Inspector arrives at restaurant, he/she should be able to verify that Handwashing timer is activated. When timer sounds, every employee should (one at a time) leave his/her station and wash hands properly. Handwashing should be completed within 10 minutes of the timer sound. Person in charge should initial Handwash Log on HACCP Shift Checklist after everyone has washed hands properly.

Food Condition & Source

- y n n/o n/a All foods are from approved sources, safe, unadulterated and honestly presented
- y n n/o n/a Food received in proper condition and temperature.
- y n n/o n/a Shellfish tags kept as required. **(n/a at Jack in the Box.)**

Prevention of Contamination

- y n n/o n/a Food separation, packaging, segregation and substitution methods are preventing food and ingredient contamination.
- y n n/o n/a Effective food contact controls are preventing food contamination. **(Raw ground beef patties should be handled only with tongs - never with bare hands.)**
- y n n/o n/a Food contact surfaces and equipment are cleaned frequently and properly to prevent food contamination. **(Jack's Quat sanitizer is effective at 150-300 ppm per manufacturer - use restaurant's QT 30 test strips.)**
- y n n/o n/a Food contact surfaces sanitized properly and approved equipment being used.

Date Marking & Disposal

- y n n/o n/a Foods are correctly date marked. **(Jack in the Box labels with discard/destroy date and/or time. Person in charge should be able to show you chart that is used to determine date.)**

Consumer Advisories & Protection

- y n n/o n/a Consumer advisories conducted properly. **(n/a at Jack in the Box.)**

Demonstration of Food Safety Knowledge

- y n n/o n/a Person in charge assigned, and demonstrates adequate food safety knowledge applicable to operation. **(Manager and Assistant Manager(s) should have NRA ServSafe Certification.)**

Time Only as a Food Safety Control

- y n n/o n/a Food holding and storage time is within food safety limits.

HACCP Plan Followed

- y n n/o n/a HACCP plan followed properly. **(Review HACCP Shift Checklist.)**

Standard Operating Procedures

- y n n/o n/a Other critical and non critical items in compliance (if not, specify violations under comment section).

NEED MORE INFORMATION?

Please call the QA Hotline at 1-800-500-5225 if you have any questions on Jack in the Box procedures, products, or systems or wish to obtain a paper copy of this guide.