NORTH DAKOTA FOOD CODE:
A GUIDE FOR FOOD HANDLERS

N.D.A.C. Chapter 33-33-04.1
Effective January 1, 2018
Based on the 2013 FDA Model Food Code
TABLE OF CONTENTS

Section 1: Food Code Inspections ................................................................. 4
Section 2: Foodborne Illness Risk Factors & Public Health Interventions .......... 10
Section 3: Good Retail Practices ................................................................. 33
Section 4: Food Code References ............................................................... 42
Section 5: Glossary ..................................................................................... 49

OUR MISSION STATEMENT
The Division of Food and Lodging is dedicated to ensuring safe and sanitary food and lodging establishments for consumers in North Dakota through education and inspection of licensed facilities. We advance our mission by collaborating, networking, and training with local health units, the industry, and other state and federal agencies.

OUR DUTY AND RESPONSIBILITY
The Division of Food and Lodging is responsible for safeguarding public health by reducing the risk of foodborne illness while ensuring a safe and wholesome food supply is honestly presented to consumers. This is accomplished through compliance with regulations authorized under the North Dakota Food Code 33-33-04-04.1. The ND Food Code adopts the 2013 FDA Model Food Code with some modifications.

OUR GOAL
The ND Food Code: A Guide for Food Handlers is a companion guide to the ND Food Code. It is designed to help the industry understand the routine inspection process and state regulations. This guide is meant to serve as an aid and is not an exhaustive list of food code requirements.
Each section is tagged with a color-coded image for easy reference:

**Section 1** includes information about what to expect during an inspection, includes an example of the Food Inspection Report, and offers guidance on how to read the Food Inspection Report.

**Section 2** includes risk factors and public health interventions that, if not actively managed and controlled, can lead to foodborne illnesses. Food safety practices outlined in Section 2 are located on the top half of the Food Inspection Report (items #1-29) and are considered ‘high priority.’ If observed as OUT of compliance, immediate attention is required.

**Section 3** includes **good retail practices (GRP)** located on the bottom half of the Food Inspection Report (items #30-56). GRPs are required to provide a core foundation for the **food establishment** to operate in compliance with regulations successfully.

**Section 4** lists commonly observed food code references. There may be exceptions based on the location of operation and regulatory jurisdiction. Please contact your **Regulatory Authority**.

Words bolded in **black** are defined in the **GLOSSARY** in Section 5 and are defined at the bottom of the page when first used.

The **Food for Thought** icon represents important reminders for food safety.

The **Thumbs Up** icon represents compliance with the requirements in the food code. These are also food safety best practices.

The **Thumbs Down** icon represents observations that are violations of the food code. These are poor food safety practices that may lead to foodborne illness and may be cited during an inspection.

---

**good retail practices (GRP)** - the basic sanitary conditions and practices that must be maintained to produce safe foods

**food establishment** - any fixed restaurant, limited restaurant, coffee shop, cafeteria, short-order café, luncheonette, grill, tearoom, sandwich shop, soda fountain, tavern, bar, catering kitchen, delicatessen, bakery, grocery store, meat market, food processing plant, school, child care, or similar place in which food or drink is prepared for sale or service to the public on the premises or elsewhere with or without charge

**Regulatory Authority** - local, state, or federal enforcement body or authorized representative having jurisdiction over the food establishment
FOOD CODE INSPECTIONS

WHAT TO EXPECT DURING THE INSPECTION?

WHY IS AN INSPECTION CONDUCTED? One of the license requirements in North Dakota is to receive routine health inspections. Health inspections are opportunities to learn how to reduce the risk of foodborne illnesses and ensure the safety of your customers. The food establishment license needs to be posted in clear view, and the public must have access to a current inspection report upon request.

WHO CONDUCTS THE INSPECTION? The regulatory agency that issues the food establishment license will conduct the inspection. The inspector is a trained professional employed by a state, local, or tribal health department. The regulatory jurisdictions in North Dakota for licensed food establishments are online at https://www.health.nd.gov/foodandlodging.

WHEN IS THE INSPECTION? Inspections are usually unannounced and can be conducted at any time during normal hours of operation. The frequency of inspection is usually twice a year. However, it may be less or more frequent depending on the category of risk determined by the menu and type of food products, food handling procedures, and special processing methods used.

WHAT SHOULD YOU DO DURING AN INSPECTION?

• **Verify the inspector’s credentials.** The inspector should offer their credentials to you voluntarily, but if they don’t, you should ask. If you’re still unsure, call your health department for verification.

• **Follow the inspector** so that you can see any food code violations first-hand. It is important to correct violations on the spot whenever possible. These violations will be recorded as ‘corrected on site.’ A follow-up inspection may otherwise be needed to verify that the correction was made.

• **Sign the inspection report.** This does not indicate that you agree with the findings, but it is instead evidence that you received a copy.

• **Ask for an explanation** if you don’t understand a violation.

• **Correct any violations in a timely manner.** Figure out how each violation occurred and how you can prevent it from happening again. Review any violations and their proper corrective action with your staff.

• **You may appeal a violation if you have reason to disagree with it.** Call your health department and speak with the inspector’s supervisor.
The food establishment inspection report is a checklist of requirements based on the North Dakota Food Code 33-33-04-04.1 (Food Code). An inspection is a snapshot in time and may not represent the day-to-day practices of the operation. The main parts of the inspection report are provided below and numbered to correspond with the enclosed example (see page 8).

A food establishment should strive for ZERO Risk Factor/Intervention violations during an inspection. Any REPEAT Risk Factor/Intervention violations may lead to further enforcement action.

A **License Number:** When each establishment is licensed, the Department of Health (DoH) assigns a 4-digit number that uniquely identifies one licensed operation from another. This field also shows the ‘type’ of license for which the establishment is approved to operate. *Example: 1922-Restaurant.*

B **Risk Category:** When each establishment is licensed, the DoH conducts a risk assessment using up to four risk levels to help determine the routine inspection frequency. ‘Risk Level 1’ has the lowest inherent food safety risk and needs fewer inspections, while ‘Risk Level 4’ has the highest inherent food safety risk and requires more frequent inspections. The risk assessment is based on the types of food served, the food preparation processes, the volume of food served daily, and whether a vulnerable population is served.

C **Compliance Status:** For each line item on the inspection report (1 – 56), compliance with the Food Code must be indicated.

<table>
<thead>
<tr>
<th>Status</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>IN</td>
<td>An observation made ‘IN’ compliance with the Food Code at the time of the inspection.</td>
</tr>
<tr>
<td>OUT</td>
<td>An observation made ‘OUT’ of compliance with the Food Code at the time of the inspection, which is a violation.</td>
</tr>
<tr>
<td>N/O</td>
<td>An item that was ‘NOT OBSERVED’ during the time of the inspection. For example, a menu item or process that was not prepared or did not occur during the time of inspection.</td>
</tr>
<tr>
<td>N/A</td>
<td>An item that was ‘NOT APPLICABLE’ during the time of the inspection. For example, certain food items or a process that is not offered or used by the establishment.</td>
</tr>
<tr>
<td>COS</td>
<td>‘CORRECTED’ on site during the inspection.</td>
</tr>
<tr>
<td>R</td>
<td>‘REPEATED’ violation cited during the prior, most recent routine inspection.</td>
</tr>
</tbody>
</table>
**Foodborne Illness Risk Factors and Public Health Interventions (Risk Factors/Interventions) – Line Items 1 – 29:** The top half of the inspection report’s first page includes the highest priority Food Code requirements necessary to prevent and eliminate foodborne illness or injury. Violations marked under this section must be immediately corrected on-site (COS) during the inspection or within the Correct by Date determined by the DoH (See section ‘K’ below). Any repeat violations (R) are indicated and may lead to further enforcement action.

**Good Retail Practices (GRPs) – Line Items 30 – 56:** The bottom half of the inspection report’s first page includes the GRPs. GRPs are Food Code requirements that control the basic maintenance of the facility and core sanitation conditions within a food establishment needed to prevent biological, chemical, and physical hazards from contaminating food. GRP violations are not required to be corrected on site during the inspection but must be corrected within an agreed-upon timeline.

**Observations and Corrective Actions:** The second page of the inspection report summarizes the inspection results. It describes each violation observed and marked ‘OUT’ of compliance and details necessary corrective actions.

**Priority Level:** Requirements contained in the Food Code are presented as being in one of three categories of importance:

<table>
<thead>
<tr>
<th>Priority Level</th>
<th>Meaning</th>
</tr>
</thead>
<tbody>
<tr>
<td>Priority (P)</td>
<td>The highest priority and most important Food Codes required to eliminate, prevent, or reduce the likelihood of hazards associated with foodborne illness or injury. Examples include employee health, hand washing, and temperature controls.</td>
</tr>
<tr>
<td>Priority Foundation (Pf)</td>
<td>Food Codes provide support for Priority (P) items such as training, equipment, and measurements that facilitate control of hazards. Examples include employee training, temperature monitoring devices, record keeping, and labeling.</td>
</tr>
<tr>
<td>Core (C)</td>
<td>Food Codes not designated as P or Pf items. These relate to general sanitation, equipment design, and general maintenance. Examples include GRPs.</td>
</tr>
</tbody>
</table>
HOW TO READ AN INSPECTION REPORT

**Item Number:** The inspection report line item (1-56) where the compliance status is marked ‘OUT’ during the routine inspection.

**Reference Code:** The Food Code reference number as defined in the [North Dakota Food Code 33-33-04-04.1](#). Also, see Section 4, page 42.

**Observation Comment:** A description of the cited violation and what corrective action is needed.

**Correct by Date:** The time period in which the violation must be corrected. If not listed, the violation was corrected on site during the inspection, and the ‘COS’ column is marked with an “X.”

**Inspection Published Comment:** Comments regarding the inspection may be provided by the inspector in this section. If left blank, no additional comments have been noted.

**Temperature Observations:** Internal food temperatures and temperature monitoring of equipment (walk-in cooler, hot-holding buffet, etc.) are recorded in this section. Temperatures found ‘OUT’ of compliance are indicated as a violation under the appropriate line item on the first page.

**Person in Charge:** The Food Code requires at least one person in charge to be on duty during all hours of operation. That person is responsible for the food safety management of the operation and training employees.

**# Risk Factor/Intervention Violations:** The total number of Risk Factor/Intervention (high priority) violations marked ‘OUT’ during the inspection are tallied at the top of the first page. This number is most comparable to a resulting ‘score’ for the inspection. The lower the number, the better. Notice that GRP violations are not included in this total since GRP violations are not considered a high priority.

---

**Person in Charge (PIC)** - the individual present at a food establishment who is responsible for the operation at the time of inspection
## Section 1: Food Code Inspections

### Food Establishment Long Form Inspection Report

- **Licensee:** 1522 - Restaurant License
- **Risk Category:** Risk Level 3
- **# Risk Factor/Intervention Violations:** 2
- **# of Repeat Risk Factors/Intervention Violations:** 1

#### Establishment XYZ

- **Physical Address:** 123 Main Ave E
- **Date:** 10/28/2020
- **Time In/Out:** 02:25 PM/03:10 PM
- **Telephone:** (701)222-3344
- **Purpose of Inspection:** routine

### FOODBORNE ILLNESS RISK FACTORS AND PUBLIC HEALTH INTERVENTIONS

<table>
<thead>
<tr>
<th>Compliance Status</th>
<th>COS</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supervision</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. In charge (PIC) present and performs duties</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. PIC demonstrates knowledge</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employee Health</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Out</td>
<td>Management, food employee and conditional employee, knowledge, responsibilities and reporting</td>
<td></td>
</tr>
<tr>
<td>4. In</td>
<td>Proper use of restriction and exclusion</td>
<td></td>
</tr>
<tr>
<td>5. In</td>
<td>Procedures for responding to vomiting/diarrheal events</td>
<td></td>
</tr>
<tr>
<td>Good Hygienic Practices</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. In</td>
<td>Proper eating, tasting, drinking, or tobacco use</td>
<td></td>
</tr>
<tr>
<td>7. In</td>
<td>No discharge from eyes, nose, and mouth</td>
<td></td>
</tr>
<tr>
<td>Preventing Contamination by Hands</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Out</td>
<td>Hands clean and properly washed</td>
<td></td>
</tr>
<tr>
<td>9. In</td>
<td>No bare hand contact with ready to eat (RTE) food</td>
<td></td>
</tr>
<tr>
<td>10. Out</td>
<td>Adequate handwashing sinks properly supplied and accessible</td>
<td>X</td>
</tr>
<tr>
<td>Approved Source</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. In</td>
<td>Food obtained from approved source</td>
<td></td>
</tr>
<tr>
<td>12. N/O</td>
<td>Food received at proper temperature</td>
<td></td>
</tr>
<tr>
<td>13. In</td>
<td>Food In good condition, safe and unadulterated</td>
<td></td>
</tr>
<tr>
<td>14. NA</td>
<td>Records available, shelfstock tags, parasite destruction</td>
<td></td>
</tr>
<tr>
<td>Protection From Contamination</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. In</td>
<td>Food separated and protected</td>
<td></td>
</tr>
</tbody>
</table>

### Risk Factors Important Practices or Procedures Identified as the Most Prevalent Contributing Factors of Foodborne Illness or Injury

- Public health interventions are control measures to prevent foodborne illness or injury.

### GOOD RETAIL PRACTICES

- Good Retail Practices are preventative measures to control the addition of pathogens, chemicals, and physical objects into foods.

<table>
<thead>
<tr>
<th>Compliance Status</th>
<th>COS</th>
<th>R</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safe Food and Water</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30. N/A</td>
<td>Pasteurized eggs used where required</td>
<td></td>
</tr>
<tr>
<td>31. N/A</td>
<td>Water and ice from approved source</td>
<td></td>
</tr>
<tr>
<td>32. N/A</td>
<td>Variance obtained for specialized processing methods</td>
<td></td>
</tr>
<tr>
<td>Food Temperature Control</td>
<td></td>
<td></td>
</tr>
<tr>
<td>33. In</td>
<td>Proper cooling methods used; adequate equipment for temperature control</td>
<td></td>
</tr>
<tr>
<td>34. In</td>
<td>Plant food properly cooked for hot holding</td>
<td></td>
</tr>
<tr>
<td>35. In</td>
<td>Approved thawing methods used</td>
<td></td>
</tr>
<tr>
<td>36. In</td>
<td>Thermometers provided and accurate</td>
<td></td>
</tr>
<tr>
<td>Food Identification</td>
<td></td>
<td></td>
</tr>
<tr>
<td>37. In</td>
<td>Food properly labeled, origina container</td>
<td></td>
</tr>
<tr>
<td>Prevention of Food Contamination</td>
<td></td>
<td></td>
</tr>
<tr>
<td>38. In</td>
<td>Insects, rodents and animals not present</td>
<td></td>
</tr>
<tr>
<td>39. Out</td>
<td>Contamination prevented during food preparation, storage, display</td>
<td>X</td>
</tr>
<tr>
<td>40. In</td>
<td>Personal cleanliness</td>
<td></td>
</tr>
<tr>
<td>41. Out</td>
<td>Wiping cloths: properly used and stored</td>
<td>X</td>
</tr>
<tr>
<td>42. In</td>
<td>Washing fruits and vegetables</td>
<td></td>
</tr>
<tr>
<td>Proper Use of Utensils</td>
<td></td>
<td></td>
</tr>
<tr>
<td>43. Out</td>
<td>In-use utensils; property stores</td>
<td></td>
</tr>
</tbody>
</table>
## Section 1: Food Code Inspections

### Observations and Corrective Actions

<table>
<thead>
<tr>
<th>Priority Level</th>
<th>Item Number</th>
<th>Reference Code</th>
<th>Code Description</th>
<th>Observation</th>
<th>Correct By Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>P</td>
<td>3</td>
<td>2-201.11(A)</td>
<td>Responsibility of Permit Holder, Person in Charge, and Conditional Employees - Symptoms and Diagnosis</td>
<td>Observation: An employee health policy shall be available to address employee illness, reporting, restriction, and exclusion.</td>
<td>12/1/2020</td>
</tr>
<tr>
<td>P</td>
<td>8</td>
<td>2-301.14</td>
<td>When to Wash</td>
<td>Observation: Food employees shall clean their hands when required. Hands shall be washed prior to putting on gloves. Education provided during inspection.</td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>21</td>
<td>3-501.16(A)(1)</td>
<td>Time/Temperature Control for Safety Food, Hot and Cold Holding - Holding Temperature</td>
<td>Observation: TCS food shall be maintained at 135°F or above, except during preparation, cooking, cooling, or when time is used as a public health control. Mashed potatoes on buffet had a temperature of 120 degrees F. Mashed potatoes discarded.</td>
<td></td>
</tr>
<tr>
<td>P</td>
<td>23</td>
<td>3-501.18</td>
<td>Ready-to-Eat Time/Temperature Control for Safety Food, Disposition</td>
<td>Observation: RTE, TCS food prepared on-site, or any opened commercial container that exceeds the 7-day time limit, or when date-marking is not done shall be discarded. Smoked sausage date marked 10/14/20 discarded.</td>
<td></td>
</tr>
<tr>
<td>PF</td>
<td>10</td>
<td>5-205.11</td>
<td>Using a Handwashing Sink - Operation and Maintenance</td>
<td>Observation: Handwashing sinks shall be accessible to employees at all times and may not be used for purposes other than handwashing. Do not use this sink to fill buckets. Discussed with POC.</td>
<td></td>
</tr>
<tr>
<td>PF</td>
<td>16</td>
<td>4-601.11(A)</td>
<td>Equipment, Food Contact Surfaces, Nonfood-Contact Surfaces, and Utensils - Objective</td>
<td>Observation: Equipment food-contact surfaces and utensils shall be clean to sight and touch. Can opener requires cleaning. Can opener placed in the ware washing area during the inspection.</td>
<td></td>
</tr>
<tr>
<td>PF</td>
<td>28</td>
<td>7-102.11</td>
<td>Common Name - Working Containers</td>
<td>Observation: Working containers of cleaning agents and sanitizers taken from bulk containers shall be clearly labeled with the common name of the agent. Spray bottle of blue liquid labeled by POC during the inspection.</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>39</td>
<td>3-305.11</td>
<td>Food storage - Preventing Contamination from the Premises</td>
<td>Observation: Ice shall be dispensed with a scoop. Do not use the glass to dispense the ice. Discussed with staff.</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>41</td>
<td>3-304.14</td>
<td>Wiping Cloths, Use Limitation</td>
<td>Observation: Between uses, wiping cloths shall be stored in a sanitizing solution. Wiping cloths placed in sink until use.</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>43</td>
<td>3-304.12</td>
<td>In-use Utensils, Between-Use Storage</td>
<td>Observation: Use a proper method for storage of in-use utensils during pauses in food preparation such as in the food, clean and protected, under running water, or changing within 4-hour increments to prevent bacterial growth. Ice scoop and container shall be maintained clean.</td>
<td>10/28/2020</td>
</tr>
<tr>
<td>C</td>
<td>45</td>
<td>4-502.13(A)</td>
<td>Single-Service and Single-Use Articles, Use Limitation - May not be reused</td>
<td>Observation: Food containers may not be reused for storage of food prepared at the establishment. Please out use of single service containers and replace with food grade containers.</td>
<td>12/1/2020</td>
</tr>
<tr>
<td>C</td>
<td>49</td>
<td>4-602.13</td>
<td>Nonfood-Contact Surfaces</td>
<td>Observation: Nonfood-contact surfaces of equipment shall be cleaned at a frequency necessary to prevent accumulation of soil residues. The inside of reach in refrigerators/freezers shall be maintained clean.</td>
<td>10/28/2020</td>
</tr>
<tr>
<td>C</td>
<td>55</td>
<td>6-501.12</td>
<td>Cleaning, Frequency and Restrictions</td>
<td>Observation: Physical facilities shall be cleaned as often as necessary to keep them clean and during periods when the least amount of food is exposed such as after closing. The area above the stovetop shall be maintained clean.</td>
<td>10/28/2020</td>
</tr>
</tbody>
</table>

### Inspection Published Comment:

The consumer advisory shall include an asterisk (*) next to each item on the menu that may be served raw or undercooked. A disclosure statement shall be on each page of the menu with raw or undercooked items and have an asterisk (*) preceding the statement; correct when new menus are printed.

### TEMPERATURE OBSERVATIONS

<table>
<thead>
<tr>
<th>Item</th>
<th>Location</th>
<th>Temp</th>
<th>Other Location Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mashed Potatoes</td>
<td>Buffet</td>
<td>120 F</td>
<td></td>
</tr>
<tr>
<td>Tomatoes-Cut</td>
<td>Cold-Hold Unit</td>
<td>39 F</td>
<td></td>
</tr>
<tr>
<td>Pork</td>
<td>Grill</td>
<td>150 F</td>
<td></td>
</tr>
</tbody>
</table>

**Follow-up:** No

**Follow-Up Date:**

<table>
<thead>
<tr>
<th>Visit Date</th>
<th>Person In Charge</th>
<th>Person In Charge Signature</th>
<th>Sig. Date</th>
<th>Inspector</th>
<th>Inspector Signature</th>
<th>Sig. Date</th>
<th>Time In</th>
<th>Time Out</th>
</tr>
</thead>
</table>
FOODBORNE ILLNESS RISK FACTORS & PUBLIC HEALTH INTERVENTIONS

PROTECTING PUBLIC HEALTH THROUGH FOOD SAFETY

The CDC has identified *Five Common Risk Factors* that contribute to foodborne illness.

These risk factors are:
1. Improper Holding Temperature
2. Inadequate *Cooking*
3. Poor Personal *Hygiene*
4. Contaminated Equipment
5. Food from Unsafe Sources

The Food and Drug Administration (FDA) has identified *Five Public Health Interventions* that, when addressed during an inspection, should lead to a reduction in foodborne illness.

These public health interventions are:
1. Demonstration of Knowledge
2. Employee Health Controls
3. Controlling Hands as a Vehicle of Contamination
4. *Time and Temperature Parameters* for Controlling Pathogens
5. Consumer Advisory

**Cooking** - to prepare food for eating, especially by heating to the time and temperatures specified in the food code

**Hygiene** - standards of personal cleanliness habits, including keeping hands, hair, and body clean and wearing clean clothing in the food establishment

**Time and Temperature Parameters** - a determined value for time and temperature that has been scientifically proven to control pathogen growth and toxin formation in food
During the routine inspection, inspectors focus on CDC’s five common risk factors that contribute to foodborne illness and address FDA’s five public health interventions that help to reduce the incidence of foodborne illness.

SUPERVISION

A Person in Charge (PIC) must be present at the food establishment at all hours of operation. The PIC ensures that there is **active managerial control** in the kitchen. Active managerial control is accomplished through systems and controls that are implemented in the food establishment.

The PIC shall have a clear understanding of the food code and its public health principles to follow sound food safety practices and produce safe, wholesome, **unadulterated**, and honestly presented foods.

The PIC must demonstrate knowledge of the Food Code by answering the inspector’s questions accurately, showing completion of a nationally accredited food manager certification, or by not having any priority violations marked out during the inspection. Having a certified food protection manager (CFPM) on staff is required in most states but is not currently in North Dakota’s Food Code. This certification is easily accessible and highly encouraged.

Learn more about CFPM online at [https://www.health.nd.gov/foodandlodging](https://www.health.nd.gov/foodandlodging).

---

**active managerial control** - the purposeful incorporation of specific actions or procedures by industry management into the operation of their businesses to attain control over foodborne illness risk factors

**unadulterated foods** - food in a pure state
Employee health and hygiene are an important part of food safety. When working in a food establishment, keep in mind the following items:

**AN EMPLOYEE HEALTH POLICY MUST BE AVAILABLE**
- Food employees need to report to the PIC information about their health and activities, as they relate to diseases that are **transmissible** through food.
- Food employees with symptoms of diarrhea, vomiting, **jaundice**, sore throat with fever, or **lesions** containing pus on the hands, wrist, or an exposed body part must be excluded from working with food.
- Food employees need to know how to respond to a vomiting or diarrheal event that occurs at the food establishment, and procedures must be provided.

### EMPLOYEE HEALTH & GOOD HYGIENIC PRACTICES

<table>
<thead>
<tr>
<th>PIC DUTIES</th>
<th>CONCERNING ILL EMPLOYEES, THE PIC MUST:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TRAIN</strong></td>
<td>Verify the establishment has an Employee Health Policy and that all staff are trained.</td>
</tr>
</tbody>
</table>
| **NOTIFY** | Notify the regulatory authority of a food employee that is infected with any of the BIG 6:  
• Salmonella  
• Salmonella typhi (Typhoid Fever)  
• Shigella  
• Shiga-toxin-producing E. coli (STEC)  
• Norovirus  
• Hepatitis A |
| **APPROVE**| Ensure the exclusion and restriction of job duties of ill food employees are followed according to Food Code. This includes seeking approval from the Regulatory Authority about when a sick employee can return to work. |

**transmissible** - capable of being passed or spread  
**jaundice** - a yellowish discoloration of the skin and eyes, indicating liver malfunction and illness  
**lesions** - an area of abnormal tissue change such as a wound or abscess
GOOD HYGIENIC PRACTICES MUST BE FOLLOWED

- Do not eat, drink, or use any form of tobacco where the contamination of exposed food, clean equipment, utensils, linens, unwrapped single-service, single-use articles, or other items needing protection, can result.
- Food employees experiencing persistent sneezing, coughing, or a runny nose that causes discharges from the eyes, nose, or mouth may not work with exposed food, clean equipment, utensils, linens, or unwrapped single-service or single-use articles.
- Food employees should keep fingernails trimmed, filed, and maintained, and not wear fingernail polish or artificial fingernails when working with exposed food.
- Do not wear jewelry while preparing food. Wear clean outer clothing and hair restraints such as hats, hair coverings or nets, beard restraints, and clothing that covers body hair.

A food employee may drink from a closed beverage container with a tight-fitting lid and straw if stored on a non-food-contact surface and kept separate from exposed food, clean equipment, and unwrapped single-service and single-use articles.

single-service articles - tableware, carry-out utensils, and other items such as bags, containers, placemats, stirrers, straws, toothpicks, and wrappers that are designed and constructed for one time, one person use after which they are intended for discard

single-use articles - utensils and bulk food containers designed and constructed to be used once and discarded such as wax paper, butcher paper, plastic wrap, formed aluminum food containers, jars, plastic tubs or buckets, bread wrappers, pickle barrels, and ketchup bottles
PREVENTING CONTAMINATION BY HANDS

REMEMBER TO WASH YOUR HANDS!!

The 20 Second Rule
Wash your hands and exposed portions of your arms for at least 20 seconds, using soap at a designated handwashing sink.

When to Wash
- After touching bare human body parts
- After using the toilet room
- After caring for or handling service animals or aquatic animals
- After coughing, sneezing, using a handkerchief or disposable tissue, using tobacco, eating, or drinking
- After handling soiled equipment or utensils
- During food preparation to remove soil and contamination and to prevent cross-contamination when changing tasks
- When switching between working with raw food and working with ready-to-eat food
- Before putting on gloves to initiate a task that involves working with food
- After engaging in other activities that contaminate the hands

Where to Wash
- **DO** wash your hands only in a designated handwashing sink.
- **DO NOT** wash your hands in a sink used for food preparation or warewashing or in a service sink used to dispose of mop water and similar liquid waste.

Poor personal hygiene is generally recognized as the most common contributing factor for foodborne illness. This means that food handlers don’t wash their hands enough throughout the day. Proper handwashing is the most effective way to minimize the risk of causing foodborne illness.
ADEQUATE HANDWASHING FACILITIES

A food establishment must have at least one designated handwashing sink. A sign shall be displayed by the handwashing sink to indicate that the sink shall be used for handwashing only.

**Handwashing sinks must always be readily accessible and have a supply of warm water, soap, and paper towels.**

NO BARE HAND CONTACT WITH READY-TO-EAT FOOD

Food employees may not contact exposed, ready-to-eat food with their bare hands and shall use suitable utensils such as deli tissue, spatulas, tongs, single-use gloves, or dispensing equipment.

Food worker using gloves to prepare ready-to-eat food. Bare hand contact with ready-to-eat food is not allowed.
Section 2: Foodborne Illness Risk Factors & Public Health Interventions

**APPROVED SOURCE**

**RECEIVING FOOD**
Foods received by the establishment shall be at the proper temperature and shall be inspected for integrity of product packaging, wholesomeness, and signs of adulteration.

**SELECTING FOOD**
Food and ingredients shall be safe, unadulterated, and honestly presented. Food must be obtained from sources that comply with the law, such as a facility that is licensed/registered and inspected by the appropriate regulatory authority.

- Meat and poultry shall be labeled to indicate an approved source, such as the USDA or ND State Inspection label (see page 17).
- Eggs shall be received clean and sound and may not exceed the restricted tolerances set for USDA Grade B.
- Milk and milk products must comply with Grade A Standards.
- Fish and seafood shall be commercially and legally caught or harvested and approved for sale or service. Fish intended for consumption in raw or undercooked form may be offered for sale or service if they are frozen as required for parasite destruction and if records are retained on-site for at least 90 days.
- **Molluscan shellfish** that are recreationally caught may not be received for sale or service. Each container must be properly tagged (see page 17).
- Wild mushrooms, if sold or served, must be approved before use.
- Game animals received for sale or service shall be commercially raised for food and raised, slaughtered, and processed according to laws governing meat.

*Molluscan shellfish* - any edible species of fresh or frozen oysters, clams, mussels, and scallops or edible portions thereof, except when the scallop product consists only of the shucked adductor muscle.
Section 2: Foodborne Illness Risk Factors & Public Health Interventions

EXAMPLES OF APPROVED SOURCES

Approved source meat displaying the USDA stamp.

Approved source meat displaying the ND Department of Agriculture stamp.

Approved source wild game displays the USDA stamp. The stamp is in the shape of a triangle for exotic species.

Approved source molluscan shellfish must display a shellstock tag.

EXAMPLES OF UNAPPROVED SOURCES

Food prepared in a private home or from an uninspected supplier may not be used in a food establishment. Home-canned goods or any other cottage foods cannot be offered for sale or service in a licensed food establishment.

Shellstock - raw, in-shell molluscan shellfish
Section 2: Foodborne Illness Risk Factors & Public Health Interventions

PROTECTION FROM CONTAMINATION

According to the FDA, the most common sources of food contamination which lead to foodborne illness include:

• Raw foods that are initially contaminated
• Ill food handlers who touch ready-to-eat foods with their bare hands
• Cross-contamination of ready-to-eat foods with raw animal foods from worker’s hands, wiping cloths, or equipment such as cutting boards and utensils
• Improper cleaning and/or sanitizing of equipment
• Food sources that are unsafe or are from an unapproved source
• Heavy metal containers or pipelines that leach toxic substances into food
• Seam defects or breaks in cans or packages that allow the entrance of contaminants
• Poisonous substances that enter food through accident, carelessness, or improper storage
• Untreated sewage, sludge, or manure used to fertilize produce

Food must be protected from cross contamination by separating raw animal foods during storage, preparation, holding, and display from ready-to-eat foods. Food shall only contact surfaces of equipment and utensils that are cleaned and sanitized at the appropriate frequency specified in the food code, single-service and single-use articles, or clean linens such as cloth napkins.

To protect food from contamination, persons unnecessary to the food establishment operation are not allowed in the food preparation, food storage, or warewashing areas.

Keep raw meats and produce on separate cutting boards. Use different knives to cut or chop these foods to prevent cross-contamination.

cleaning - the removal of organic matter from food-contact surfaces, equipment, and utensils
sanitizing - the application of heat or chemicals on cleaned food contact surfaces that is sufficient to yield a 99.999% reduction of disease microorganisms of public health importance
AVOID CONTAMINATION

- Separate raw meats, fish, and poultry from produce or cooked and ready-to-eat foods
- Assign specific equipment (cutting boards, utensils, and containers) to each type of food product
- Separate fruits and vegetables that are not washed from ready-to-eat foods
- Clean and sanitize all work surfaces, equipment, and utensils after each use
- Keep wiping cloths in sanitizer between uses
- Make sure cloths or towels used for wiping spills are not used for any other purpose
- Monitor employees and co-workers to ensure hands are washed before putting on gloves
- Set aside damaged, spoiled, or recalled products from food, equipment, utensils, linens, and single-service and single-use articles by placing them in designated areas away from other items

To avoid contamination of raw food to ready-to-eat food, the food handler in this image must change gloves, wash hands, then put on a new pair of gloves prior to handling ready-to-eat food.
PREVENTING CONTAMINATION DURING STORAGE
Raw animal food must be stored below ready-to-eat food to avoid contamination.

**TOP SHELF**
- Ready-to-eat & fully cooked foods
- Raw seafood, fish, & eggs
- Raw steak & pork
- Raw ground meat (hamburger)

**BOTTOM SHELF**
- Raw poultry (chicken, turkey, duck)

Raw animal foods must be separated by type based on minimum cooking temperatures by spacing or placing in separate containers.
Section 2: Foodborne Illness Risk Factors & Public Health Interventions

CLEAN FOOD-CONTACT SURFACES SANITIZED

Food-contact surfaces include surfaces that normally contact food.

- Cutting boards
- Utensils – knives, forks, and spoons
- Can openers
- Plates

Food-contact surfaces also include surfaces not normally in contact with food, but could become contaminated when food drains, drips, or splashes onto it.

- Interior of a microwave oven

Food-contact surfaces must be effectively cleaned and sanitized to reduce the chance of contaminating food or transmitting harmful bacteria to consumers. Equipment and utensils used with Time and Temperature Controlled (TCS) foods shall be cleaned throughout the day, at least every 4 hours. The food-contact surfaces of cooking and baking equipment shall be cleaned at least every 24 hours. Read more about warewashing on page 38.

FOOD-CONTACT SURFACES MUST BE:

- Clean to sight and touch
- Cleaned before each use with a different type of raw animal food such as beef, fish, lamb, pork, or poultry
- Cleaned each time there is a change from working with raw foods to working with ready-to-eat foods
- Cleaned between uses with raw fruits and vegetables and with TCS foods
- Cleaned each time there is a change from working with any of the Major 8 Allergens
- Cleaned while in-use every 4 hours

Food-contact surfaces - a surface of equipment or a utensil with which food normally comes into contact, or a surface of equipment or a utensil from which food may drain, drip, or splash into a food or onto a surface normally in contact with food

Major 8 Allergens - milk, egg, fish (such as bass, flounder, cod, and including crustacean shellfish such as crab, lobster, or shrimp), tree nuts (such as almonds, pecans, or walnuts), wheat, peanuts, and soybeans; or a food ingredient that contains protein derived from one or more of these foods.
Section 2: Foodborne Illness Risk Factors & Public Health Interventions

TIME/TEMPERATURE CONTROL FOR SAFETY

Cooking, reheating, cooling, hot holding, and cold holding are all important processes in food preparation. Complying with the requirements in the Food Code helps to keep food out of the danger zone. There should be enough equipment with sufficient capacity used for the cooling, heating, and hot/cold holding of foods requiring temperature control to meet the demands of the operation.

COOK TCS FOODS THOROUGHLY

Certain methods of food preparation are intended to destroy harmful bacteria that may cause foodborne illness. Cooking to the proper time and temperature is often the "critical control point" in preventing foodborne illnesses and disease outbreaks. Undercooked foods can increase the risk of developing foodborne illness because the harmful bacteria in the raw foods might not have been adequately destroyed.

Raw animal foods such as eggs, fish, meat, poultry, and foods containing these raw animal foods must be cooked to heat all parts of the food to meet the time and temperature requirements for cooking shown in the "Internal Cooking Time and Temperature Specifications" tables. Foods cooked with a non-continuous cooking process must have a written procedure and approval by the Regulatory Authority.

reheating - the process of re-cooking previously cooked and cooled foods to a temperature of at least 165°F
cooling - the process of cooling food quickly to 41°F
hot holding - the storage of cooked food at 135°F or higher while awaiting consumption by customers
cold holding - the storage of food at 41°F or lower while awaiting consumption by customers
danger zone - the temperature range at which most foodborne pathogens rapidly grow (between 41°F and 135°F).
critical control point - a point or procedure in a specific food system where the loss of control may result in an unacceptable health risk
non-continuous cooking process - the cooking of food using a process in which the initial heating of the food is intentionally halted so that it may be cooled and held for complete cooking later before sale or service

Poultry cooked to at least 165°F for 15 seconds.
### Internal Cooking Time and Temperature Specifications for Raw Animal Foods (Excluding Whole Meat Roasts)

<table>
<thead>
<tr>
<th>Internal Cooking Temperature &amp; Time</th>
<th>Raw Animal Foods</th>
</tr>
</thead>
</table>
| **145°F for 15 seconds**            | Raw eggs cooked for immediate service  
|                                    | Fish, except as listed below  
|                                    | Meat, except as listed in the next two rows  
|                                    | Commercially raised game animals, rabbits |
| **155°F for 15 seconds**            | Ratites (Ostrich, Rhea, and Emu)  
|                                    | Injected meats  
|                                    | Mechanically tenderized meats  
|                                    | Raw eggs not for immediate service (pooled or hot held)  
|                                    | Comminuted: Meat (hamburger or sausage), fish, or commercially raised game animals |
| **165°F for 15 seconds**            | Wild game animals  
|                                    | Poultry  
|                                    | Stuffed fish, meat, pork, pasta, ratites & poultry  
|                                    | Stuffing containing fish, meat, ratites & poultry  
|                                    | All raw animal foods cooked in a microwave oven |
**INTERNAL COOKING TIME AND TEMPERATURE SPECIFICATIONS FOR WHOLE MEAT ROASTS**
(BEEF, CORNED BEEF, LAMB, PORK, AND CURED PORK ROASTS SUCH AS HAM)

<table>
<thead>
<tr>
<th>Internal Cooking Temperature</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>130°F</td>
<td>112 minutes</td>
</tr>
<tr>
<td>131°F</td>
<td>89 minutes</td>
</tr>
<tr>
<td>133°F</td>
<td>56 minutes</td>
</tr>
<tr>
<td>135°F</td>
<td>36 minutes</td>
</tr>
<tr>
<td>136°F</td>
<td>28 minutes</td>
</tr>
<tr>
<td>138°F</td>
<td>18 minutes</td>
</tr>
<tr>
<td>140°F</td>
<td>12 minutes</td>
</tr>
<tr>
<td>142°F</td>
<td>8 minutes</td>
</tr>
<tr>
<td>144°F</td>
<td>5 minutes</td>
</tr>
<tr>
<td>145°F</td>
<td>4 minutes</td>
</tr>
<tr>
<td>147°F</td>
<td>134 seconds</td>
</tr>
<tr>
<td>149°F</td>
<td>85 seconds</td>
</tr>
<tr>
<td>151°F</td>
<td>54 seconds</td>
</tr>
<tr>
<td>153°F</td>
<td>34 seconds</td>
</tr>
<tr>
<td>155°F</td>
<td>22 seconds</td>
</tr>
<tr>
<td>157°F</td>
<td>14 seconds</td>
</tr>
<tr>
<td>158°F</td>
<td>0 seconds</td>
</tr>
</tbody>
</table>

**REHEATING FOR HOT HOLDING**

TCS foods that are cooked, cooled, and reheated for hot holding shall be reheated so that all parts of the food reach a temperature of **at least 165°F for 15 seconds**. Ready-to-eat TCS foods that are commercially processed and packaged shall be heated to a temperature of **at least 135°F**. Reheating for hot holding shall be done rapidly and should not exceed two hours to prevent food from being in the danger zone too long.
**COOLING**

Food must be cooled from 135°F to 41°F or less in six hours provided that the food is cooled from 135°F to 70°F within the first two hours. This prevents food from staying in the danger zone too long.

---

Fresh, cut tomatoes prepared greater than four hours ago with an internal temperature of >41°F must be discarded.

Food prepared yesterday and stored in the walk-in cooler with an internal temperature of >41°F must be discarded.

**PROPER HOLDING TEMPERATURES**

Keep TCS foods out of the danger zone by holding them at appropriate temperatures.

- **Hot Holding** = Hot TCS foods held for service shall be held at **135°F or above**.
- **Cold Holding** = Cold TCS foods held for service shall be held at **41°F or less**.

---

Examples of food temperature logs can be found on the next three pages. Note: Temperature logs are not required in ND’s Food Code but are considered best practice and are highly encouraged.
### FOOD COOLING LOG

- Cooked TCS food must be cooled from 135°F to 41°F or below within six hours. The decrease in temperature from 135°F to 70°F must occur within two hours.

- If the temperature is more than 70°F in two hours, food may be reheated once to 165°F, and cooling can start over.

- Total cooling time cannot exceed six hours. If this time is exceeded, then the food must be discarded.

<table>
<thead>
<tr>
<th>DATE</th>
<th>FOOD</th>
<th>START TIME/TEMP</th>
<th>TEMP AT 1 HR</th>
<th>TEMP AT 2 HRS</th>
<th>135°F TO 70°F IN 2 HRS?</th>
<th>TEMP AT 3 HRS</th>
<th>TEMP AT 4 HRS</th>
<th>TEMP AT 5 HRS</th>
<th>TEMP AT 6 HRS</th>
<th>135°F TO 41°F IN 6 HRS?</th>
<th>CORRECTIVE ACTION</th>
<th>INITIALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example: 1/1/2020</td>
<td>Beef stew</td>
<td>10 AM 135°F</td>
<td>100°F</td>
<td>69°F</td>
<td>Yes, continue if No, Reheat</td>
<td>60°F</td>
<td>50°F</td>
<td>45°F</td>
<td>39°F</td>
<td>Yes If No, dispose of food</td>
<td>NO</td>
<td>ZZ</td>
</tr>
</tbody>
</table>

26
Temperature Log – HOT HOLDING

- The hot-holding unit must hold food at an internal temperature of 135°F or higher.
- TCS foods that have been held below 135°F for less than two hours may be reheated to 165°F or higher and replaced in the unit.
- TCS foods that have been held below 135°F for more than two hours must be discarded.

<table>
<thead>
<tr>
<th>DATE</th>
<th>FOOD</th>
<th>START TEMP/TIME</th>
<th>TEMP/TIME</th>
<th>TEMP/TIME</th>
<th>CORRECTIVE ACTION</th>
<th>INITIALS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Temperature Log – COLD HOLDING

- The cold-holding unit must hold food at 41°F or below.
- Properly cool hot foods before storing in a cold-holding unit.

<table>
<thead>
<tr>
<th>DATE</th>
<th>FOOD</th>
<th>START TEMP/TIME</th>
<th>TEMP/TIME</th>
<th>TEMP/TIME</th>
<th>CORRECTIVE ACTION</th>
<th>INITIALS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
DATE MARKING

If ready-to-eat food has an initial temperature of 41°F or less when removed from cold holding or 135°F or greater when removed from hot holding, the food can be served at any temperature within four hours from the point in time when the food was removed from temperature control.

If food has an initial temperature of 41°F or less when removed from temperature control and the food temperature does not exceed 70°F, the food can be held for a maximum time of six hours.

The food shall be discarded if it exceeds the four-hour or six-hour time limit. The food shall be clearly marked to indicate the time that is four hours or six hours past the point in time when the food is removed from temperature control.
CONSUMER ADVISORY
If an animal food such as beef, eggs, fish, lamb, pork, poultry, or shellfish is served or sold raw, undercooked, or without otherwise being processed to eliminate pathogens, the food establishment must have an approved Consumer Advisory. The food establishment must inform consumers of the significantly increased risk of consuming such food by way of a disclosure and reminder.

The Consumer Advisory shown below includes the disclosure and the reminder. The disclosure identifies the animal-derived food by asterisking it with a footnote, which is the reminder.

CONSUMER ADVISORY courtesy of Tumbleweed Bar & Grill in Lincoln, ND.

HIGHLY SUSCEPTIBLE POPULATIONS

Highly susceptible population refers to persons who are more likely than other people in the general population to experience foodborne disease. This includes:

- Children of preschool age and younger,
- Older adults,
- Persons who are immunocompromised.

Food service provided to highly susceptible populations at a facility that offers congregate living and/or feeding, custodial care, or health care, such as a childcare center, hospital, nursing home, or assisted living, follow special provisions in Food Code.

Highly susceptible population - persons who are more likely than other people in the general population to experience foodborne diseases such as preschool-age children, older adults, or those who are immunocompromised.
Section 2: Foodborne Illness Risk Factors & Public Health Interventions

CERTAIN ITEMS IN THE FOOD CODE APPLY ONLY TO HIGHLY SUSCEPTIBLE POPULATIONS

- Bare hand contact with ready-to-eat foods is prohibited in food establishments serving a highly susceptible population.
- Only treated/pasteurized juices/juice beverages may be served.
- Only pasteurized eggs can be used in recipes if eggs are undercooked and if eggs are combined.
- Raw or partially cooked animal foods or raw seed sprouts cannot be served.
- Unopened packaged food served to patients in medical isolation or quarantine cannot be re-served.

FOOD/COLOR ADDITIVES AND TOXIC SUBSTANCES

- Food must not contain unapproved additives or coloring.
- Bulk and working containers of cleaning agents and sanitizers shall be labeled.
- Poisonous or toxic materials shall be stored separately from and not above food, equipment, utensils, linens, and single-service and single-use articles so they cannot contaminate them.
- Personal care items, first aid supplies, medicines, and chemicals shall be stored separately from and not above food, equipment, utensils, linens, and single-service and single-use articles.
CONFORMANCE WITH APPROVED PROCEDURES

HACCP stands for **Hazard Analysis Critical Control Point**. Certain specialized food processes have points during food preparation that could lead to an unsafe food product if not properly controlled. These points are referred to as critical control points. A specialized food process needs to have written procedures and careful documentation of the critical control points and set **critical limits** used to ensure food safety. Examples of specialized food processing methods include smoking or curing food to extend shelf-life, **fermenting food**, **acidifying food**, reduced oxygen packaging (vacuum-sealing), using food additives to render a TCS food so that it is shelf-stable, **cook chill**, and **sous vide** cooking methods.

7 PRINCIPLES OF HACCP

1. Hazard Analysis
2. Critical Control Point Identification
3. Establishment of Critical Limits
4. Monitoring Procedures
5. Corrective Actions
6. Verification Procedures
7. Record Keeping

HOW TO SUBMIT A HACCP PLAN FOR APPROVAL

Contact your regulatory authority.

Resources are available online at [https://www.health.nd.gov/foodandlodging](https://www.health.nd.gov/foodandlodging).

Requesting a waiver or a variance from the regulatory authority may be necessary before performing specialized food processing methods. Contact your Regulatory Authority.
GOOD RETAIL PRACTICES

Good retail practices (GRP) are designed to ensure that unsanitary conditions do not lead to the introduction of hazards into food.

SAFE FOOD AND WATER

Pasteurized eggs or egg products shall be substituted for raw eggs in the preparation of foods such as Caesar salad, mayonnaise, meringue, eggnog, and ice cream.

Water and ice must meet drinking water standards established by EPA and applicable state drinking water quality standards. If water and ice are from a non-public source, the water must be tested annually, and records must be kept on file.

FOOD TEMPERATURE CONTROL

COOLING METHODS

To keep food out of the danger zone, proper cooling methods must be used, and adequate cooling equipment must be present in the food establishment.

The following cooling procedures will help to cool food appropriately:

• Stir food in a container placed in an ice water bath.
• Use ice wands to help stir hot foods and get them to cool quickly.
• Use rapid chilling equipment such as a walk-in cooler.
• Arrange containers in refrigeration equipment for maximum heat transfer.
• Do not stack containers or put them close together while cooling.
• Loosely cover during the cooling period to allow air circulation in the container.
• Cut large meats such as roasts into smaller portions to allow for proper cooling.
• Place food in shallow pans or containers (maximum depth of two inches) to facilitate cooling.
Section 3: Good Retail Practices

PROPERLY COOKING PLANT FOOD

- Fruits and vegetables that are fresh, frozen, or canned that are cooked for hot holding shall be cooked to an internal temperature of 135°F.

THAWING TCS FOODS SAFELY

- Thaw under refrigeration.
- Thaw under running water 70°F or less with sufficient water flow.
- Thaw in a microwave oven as part of a non-continuous cooking process. Transfer the food immediately to conventional cooking equipment.

Thawing at ambient (70°F) room temperature is not safe!

Properly thawing meat under cold, running water.

Improperly thawing meat at ambient temperature.

thawing - the process of a frozen substance becoming liquid or soft as a result of warming up
Section 3: Good Retail Practices

PROVIDING ACCURATE THERMOMETERS

Food thermometers must be accessible for use by food employees and used often to verify appropriate temperatures during food preparation processes. Food thermometers must be calibrated following the manufacturer’s instructions at a frequency to ensure accuracy.

FOOD IDENTIFICATION

Foods packaged within the food establishment must contain the common name of the food, a list of ingredients and sub-ingredients in order of predominance by weight, net quantity, and the name and place of the facility where the food was packaged, and list any major allergens.

There are eight major food allergens: fish, shellfish, tree nuts, peanuts, milk, egg, wheat, and soy. All major food allergens, if present, must be accurately declared on the package.

Working containers and bulk foods removed from their original packaging require labeling with the food’s common name.

The label on this package contains the common name of the food, a list of ingredients, the net quantity, the name and place of the facility where the food was packaged, and a list of major allergens.
Section 3: Good Retail Practices

PREVENTION OF FOOD CONTAMINATION

Live animals are not allowed on the premises of a food establishment except in the following situations: decorative fish in aquariums, patrol dogs accompanying police or security officers, service animals controlled by the disabled employee or person, or pets in dining areas if approved under a variance by the Regulatory Authority.

Measures shall be taken to control the presence of pests in the food establishment, including eliminating entry points and harborage areas and removing pests and their evidence. Insect trapping devices must not be located over food preparation areas.

Food, equipment and utensils, laundered linens, and single-service and single-use articles shall be protected from contamination by storing them in a clean, dry location where they are not exposed to splash, dust, or other contamination. They must also be at least six inches above the floor. Food, equipment and utensils, laundered linens, and single-service and single-use articles may not be stored in locker rooms, toilet rooms, dressing rooms, garbage rooms, mechanical rooms, under sewer lines that are not shielded from potential drips, under leaking water lines, or under open stairwells.

Food employees shall wear clean outer clothing and effective hair restraints. Prohibited jewelry shall not be worn, and fingernails shall be maintained to prevent contamination of food during food preparation, storage, and display.

Cloths in-use for wiping food spills from tableware and carry-out containers that occur as food is being served shall be maintained dry and used for no other purpose. Cloths in-use for wiping counters and other equipment surfaces shall be stored in a chemical sanitizer solution at the appropriate concentration and laundered daily.

Raw fruits and vegetables must be thoroughly washed in water to remove soil and other contaminants before being cut, combined with other ingredients, cooked, served, or offered for human consumption in ready-to-eat form.

Pests – an insect or small animal that is detrimental to humans or human concerns
PROPER USE OF UTENSILS
There are several methods available for storage of in-use utensils during pauses in food preparation or dispensing, such as:
• In the food, clean and protected
• Under running water to prevent bacterial growth
• In a container of water where the water temperature is at least 135°F

In-use utensils may not be stored in chemical sanitizer or ice between uses. Ice scoops may be stored with handles facing up in an ice bin.

UTENSILS, EQUIPMENT & VENDING
• Equipment and utensils must be properly designed and constructed and in good repair.
• After cleaning and sanitizing, equipment and utensils shall be air-dried before contact with food.
• Clean equipment and utensils shall be stored in a self-draining position that allows air drying and covered or inverted.
• Single-service and single-use articles and cleaned and sanitized utensils shall be handled, displayed, and dispensed so that contamination of food- and lip-contact surfaces is prevented.
• Knives, forks, and spoons that are not prewrapped shall be presented so that only the handles are touched by employees and by consumers.

There are limitations to using equipment and utensils that contain cast iron, lead, copper, galvanized metal, wood, and nonstick coatings. Call your Regulatory Authority for more information.
WAREWASHING FACILITIES

Adequate warewashing facilities must be available and used to clean and sanitize food-contact surfaces, including the availability of means to monitor its use and the effectiveness of sanitization. Sanitizing solutions must not exceed the maximum concentrations.

Food-contact surfaces must be washed, rinsed, sanitized, and air-dried according to the procedure outlined below.

SANITIZING WITH HOT WATER

**MANUAL METHOD** - The temperature of the water must be maintained at 170°F.

**MECHANICAL METHOD** - The surface temperature of utensils must be at least 160°F. The food establishment must either have a thermometer or maximum temperature indicator to ensure the temperature of a utensil reaches at least 160°F.
Section 3: Good Retail Practices

SANITIZING WITH CHEMICAL METHODS

**MANUAL or MECHANICAL METHODS** – An appropriate concentration of sanitizer must be used in accordance with the manufacturer’s recommendations. Test strips must be on hand to test the concentration.

Test strips available on-site for quaternary ammonium sanitizers.  
Test strips available on-site for chlorine-based sanitizers.

Sponges are not to be used in contact with clean, sanitized food contact surfaces.

**KEEPING NON-FOOD CONTACT SURFACES CLEAN**

Non-food contact surfaces are surfaces that do not directly contact food. Examples include floors, ceilings, walls, restrooms, and equipment exteriors. Non-food contact surfaces shall be cleaned at a frequency that is adequate to prevent the accumulation of soils.

The exterior of this equipment is heavily soiled.
PHYSICAL FACILITIES

FACILITY DESIGN
Physical facilities shall be in good repair, maintained, and clean.

Materials used for indoor floor, wall, and ceiling surfaces shall be smooth, durable, and easily cleanable. A floor covering such as carpeting or similar material may not be installed as a floor covering in food preparation areas, walk-in refrigerators, warewashing areas, toilet room areas, refuse storage rooms, or other areas where the floor is subject to moisture, flushing, or spray cleaning methods.

The toilet facility shall not be an attractant to insects. The number of fixtures shall be adequate. Toilet tissue and a covered trash receptacle (ladies’ room only) shall be provided. Fixtures shall be kept clean, and the door shall be self-closing to prevent recontamination of hands.

Light bulbs shall be shielded, coated, or otherwise shatter-resistant in areas with exposed food, clean equipment, utensils and linens, or unwrapped single-service and single-use articles.

Ventilation shall be adequate to prevent an accumulation of condensation, grease, or other soil from potentially contaminating food.

Personal belongings should be properly stored to maintain a clean and sanitary facility and protect food and equipment. Cell phones and purses should not be in the food preparation area.

easily cleanable - a characteristic of a surface that allows effective removal of soil by normal cleaning methods
Section 3: Good Retail Practices

**WATER AND WASTEWATER**
The distribution of water to the facility must be protected and operated according to law. Adequate pressure must be maintained at all fixtures during peak demand, including the capacity to provide hot water at peak hot water demand.

The plumbing system, including the equipment and devices connected to the **potable water** supply, shall be installed and maintained according to law.

Sewage and wastewater must be properly disposed. Indications that a system is not functioning correctly may include the presence of sewage back-up into the establishment or outdoors on the ground. Condensate drippage and other non-sewage wastes must be drained to a system in accordance with the law, and backflow prevention, if required, must be installed between the sewage system and drain of equipment holding food or utensils.

**WASTE MANAGEMENT**
Refuse areas may attract and harbor insects and pests and create a public health nuisance, so attention must be paid to the maintenance of the refuse facilities. Receptacles and waste handling units for refuse, recyclables, and returnables used with materials containing food residue and used outside the food establishment shall be designed and constructed to have tight-fitting lids, doors, or covers.

*Properly constructed dumpsters with tight-fitting lids.*

*Missing lid and leaking refuse attract insects and pests.*

*potable water* - water that is safe to drink
## FOOD CODE REFERENCES

### SUPERVISION
- **2-101.11** Supervision: Responsibility, Assignment
- **2-102.11** Supervision: Knowledge, Demonstration
- **2-103.11** Supervision: Duties, Person in Charge

### EMPLOYEE HEALTH & GOOD HYGIENIC PRACTICES
- **2-102.11** Supervision: Knowledge, Demonstration
- **2-103.11** Supervision: Duties, Person in Charge
- **2-201.11** Employee Health: Responsibility of Permit Holder, Person in Charge, and Conditional Employees
- **2-201.12** Employee Health: Exclusions and Restrictions
- **2-302.11** Personal Cleanliness: Fingernails Maintenance
- **2-303.11** Personal Cleanliness: Jewelry Prohibition
- **2-304.11** Personal Cleanliness: Outer Clothing Clean Condition
- **2-401.11** Hygienic Practices: Eating, Drinking, or Using Tobacco
- **2-401.12** Hygienic Practices: Discharges from the Eyes, Nose, and Mouth
- **2-402.11** Hygienic Practices: Hair Restraints Effectiveness
- **2-501.11** Responding to Contamination Events: Clean-up of Vomiting and Diarrheal Events

### PREVENTING CONTAMINATION BY HANDS
- **2-301.11** Personal Cleanliness: Hands and Arms Clean Condition
- **2-301.12** Personal Cleanliness: Hands and Arms Cleaning Procedure
- **2-301.14** Personal Cleanliness: When to Wash
- **2-301.15** Personal Cleanliness: Where to Wash
- **5-202.12** Plumbing System: Handwashing Sink, Installation
- **5-203.11** Plumbing System: Numbers and Capacities, Handwashing Sinks
- **5-204.11** Plumbing System: Location and Placement, Handwashing Sinks
- **5-205.11** Plumbing System: Operation and Maintenance, Using a Handwashing Sink
- **6-301.11** Numbers and Capacities: Handwashing Sinks, Handwashing Cleanser, Availability
- **6-301.12** Numbers and Capacities: Handwashing Sinks, Hand Drying Provision
- **6-301.13** Numbers and Capacities: Handwashing Sinks, Handwashing Aids and Devices, Use Restrictions
- **6-301.14** Numbers and Capacities: Handwashing Sinks, Handwashing Signage
- **3-301.11** Protection from Contamination After Receiving: Preventing Contamination by Employees, Preventing Contamination from Hands

### APPROVED SOURCE
- **2-103.11(E)** Supervision: Duties, Person in Charge
- **3-101.11** Characteristics: Condition, Safe, Unadulterated, and Honestly Presented
- **3-201.11** Sources, Specifications, and Original Containers and Records: Sources, Compliance with Food Law
- **3-201.12** Sources, Specifications, and Original Containers and Records: Food in a Hermetically Sealed Container
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-201.13</td>
<td>Sources, Specifications, and Original Containers and Records: Fluid Milk and Milk Products</td>
</tr>
<tr>
<td>3-201.14</td>
<td>Sources, Specifications, and Original Containers and Records: Fish</td>
</tr>
<tr>
<td>3-201.15</td>
<td>Sources, Specifications, and Original Containers and Records: Molluscan Shellfish</td>
</tr>
<tr>
<td>3-201.16</td>
<td>Sources, Specifications, and Original Containers and Records: Wild Mushrooms</td>
</tr>
<tr>
<td>3-201.17</td>
<td>Sources, Specifications, and Original Containers and Records: Game Animals</td>
</tr>
<tr>
<td>3-202.13</td>
<td>Sources, Specifications, and Original Containers and Records: Eggs</td>
</tr>
<tr>
<td>3-202.14</td>
<td>Sources, Specifications, and Original Containers and Records: Eggs and Milk Products, Pasteurized</td>
</tr>
<tr>
<td>3-302.12</td>
<td>Protection from Contamination After Receiving: Food Storage Containers, Identified with Common Name of Food</td>
</tr>
<tr>
<td>3-402.11</td>
<td>Destruction of Organisms of Public Health Concern: Parasite Destruction</td>
</tr>
<tr>
<td>3-402.12</td>
<td>Destruction of Organisms of Public Health Concern: Records, Creation and Retention</td>
</tr>
</tbody>
</table>

**PROTECTION FROM CONTAMINATION**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-103.11</td>
<td>Supervision: Duties, Person in Charge</td>
</tr>
<tr>
<td>3-302.11</td>
<td>Protection from Contamination After Receiving: Preventing Food and Ingredient Contamination, Packaged and Unpackaged Food – Separation, Packaging, and Segregation</td>
</tr>
<tr>
<td>3-302.15</td>
<td>Protection from Contamination After Receiving: Package Integrity</td>
</tr>
<tr>
<td>3-304.11</td>
<td>Protection from Contamination After Receiving: Preventing Contamination from Equipment, Utensils, and Linens, Food Contact with Equipment and Utensils</td>
</tr>
<tr>
<td>6-404.11</td>
<td>Segregation and Location</td>
</tr>
<tr>
<td>4-601.11</td>
<td>Cleaning of Equipment and Utensils: Objective, Equipment, Food-Contact Surfaces, Nonfood-Contact Surfaces, and Utensils</td>
</tr>
<tr>
<td>4-602.11</td>
<td>Cleaning of Equipment and Utensils: Frequency, Equipment Food-Contact Surfaces and Utensils</td>
</tr>
<tr>
<td>4-602.12</td>
<td>Cleaning of Equipment and Utensils: Frequency, Cooking and Baking Equipment</td>
</tr>
</tbody>
</table>

**TIME/TEMPERATURE CONTROL FOR SAFETY**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-401.11</td>
<td>Destruction of Organisms of Public Health Concern: Cooking, Raw Animals Foods</td>
</tr>
<tr>
<td>3-401.12</td>
<td>Destruction of Organisms of Public Health Concern: Microwave Cooking</td>
</tr>
<tr>
<td>3-403.11</td>
<td>Destruction of Organisms of Public Health Concern: Reheating, Reheating for Hot Holding</td>
</tr>
<tr>
<td>Section 4: Food Code References</td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>DATE MARKING</strong></td>
<td></td>
</tr>
<tr>
<td>3-501.17 Limitation of Growth of Organisms of Public Health Concern: Ready-to-Eat, Time/Temperature Control for Safety Food, Date Marking</td>
<td></td>
</tr>
<tr>
<td><strong>USING TIME AS A PUBLIC HEALTH CONTROL</strong></td>
<td></td>
</tr>
<tr>
<td><strong>CONSUMER ADVISORY</strong></td>
<td></td>
</tr>
<tr>
<td>3-603.11 Food Identity, Presentation, and On-Premises Labeling: Consumer Advisory, Consumption of Animal Foods that are Raw, Undercooked, or Not Otherwise Processed to eliminate Pathogens</td>
<td></td>
</tr>
<tr>
<td><strong>HIGHLY SUSCEPTIBLE POPULATIONS</strong></td>
<td></td>
</tr>
<tr>
<td>3-801.11 Special Requirements for Highly Susceptible Populations: Additional Safeguards, Pasteurized Foods, Prohibited Re-Service, and Prohibited Food</td>
<td></td>
</tr>
<tr>
<td><strong>FOOD COLOR/ADDITIVES AND TOXIC SUBSTANCES</strong></td>
<td></td>
</tr>
<tr>
<td>3-202.12 Additives</td>
<td></td>
</tr>
<tr>
<td>3-302.14 Protection from Unapproved Additives</td>
<td></td>
</tr>
<tr>
<td>3-601.12 Food Identity, Presentation, and On-Premises Labeling: Honestly Presented</td>
<td></td>
</tr>
<tr>
<td>7-102.11 Labeling and Identification: Common Name</td>
<td></td>
</tr>
<tr>
<td>7-201.11 Operational Supplies and Applications: Storage, Separation</td>
<td></td>
</tr>
<tr>
<td>7-207.11 Operational Supplies and Applications: Medicines, Restriction and Storage</td>
<td></td>
</tr>
<tr>
<td>7-207.12 Operational Supplies and Applications: Medicines, Refrigerated Medicines, Storage</td>
<td></td>
</tr>
<tr>
<td>7-208.11 Operational Supplies and Applications: First Aid Supplies, Storage</td>
<td></td>
</tr>
<tr>
<td>7-209.11 Operational Supplies and Applications: Other Personal Care Items, Storage</td>
<td></td>
</tr>
<tr>
<td>7-301.11 Stock and Retail Sale: Storage and Display, Separation</td>
<td></td>
</tr>
<tr>
<td><strong>CONFORMANCE WITH APPROVED PROCEDURES</strong></td>
<td></td>
</tr>
<tr>
<td>3-404.11 Destruction of Organisms of Public Health Concern: Treating Juice</td>
<td></td>
</tr>
<tr>
<td>3-502.11 Limitation of Growth of Organisms of Public Health Concern: Specialized Processing Methods, Variance Requirement</td>
<td></td>
</tr>
<tr>
<td>3-502.12 Limitation of Growth of Organisms of Public Health Concern: Clostridium botulinum and Listeria monocytogenes Controls, Reduced Oxygen Packaging Without a Variance, Criteria</td>
<td></td>
</tr>
<tr>
<td>8-103.11 Code Applicability: Variances, Documentation of Proposed Variance and Justification</td>
<td></td>
</tr>
<tr>
<td>8-103.12 Code Applicability: Variances, Conformance with Approved Procedures</td>
<td></td>
</tr>
<tr>
<td>8-201.13 Plan Submission and Approval: When a HACCP Plan is Required</td>
<td></td>
</tr>
<tr>
<td>8-201.14 Plan Submission and Approval: Contents of a HACCP Plan</td>
<td></td>
</tr>
</tbody>
</table>
SAFE FOOD AND WATER
3-202.16 Sources, Specifications, and Original Containers and Records: Ice
3-302.13 Pasteurized Eggs, Substitute for Raw Eggs for Certain Recipes
5-101.11 Water: Source, Approved Systems
5-102.11 Water: Quality, Standards
5-102.12 Water: Quality, Nondrinking Water
5-102.13 Water: Quality, Sampling
5-102.14 Water: Quality, Sample Report
5-104.12 Water: Distribution, Delivery, and Retention, Alternative Water Supply

FOOD TEMPERATURE CONTROL
3-401.13 Destruction of Organisms of Public Health Concern: Plant Food Cooking for Hot Holding
3-501.13 Limitation of Growth of Organisms of Public Health Concern: Thawing
3-501.15 Limitation of Growth of Organisms of Public Health Concern: Cooling Methods
4-203.11 Design and Construction: Accuracy, Temperature Measuring Devices, Food
4-301.11 Numbers and Capacities: Equipment, Cooling, Heating, and Holding Capacities
4-502.11(B) Maintenance and Operation: Utensils and Temperature and Pressure Measuring Devices, Good Repair and Calibration

FOOD IDENTIFICATION
3-601.11 Food Identity, Presentation, and On-Premises Labeling: Accurate Representation, Standards of Identity
3-602.11 Food Identity, Presentation, and On-Premises Labeling: Labeling, Food Labels

PREVENTION OF FOOD CONTAMINATION
2-302.11 Personal Cleanliness: Fingernails Maintenance
2-303.11 Personal Cleanliness: Jewelry Prohibition
2-304.11 Personal Cleanliness: Outer Clothing Clean Condition
2-402.11 Hygienic Practices: Hair Restraints Effectiveness
2-403.11 Hygienic Practices: Animals, Handling Prohibition
3-302.15 Washing Fruits and Vegetables
3-304.14 Protection from Contamination After Receiving: Wiping Cloths, Use Limitation
3-305.11 Protection from Contamination After Receiving: Preventing Contamination from the Premises: Food Storage
3-305.12 Protection from Contamination After Receiving: Preventing Contamination from the Premises: Food Storage, Prohibited Areas
4-903.11 Laundering: Storing, Equipment, Utensils, Linens, and Single-Service and Single-Use Articles
4-903.12 Laundering: Storing, Prohibitions
Section 4: Food Code References

6-202.15 Design, Construction, and Installation: Outer Openings, Protected
6-202.16 Design, Construction, and Installation: Exterior Walls and Roofs, Protective Barrier
6-501.111 Maintenance and Operation: Controlling Pests
6-501.112 Maintenance and Operation: Removing Dead or Trapped Birds, Insects, Rodents, and Other Pests
6-501.115 Maintenance and Operation: Prohibiting Animals

PROPER USE OF UTENSILS
3-303.12 Protection from Contamination After Receiving: Preventing Contamination from Ice Used as a Coolant, Storage or Display of Food in Contact with Water or Ice
3-304.12 Protection from Contamination After Receiving: Preventing Contamination from Equipment, Utensils, and Linens, In-Use Utensils, Between-Use Storage
4-101.11 Materials for Construction and Repair: Multiuse, Characteristics
4-904.11 Protection of Clean Items: Preventing Contamination: Kitchenware and Tableware

UTENSILS, EQUIPMENT AND VENDING
4-101.12 Materials for Construction and Repair: Multiuse, Cast Iron, Use Limitation
4-101.13 Materials for Construction and Repair: Multiuse, Lead, Use Limitation
4-101.14 Materials for Construction and Repair: Multiuse, Copper, Use Limitation
4-101.15 Materials for Construction and Repair: Multiuse, Galvanized Metal, Use Limitation
4-101.17 Materials for Construction and Repair: Multiuse, Wood, Use Limitation
4-101.18 Materials for Construction and Repair: Multiuse, Nonstick Coatings, Use Limitation

WAREWASHING FACILITIES
4-101.16 Materials for Construction and Repair: Multiuse, Sponges, Use Limitation
4-204.115 Design and Construction: Warewashing Machines, Temperature Measuring Devices
4-204.116 Design and Construction: Manual Warewashing Equipment, Heaters and Baskets
4-204.117 Design and Construction: Warewashing Machines, Automatic Dispensing of Detergents and Sanitizers
4-301.12 Numbers and Capacities: Manual Warewashing, Sink Compartment Requirements
4-501.116 Maintenance and Operation: Equipment, Warewashing Equipment, Determining Chemical Sanitizer Concentration
4-703.11 Sanitization of Equipment and Utensils: Methods, Hot Water, and Chemical
Section 4: Food Code References

PHYSICAL FACILITIES

- 4-204.11 Design and Construction: Functionality, Ventilation Hood Systems, Drip Prevention
- 4-301.14 Numbers and Capacities: Ventilation Hood Systems, Adequacy
- 5-103.11 Water: Quantity and Availability, Capacity
- 5-103.12 Water: Quantity and Availability, Pressure
- 5-104.11 Water: Distribution, Delivery, and Retention, System
- 5-104.12 Water: Distribution, Delivery, and Retention, Alternative Water Supply
- 5-201.11 Plumbing System: Materials, Approved
- 5-202.11 Plumbing System: Design, Construction, and Installation
- 5-202.13 Plumbing System: Backflow Prevention, Air Gap
- 5-203.12 Plumbing System: Toilets and Urinals
- 5-402.10 Sewage, Other Liquid Waste, and Rainwater: Retention, Drainage, and Delivery, Establishment Drainage System
- 5-402.11 Sewage, Other Liquid Waste, and Rainwater: Retention, Drainage, and Delivery, Backflow Prevention
- 5-402.13 Sewage, Other Liquid Waste, and Rainwater: Retention, Drainage, and Delivery, Conveying Sewage
- 5-403.11 Sewage, Other Liquid Waste, and Rainwater: Disposal Facility, Approved Sewage Disposal System
- 5-501.11 Refuse, Recyclables, and Returnables: Outdoor Storage Surface
- 5-501.12 Refuse, Recyclables, and Returnables: Outdoor Enclosure
- 5-501.13 Refuse, Recyclables, and Returnables: Receptacles
- 5-501.15 Refuse, Recyclables, and Returnables: Outside Receptacles
- 5-501.17 Refuse, Recyclables, and Returnables: Toilet Room Receptacle, Covered
- 6-101.11 Materials for Construction and Repair: Indoor Areas, Surface Characteristics
- 6-201.11 Design, Construction, and Installation: Cleanability, Floors, Walls, and Ceilings
- 6-201.12 Design, Construction, and Installation: Cleanability, Floors, Walls, and Ceilings, Utility Lines
- 6-201.13 Design, Construction, and Installation: Cleanability, Floor and Wall Junctures, Coved, and Enclosed or Sealed
- 6-201.14 Design, Construction, and Installation: Cleanability, Floor Carpeting, Restrictions and Installation
- 6-201.15 Design, Construction, and Installation: Cleanability, Floor Covering, Mats and Duckboards
- 6-201.16 Design, Construction, and Installation: Cleanability, Wall and Ceiling Coverings and Coatings
- 6-201.17 Design, Construction, and Installation: Cleanability, Walls and Ceilings, Attachments
- 6-202.11 Design, Construction, and Installation: Functionality, Light Bulbs, Protective Shielding
- 6-202.14 Design, Construction, and Installation: Functionality, Toilet Rooms, Enclosed
- 6-302.11 Numbers and Capacities: Toilets and Urinals, Toilet Tissue, Availability
- 6-304.11 Numbers and Capacities: Ventilation, Mechanical
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-501.18</td>
<td>Maintenance and Operation: Premises, Structures, Attachments, and Fixtures – Methods, Cleaning of Plumbing Fixtures</td>
</tr>
<tr>
<td>6-501.19</td>
<td>Maintenance and Operation: Premises, Structures, Attachments, and Fixtures – Methods, Closing Toilet Room Doors</td>
</tr>
<tr>
<td>5-501.12</td>
<td>Refuse, Recyclables, and Returnables: Outdoor Enclosure</td>
</tr>
<tr>
<td>5-501.13</td>
<td>Refuse, Recyclables, and Returnables: Receptacles</td>
</tr>
<tr>
<td>5-501.15</td>
<td>Refuse, Recyclables, and Returnables: Outside Receptacles</td>
</tr>
<tr>
<td>5-501.17</td>
<td>Refuse, Recyclables, and Returnables: Toilet Room Receptacle, Covered</td>
</tr>
<tr>
<td>6-101.11</td>
<td>Materials for Construction and Repair: Indoor Areas, Surface Characteristics</td>
</tr>
<tr>
<td>6-201.11</td>
<td>Design, Construction, and Installation: Cleanability, Floors, Walls, and Ceilings</td>
</tr>
<tr>
<td>6-201.12</td>
<td>Design, Construction, and Installation: Cleanability, Floors, Walls, and Ceilings, Utility Lines</td>
</tr>
<tr>
<td>6-201.13</td>
<td>Design, Construction, and Installation: Cleanability, Floor and Wall Junctures, Coved, and Enclosed or Sealed</td>
</tr>
<tr>
<td>6-201.14</td>
<td>Design, Construction, and Installation: Cleanability, Floor Carpeting, Restrictions and Installation</td>
</tr>
<tr>
<td>6-201.15</td>
<td>Design, Construction, and Installation: Cleanability, Floor Covering, Mats and Duckboards</td>
</tr>
<tr>
<td>6-201.16</td>
<td>Design, Construction, and Installation: Cleanability, Wall and Ceiling Coverings and Coatings</td>
</tr>
<tr>
<td>6-201.17</td>
<td>Design, Construction, and Installation: Cleanability, Walls and Ceilings, Attachments</td>
</tr>
<tr>
<td>6-202.11</td>
<td>Design, Construction, and Installation: Functionality, Light Bulbs, Protective Shielding</td>
</tr>
<tr>
<td>6-302.11</td>
<td>Numbers and Capacities: Toilets and Urinals, Toilet Tissue, Availability</td>
</tr>
<tr>
<td>6-304.11</td>
<td>Numbers and Capacities: Ventilation, Mechanical</td>
</tr>
<tr>
<td>6-501.18</td>
<td>Maintenance and Operation: Premises, Structures, Attachments, and Fixtures – Methods, Cleaning of Plumbing Fixtures</td>
</tr>
<tr>
<td>6-501.19</td>
<td>Maintenance and Operation: Premises, Structures, Attachments, and Fixtures – Methods, Closing Toilet Room Doors</td>
</tr>
</tbody>
</table>
Section 5: Glossary

GLOSSARY

**Acidifying food** – acidified foods are low acid foods to which acid or acid ingredients are added to produce a final equilibrium pH of 4.6 or below

**Active managerial control** – the purposeful incorporation of specific actions or procedures by industry management into the operation of their businesses to attain control over foodborne illness risk factors

**Botulism** – the disease typically caused by ingestion of botulism toxin formed by the bacterium Clostridium botulinum

**Cleaning** – the removal of organic matter from food-contact surfaces, equipment, and utensils

**Cold holding** – the storage of food at 41°F or lower while awaiting consumption by customers

**Cook chill** – a method of cooking food and then rapidly chilling it with the intention to reheat the food and serve it to customers later

**Cooking** – to prepare food for eating, especially by heating to the time and temperatures specified in the food code

**Cooling** – the process of cooling food quickly to 41°F

**Critical control point(s)** – a point or procedure in a specific food system where the loss of control may result in an unacceptable health risk

**Critical limits** – the maximum or minimum parameter set to control a critical control point.

**Danger Zone** – the temperature range at which most foodborne pathogens rapidly grow (between 41°F and 135°F).

**Easily cleanable** – a characteristic of a surface that allows effective removal of soil by normal cleaning methods

**Fermenting food** - foods or beverages produced through controlled microbial growth and the conversion of food components through enzymatic action

**Foodborne pathogens** – a disease-producing organism that is transmissible through food
**Section 5: Glossary**

**Food-contact surface** – a surface of equipment or a utensil with which food normally comes into contact, or a surface of equipment or a utensil from which food may drain, drip, or splash into a food or onto a surface normally in contact with food.

**Food establishments** – any fixed restaurant, limited restaurant, coffee shop, cafeteria, short-order café, luncheonette, grill, tearoom, sandwich shop, soda fountain, tavern, bar, catering kitchen, delicatessen, bakery, grocery store, meat market, food processing plant, school, child care, or similar place in which food or drink is prepared for sale or service to the public on the premises or elsewhere with or without charge.

**Good retail practices** – the basic sanitary conditions and practices that must be maintained to produce safe foods.

**Hazard Analysis and Critical Control Point** – a systematic approach to the identification, evaluation, and control of food safety hazards.

**Highly susceptible population** – persons who are more likely than other people in the general population to experience foodborne diseases such as preschool-age children, older adults, or those who are immunocompromised.

**Hot holding** – the storage of cooked food at 135°F or higher while awaiting consumption by customers.

**Hygiene** – standards of personal cleanliness habits, including keeping hands, hair, and body clean and wearing clean clothing in the food establishment.

**Jaundice** – a yellowish discoloration of the skin and eyes, indicating liver malfunction and illness.

**Lesions** – an area of abnormal tissue change such as a wound or abscess.

**Major food allergens** – milk, egg, fish (such as bass, flounder, cod, and including crustacean shellfish such as crab, lobster, or shrimp), tree nuts (such as almonds, pecans, or walnuts), wheat, peanuts, and soybeans; or a food ingredient that contains protein derived from one or more of these foods.

**Molluscan shellfish** – any edible species of fresh or frozen oysters, clams, mussels, and scallops or edible portions thereof, except when the scallop product consists only of the shucked adductor muscle.
Non-continuous cooking process – the cooking of food using a process in which the initial heating of the food is intentionally halted so that it may be cooled and held for complete cooking later before sale or service

Non-TCS food - food that does not support the growth of foodborne pathogens or toxin formation and so does not require time/temperature control for safety

Person in charge (PIC) – the individual present at a food establishment who is responsible for the operation at the time of inspection

Pests – an insect or small animal that is detrimental to humans or human concerns

Plant foods – foods derived from plants such as vegetables, grains, nuts, seeds, legumes, and fruits

Potable water – water that is safe to drink

Ready-to-eat food – a food that is in a form that is edible without additional preparation

Regulatory Authority – local, state, or federal enforcement body or authorized representative having jurisdiction over the food establishment

Reheating – the process of re-cooking previously cooked and cooled foods to a temperature of at least 165°F

Sanitizing – the application of heat or chemicals on cleaned food contact surfaces that is sufficient to yield a 99.999% reduction of disease microorganisms of public health importance

Service animals – an animal such as a guide dog, signal dog, or other animal individually trained to aid an individual with a disability

Service sink – a sink used for cleanup such as a mop sink

Single-service articles – tableware, carry-out utensils, and other items such as bags, containers, placemats, stirrers, straws, toothpicks, and wrappers that are designed and constructed for one time, one person use after which they are intended for discard

Single-use articles – utensils and bulk food containers designed and constructed to be used once and discarded such as wax paper, butcher paper, plastic wrap, formed aluminum food containers, jars, plastic tubs or buckets, bread wrappers, pickle barrels, and ketchup bottles
Shellstock - raw, in-shell molluscan shellfish

Sous vide – a method of cooking food sealed in airtight plastic bags in a water bath for longer than normal cooking times at an accurately regulated temperature much lower than normally used for cooking with the intention to cook the item evenly

Thawing – the process of a frozen substance becoming liquid or soft as a result of warming up

Time and temperature control for safety (TCS) food – food that requires time and temperature control for safety to limit foodborne pathogen growth or toxin formation

Time and temperature parameters – a determined value for time and temperature that has been scientifically proven to control pathogen growth and toxin formation in food

Transmissible – capable of being passed or spread

Unadulterated – food in a pure state

Variance – a written document issued by the regulatory authority that authorizes a modification or waiver of one or more requirements of the food code if, in the opinion of the regulatory authority, a health hazard or nuisance will not result from the modification or waiver

Warewashing – the cleaning and sanitizing of utensils and food contact surfaces of equipment