

## TEMPERATURE DANGER ZONE (TCS FOODS)

Bacteria double every 20 minutes between 70°F–125°F. Never hold TCS food in this range.

**41°F – 135°F (5°C – 57°C)**

### 1. Internal Cooking Limits

**165°F (74°C) Instant:** Poultry, stuffing, casseroles, reheated TCS (within 2h), microwaved foods.

**155°F (68°C) 17 sec:** Ground beef/pork, mechanically tenderized steaks, pooled shell eggs.

**145°F (63°C) 15 sec:** Seafood, whole steaks, pork chops, commercial game, eggs for immediate service.

**145°F (63°C) 4 min:** Whole beef, pork, and lamb roasts (slow thermal conduction).

**135°F (57°C) Instant:** Plant foods, fruits, grains, cooked vegetables for hot holding.

### 2. Two-Stage Cooling Protocol

**Stage 1 (Critical):** Cool from **135°F down to 70°F within 2.0 hours** maximum (§ 3-501.14).

**Stage 2 (Holding):** Cool from **70°F down to ≤41°F within 4.0 hours** additional.

**Cumulative Time:** Total cooling time cannot exceed **6.0 hours** total.

**Corrective Action:** If >70°F at 2h mark, must reheat to 165°F for 15s or discard immediately.

**Holding Targets:** Cold Holding ≤41°F | Hot Holding ≥135°F.

### 3. Sanitizer PPM & Handwash

**Chlorine Bleach:** 50–99 ppm | Water ≥75°F (24°C) | Dwell Time: ≥ **7 seconds**.

**Quaternary Ammonia (Quats):** 200 ppm | Water ≥75°F (24°C) | Dwell: ≥ **30 seconds**.

**Iodine:** 12.5–25 ppm | Water ≥68°F (20°C), pH ≤5.0 | Dwell: ≥ **30 seconds**.

**Handwashing:** Total 20s minimum (10–15s vigorous soap lather under warm running water ≥100°F).

**Bare Hand Contact:** Strictly prohibited on Ready-to-Eat (RTE) foods (§ 3-301.11).

### 4. Walk-In Cooler Storage Hierarchy (Top to Bottom)

| Shelf             | Food Category                            | Min Temp    | Contamination Rationale                                 |
|-------------------|------------------------------------------|-------------|---------------------------------------------------------|
| <b>Top (1)</b>    | Ready-to-Eat (RTE) & Cooked Foods        | N/A         | Zero further cooking; zero drip risk onto lower foods.  |
| <b>Shelf 2</b>    | Whole Seafood, Intact Steaks, Shell Eggs | 145°F (15s) | Lowest raw thermal kill requirement.                    |
| <b>Shelf 3</b>    | Whole Beef & Pork Roasts                 | 145°F (4m)  | Intact muscle tissue; lower internal biological load.   |
| <b>Shelf 4</b>    | Ground Meats, Tenderized Cuts, Injected  | 155°F (17s) | Surface pathogens ground throughout interior.           |
| <b>Bottom (5)</b> | Whole & Ground Poultry, Stuffed Meats    | 165°F (1s)  | Highest Salmonella/Campylobacter load. Absolute bottom. |

### 5. Big 9 Major Food Allergens (FASTER Act)

**1. Sesame** (Mandatory allergen federal law)

**2. Milk & Dairy | 3. Eggs**

**4. Peanuts | 5. Tree Nuts** (Walnuts, Almonds)

**6. Fish** (Bass, Flounder, Cod) | **7. Crustacean Shellfish**

**8. Wheat & Gluten | 9. Soybeans**

*Protocol: Dedicated purple prep utensils, separate fryer oil, full Wash-Rinse-Sanitize between orders.*