

# Temperature Requirements for TCS Food

## Keep TCS Food Out of the Danger Zone

**Time and Temperature Control for Safety (TCS) Food:** any food requires time/temperature control for safety to limit pathogenic microorganism growth or toxin formation.



Disease-causing bacteria grow best at temperatures between 41°F and 135°F. Therefore:

- **Keep Hot Foods Hot: 135°F or Above.**
- **Keep Cold Foods Cold: 41°F or Below.**

## Thawing

- Thaw in cooler at 41°F or below.
- Thaw in cool (70°F or below) running water.
- Thaw in the microwave and cook immediately after thawing.
- Thaw as part of the cooking process.
- **Never thaw foods at room temperature.**

## Cooking

Foods requiring cooking shall be cooked to heat all parts of the food to a temperature of at least 135°F, except that:

- These foods shall be cooked to heat all parts of the food to at least 165°F with no interruption in the cooking process:
  - Poultry.
  - Stuffed poultry
  - Stuffed meats.
  - Stuffings containing meat.
- These foods shall be cooked to heat all parts of the food to at least 155°F:
  - Ground beef.
  - Any food containing ground beef.
  - Meats that are mechanically tenderized or injected.

## Temperature Requirements for TCS Food

- These foods shall be cooked to heat all parts of the food to at least 145°F:
  - Pork.
  - Any food containing pork.
  - Fish.
  - Any food containing fish.
- Shell eggs shall not be pooled if the pooled eggs are to be held before or after cooking.
- Shell eggs may be pooled for immediate cooking followed by immediate service.
- Individually prepared eggs and pooled eggs shall be cooked to heat all parts to 145°F or above for 15 seconds.
- Rare beef steaks shall be cooked to 145°F on the top and bottom surfaces with a cooked color change achieved on all external surfaces.
- Whole meats, including those listed below, shall be cooked to an internal temperature of at least 130°F for 112 minutes (rare):
  - Beef.
  - Corned beef roasts.
  - Pork roasts.
  - Lamb and cured pork roasts such as ham.

## Cooling Hot Food

Use small containers (shallow pans are best) and put them into the cooler immediately. **Do not cool at room temperature.** Food must cool from 135°F to 70°F within two hours and 70°F to 41°F within four hours. To accelerate the cooling of foods, you can use an ice bath and stir food frequently. Monitor the internal temperature of food with a thermometer.

## Reheating

Rapidly reheat foods from 41°F to at least 165°F within two hours. The food must be reheated on a stove, in an oven or reheated in a microwave to 165°F. After rapidly reheating, food must be held at 135°F or above until served. Monitor reheating and holding temperatures with a thermometer.

## Salad Preparation

Use ingredients that have already been cooled to 41°F or less (pre-chilled). This cuts down the amount of time these foods are in the Danger Zone from 41°F to 135°F.

# Food Temperature Monitor Record

Check temperatures of foods regularly by using a metal stemmed thermometer.

Table 1: Food Temperature Log Example.

Date	Time	Location	41°F Cold Product Food Item Temperature	135°F Hot Product Food Item Temperature	Person Testing

---

**Health Response and Licensure • Food and Lodging**  
1720 Burlington Drive, Suite A, Bismarck, ND 58504-7736  
Phone: (701) 328-1291 • Toll-free: 1 (800) 472-2927 • 711 (TTY)  
[hhs.nd.gov/foodandlodging](https://hhs.nd.gov/foodandlodging)

