



Results of the 2009 FOODSAFE® Knowledge Retention Study

A phone survey of FOODSAFE graduates was conducted in the spring of 2009. Questions were asked about food handler knowledge, practices and attitudes of 500 FOODSAFE graduates working in the food services industry, 395 FOODSAFE graduates no longer working in the food services industry and 201 food workers who had not taken the FOODSAFE course before.

The survey purpose was to find out -

- if the ability of FOODSAFE graduates to remember principles of food safety from the course declined over time,

The Danger Zone –

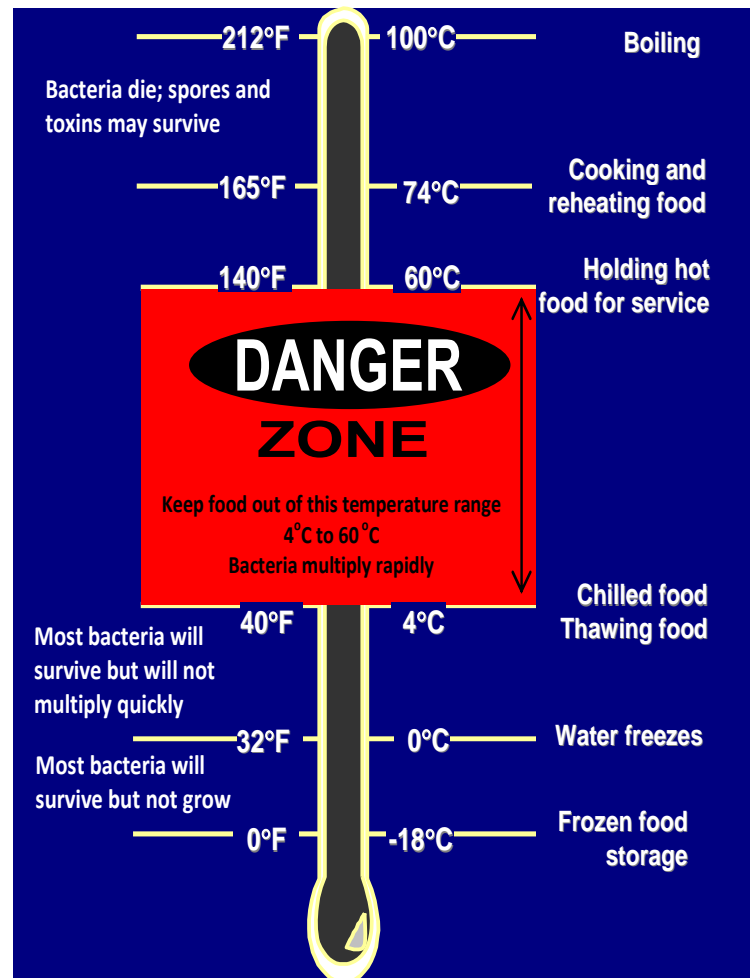
where bacteria grow – is between 4°C and 60°C

- if the workplace influences food safety knowledge and attitudes in workers, and
- if trained (FOODSAFE) food service workers have better food safety practices at home

What did we find?

FOODSAFE graduates did have significantly higher scores than untrained workers, but this knowledge decreased over time. After only 6 months, FOODSAFE graduates had forgotten key food safety principles and on average, most scored less than 70%. However, FOODSAFE graduates had better attitudes and practices in comparison to untrained food workers, and also had better practices at home. Where people worked also made a difference, food workers surveyed from institutions (for e.g. hospitals) and caterers had higher food safety knowledge scores than food workers surveyed from fast food premises, take-outs and resorts. Knowledge scores increased with age,

years of experience and for supervisors, although not for university educated food workers.



Key messages for food safety

TEMPERATURE CONTROL

1. The temperature range that bacteria can grow in is called the **“The Danger Zone”** – this is between **4°C (40°F) and 60°C (140°F)**. To minimize bacterial growth keep foods refrigerated below 4°C (40°F) and held hot above 60°C (140°F).

2. Check the Temperature!



Always use a thermometer at work and at home to check the internal temperature of foods and the refrigerator. In this survey, only 63% of trained

food workers and 50% of untrained food workers would use a food thermometer to check if foods were cooked enough. 49 to 55% of untrained and trained food workers would take the internal temperature of a hamburger patty – remember, **Your Burger's Done at 71°C!**



3. Cooling. To keep foods out of the danger zone, **cool after cooking to 20°C within 2 hrs, then to 4°C within 4 hrs.** Using an ice bath is a good idea, or transfer foods from big pots into smaller

shallow pans, so the food cools faster. Measure the internal temperature of the food.

4. Reheating. To properly reheat foods, they should be cooked to an internal temperature of at least **74°C (165°F)**.

HAND WASHING AND HYGIENE



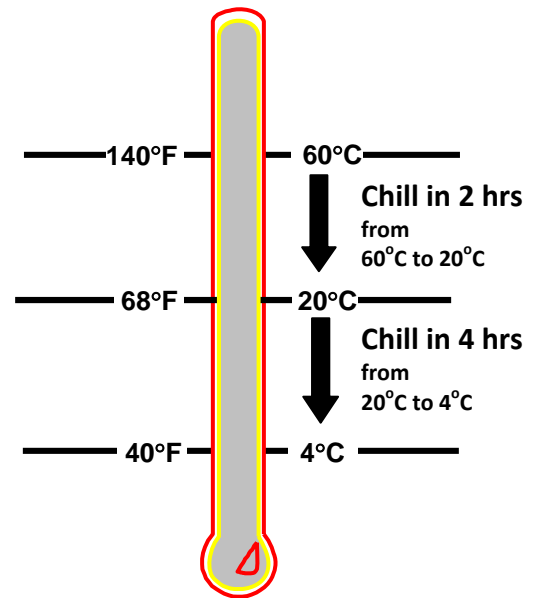
All of the food workers in the survey correctly answered that they would wash their hands after going to the bathroom or handling raw meat. But not

everyone would wash hands after using gloves, handling money, making a sandwich, or at home after handling their pet. Frequent hand-washing is important to remove soil and germs that may spread illness and contaminate food. Use regular soap (NOT antimicrobial soap).

DON'T GO TO WORK SICK!

77% of untrained food workers (and 90% of trained food workers) agreed with the statement *"If you go to work with diarrhea you might make other people sick"*.

FOOD COOLING PROCEDURE

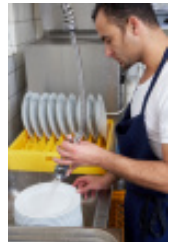


SANITIZING

The correct way to wash dishes is to

WASH → RINSE → SANITIZE → AIR DRY

The correct amount of household bleach to sanitize surfaces is one ounce per gallon (or 5 mL per litre) to achieve at least 200ppm (the desired range is between 100 and 200ppm, household bleach can vary between 3.25% and 5%). Only 64% of trained workers and 55% of untrained workers answered this correctly!



Why is food safety important?

No one wants to get sick after eating food. Food safety is important to control hazards in food. In reported outbreaks, food handlers were linked to over 16,000 cases of illness between 2000 and 2006, usually due to poor hygiene or poor food handling practices

(Greig et al 2007; JFP 70(7):1752-61).

Understanding potential hazards in food, and how to control them is one way food handlers can prevent illness.