



# Dietary: The Game of Infection Prevention

Presenter:

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# Disclosure

No conflicts of interest





# Instructions

Go to

**[www.menti.com](https://www.menti.com)**

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Or use QR code





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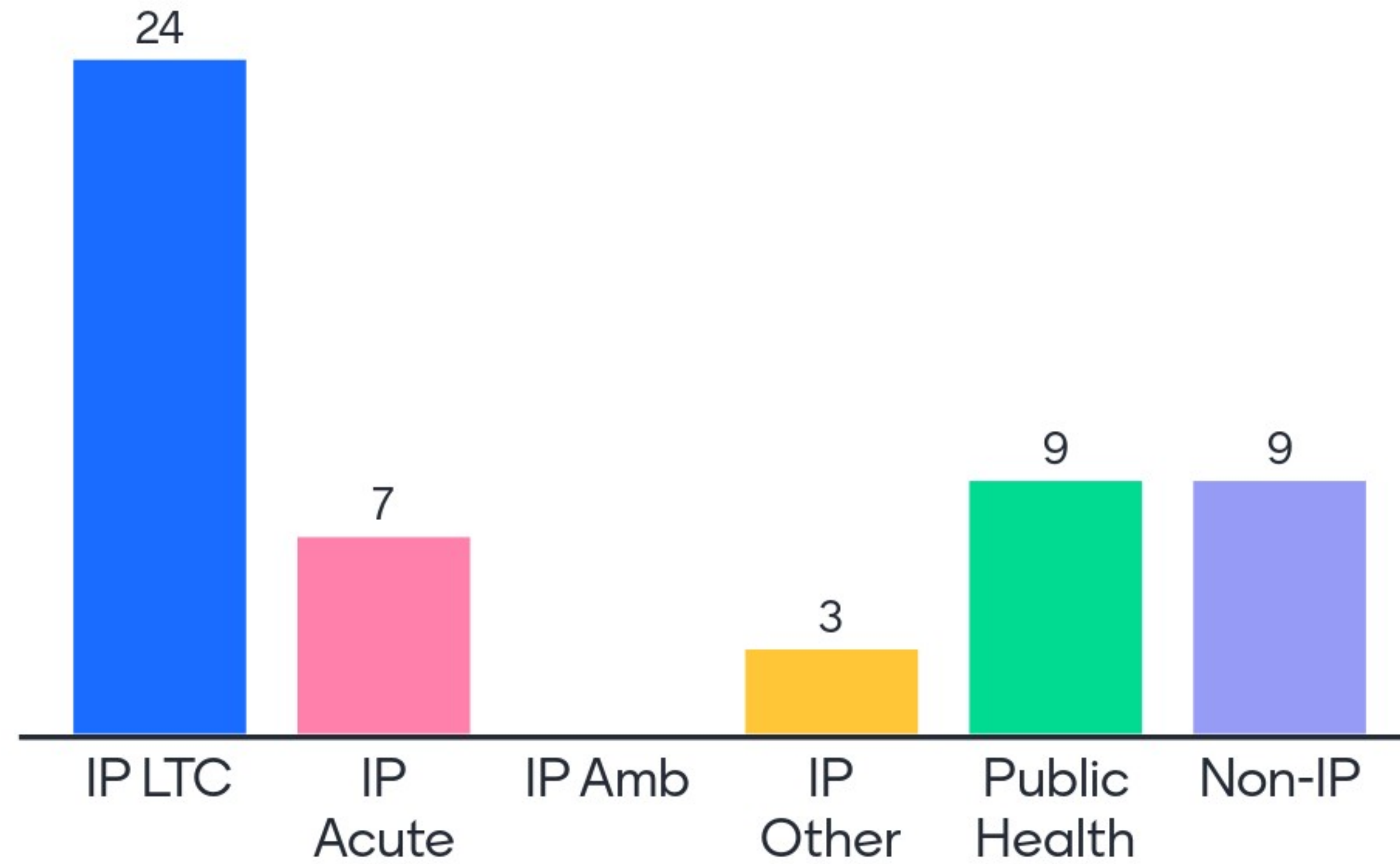
## Objectives

Upon completion, the participant will be able to:

- Identify 3 common infection control challenges in the dietary program
- Describe infection prevention measures that should be used to store, prepare and serve food
- State 3 ways cross contamination can occur in the dietary program



# Please select your role:



What are your  
“Food Fears”  
related to  
Infection  
Control?

Outbreaks

Regulatory

What to look for?

The “unknown”

Something else





# What word describes your "food fear" for Infection Control?

68 responses







According to CDC estimates, the most common foodborne illnesses are caused by norovirus, Salmonella, Clostridium perfringens, Campylobacter, and Staphylococcus aureus.

48 million people get sick from foodborne illnesses every year. Among them, 128,000 are hospitalized and 3,000 people die.

Norovirus ~5x more common, less severe usually. In the US, norovirus is the most common cause of illness from contaminated food or water—but food isn't the only way people can get norovirus. It also spreads easily from person-to-person.



# Foodborne Illness Related Pathogens

Etiological Agent	Incubation Period	Clinical Syndrome
Staphylococcus aureus	30 min-8 hrs; usually 2-4 hrs	Vomiting, diarrhea
Clostridium perfringens	6-24 hrs	Diarrhea, abdominal cramps; vomiting and fever uncommon
Nontyphoidal Salmonella	6 hrs-10 days; usually 6-48 hrs	Diarrhea, often with fever and abdominal cramps
Norovirus (NoV)	12-48 hrs (median 33 hours)	Diarrhea, vomiting, nausea, abdominal cramps, low-grade fever
Campylobacter jejuni/coli	2-10 days; usually 2-5 days	Diarrhea (often bloody), abdominal pain, fever
Listeria monocytogenes – Diarrheal disease	Unknown	Diarrhea, abdominal cramps, fever



# Multi-State Foodborne Outbreaks

Contaminated Food	Germ	Year
<a href="#">Raw Cheddar Cheese</a>	E. coli O157	2024
<a href="#">Queso Fresco and Cotija Cheese</a>	Listeria monocytogenes	2024
<a href="#">Charcuterie Meats</a>	Salmonella I 4:l:-	2024
<a href="#">Peaches, Nectarines, and Plums</a>	Listeria monocytogenes	2023
<a href="#">Cantaloupes</a>	Salmonella Sundsvall	2023
<a href="#">Fresh Diced Onions</a>	Salmonella Thompson	2023
<a href="#">Ice Cream</a>	Listeria monocytogenes	2023
<a href="#">Ground Beef</a>	Salmonella Saint Paul	2023
<a href="#">Raw Cookie Dough</a>	Salmonella Enteritidis	2023
<a href="#">Flour</a>	Salmonella Infantis	2023
<a href="#">Frozen Strawberries</a>	Hepatitis A	2023
<a href="#">Leafy Greens</a>	<i>Listeria monocytogenes</i>	2023



# FOODBORNE ILLNESSES:

- ~250 known foodborne illnesses (caused by bacteria, viruses and parasites)
- Salmonella has been reported as the major cause of foodborne illness resulting in hospitalization and death.
- Most vulnerable: young children and older adults; most severe complications and deaths





## Suspect Foodborne Disease Outbreak?

If a cluster of illnesses are thought to be possibly attributable to healthcare prepared food, what do you do?

- work with Local Health Dept. (LHD)
- IP role is lead in facility in collaboration with the Dietary Manager, Nursing and Medical.
- Collaborating with LHD, a determination of which food items are suspect, and samples from same lot or batch should be saved.
- LHD will advise on any culturing to be done of food or individuals.
- Be prepared ahead of time with policy and procedures to follow.





## Risk Factors for Foodborne Illness Outbreaks:

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1. Food from unsafe sources
2. Improper cooling or heating of perishable food items
3. Improper cooking temperatures of food
4. Dirty and/or contaminated utensils and equipment (cross contamination)
5. Poor employee hygiene and hygiene practices



# Food Sources

## 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.
- 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.





# THE TEMPERATURE DANGER ZONE

Limit the time that foods spend in the temperature danger zone and cook foods to the minimum internal temperature required for safety.



**41°F - 135°F**

Bacteria grows most quickly between 70°F - 125°F

The temperature danger zone has its name for a reason!

A single bacterium doubles every 20 minutes in the right conditions, meaning it can multiply trillions of times in just 24 hours without proper attention to food safety.

The temperature danger zone is between 41°F and 135°F—a temperature range in which pathogens grow well. Harmful microorganisms can grow to levels high enough to cause illness within four hours.



# Time and Temperature Control for Safety (TCS)

Foods that need time and temperature control for safety, known as TCS foods, include:

TCS Foods	TCS Foods	TCS Foods	TCS Foods
milk and dairy products	eggs	meat (beef, pork, and lamb)	poultry
fish	shellfish and crustaceans	baked potatoes	tofu or other soy protein
sprouts and sprout seeds	sliced melons	cut tomatoes	cut leafy greens
untreated garlic-and-oil mixtures	cooked rice	cooked beans	cooked vegetables



# TCS Holding Temperatures

- Cold foods must be maintained at 41°F or less.
- Hot food must be maintained at 135°F or above.
- Be sure to check the temperature at least every four hours.
- Checking the temperature every two hours would be ideal to leave time for corrective action.
- Throw out food that is not 41°F or lower, or 135°F or higher.





# Cooling Foods

Food must pass through the temperature danger zone **quickly** to reduce the growth of pathogens.

- First the food must be cooled from 135°F to 70°F **within two hours**,
- Then cooled to 41°F or lower in the next **four hours**.
- If the food has not reached 70°F within **two hours**, it must be thrown out or reheated and then cooled again.
- The total cooling time cannot be longer than **six hours**.



# Proper cooling methods for food



1. First the food must be cooled from 135°F to 70°F **within two hours**,
2. Then cooled to 41°F or lower in the next **four hours**.

- Separate food into smaller portions. The most effective way to cool food is to reduce its size. **A large pot of hot food put right into the fridge can become dangerous.** Divide large containers of food into smaller containers or shallow pans.
- Cover food loosely while it cools. This let's heat escape more easily while food cools in the fridge.
- Stir loose foods
- Use an ice bath
- Add ice or water as an ingredient
- Use a blast chiller or tumbler



# Reheating Foods

1. Food that will be served immediately can be reheated to any temperature as long as the food was cooked and cooled properly.
2. Food reheated for hot-holding must reach an internal temperature of 165°F within **two hours**.
3. The food needs to stay at this temperature for at least **15 seconds** before serving.





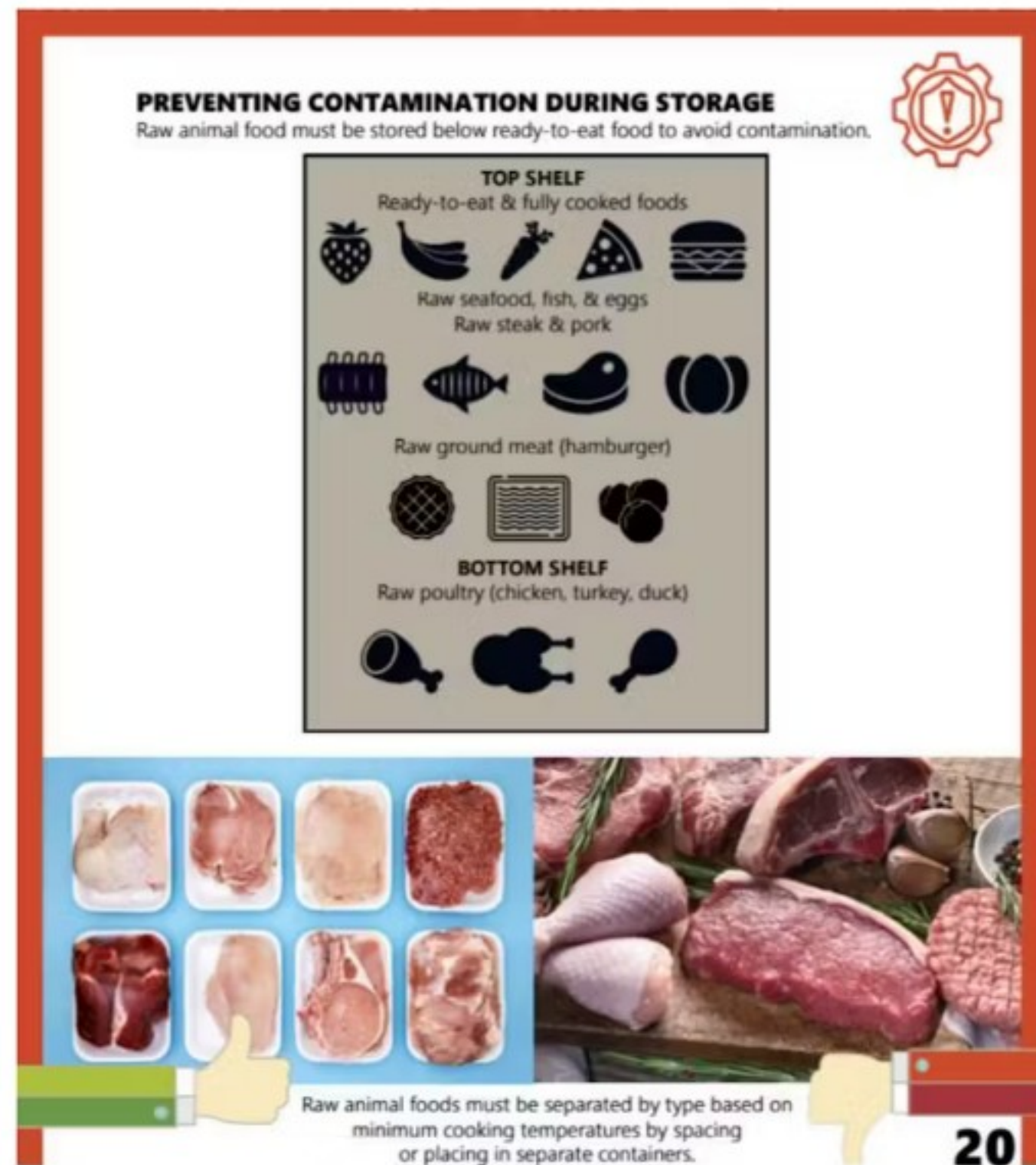
# Storing to prevent cross-contamination

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## Storing in Coolers/Refrigerators



Based on minimally required internal temperature.

### Top Shelf:

- Ready to eat and fully cooked foods
- Raw seafood, fish, eggs
- Raw steak (beef, pork)
- Raw ground meat

### Bottom Shelf

- Raw poultry







## Cross Contamination Prevention

Ready to eat food = NO TOUCH with bare hands

Gloves: must be single use, wash hands before gloving, should fit, never blow into them to put on, change at appropriate times

Nail care-short and clean, file, not artificial, no polish unless LHD allows polish with gloves





## Prepping foods

Cutting boards and surfaces should be kept clean and sanitized

Color coded for use: (example)

- Red: raw meat
- Blue: raw fish
- Yellow: raw poultry
- Green: Fruit and Veg
- White: Bakery and Dairy
- Brown: cooked meat



# Cleaning and Sanitizing

Cleaning: removes food and dirt from surface (floors, walls, shelves, equipment, etc.)

Sanitizer: for surfaces that touch food

Infection Control tip:  
Worn/cracked surfaces prevent proper sanitation.





# Thermometer Use

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- Wash, rinse, sanitized and air dried before AND after use.
- Keep storage cases clean.
- Need to be calibrated regularly.





# Sanitizing with Chemical Methods

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- Whether mixed manually or mechanically: appropriate concentration must be used per manufacturer's recommendation. Test strips must be on hand to test concentration.
- Chemicals include quaternary ammonium sanitizers and chlorine-based sanitizers and strips are available for both.

Green = cleaning solution

Red = sanitizing solution





# 3 Compartment Sink





# Personal Hygiene

Proper hand hygiene must be practiced!

When?

- before starting work;
- before putting on single service gloves;
- after touching raw, fresh or frozen beef, poultry, fish or meat;
- after mopping, sweeping, removing garbage or using the telephone;
- after using the bathroom;
- after smoking, eating, sneezing or drinking;
- after touching anything that might result in contamination of hands.





# Personal Hygiene

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Wash hands in dedicated hand washing sink.

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This sink should be labeled to indicate purpose of hand hygiene only.

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Do not use a sink that is used for food prep or ware washing or service sink for hand hygiene.

Poor Personal Hygiene is generally recognized as the most common contributing factor for foodborne illness.





# Mouths

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- Saliva: can contain pathogens
- No eating, drinking, smoking, vaping, chewing gum, and nicotine products are allowed in prep areas
- Only allowed in designated areas, (never in prep area or service areas), followed by hand washing



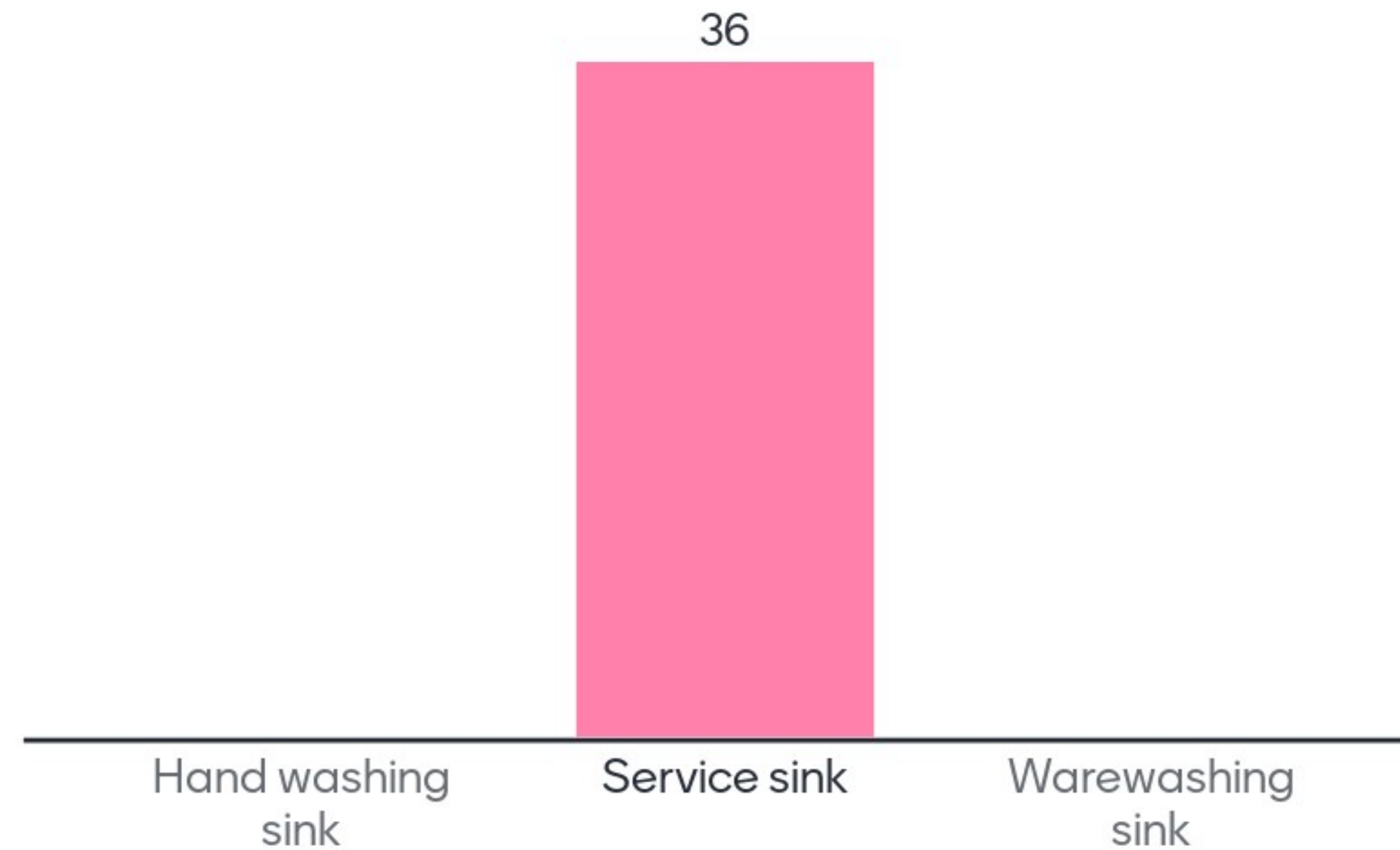


# Personal Hygiene



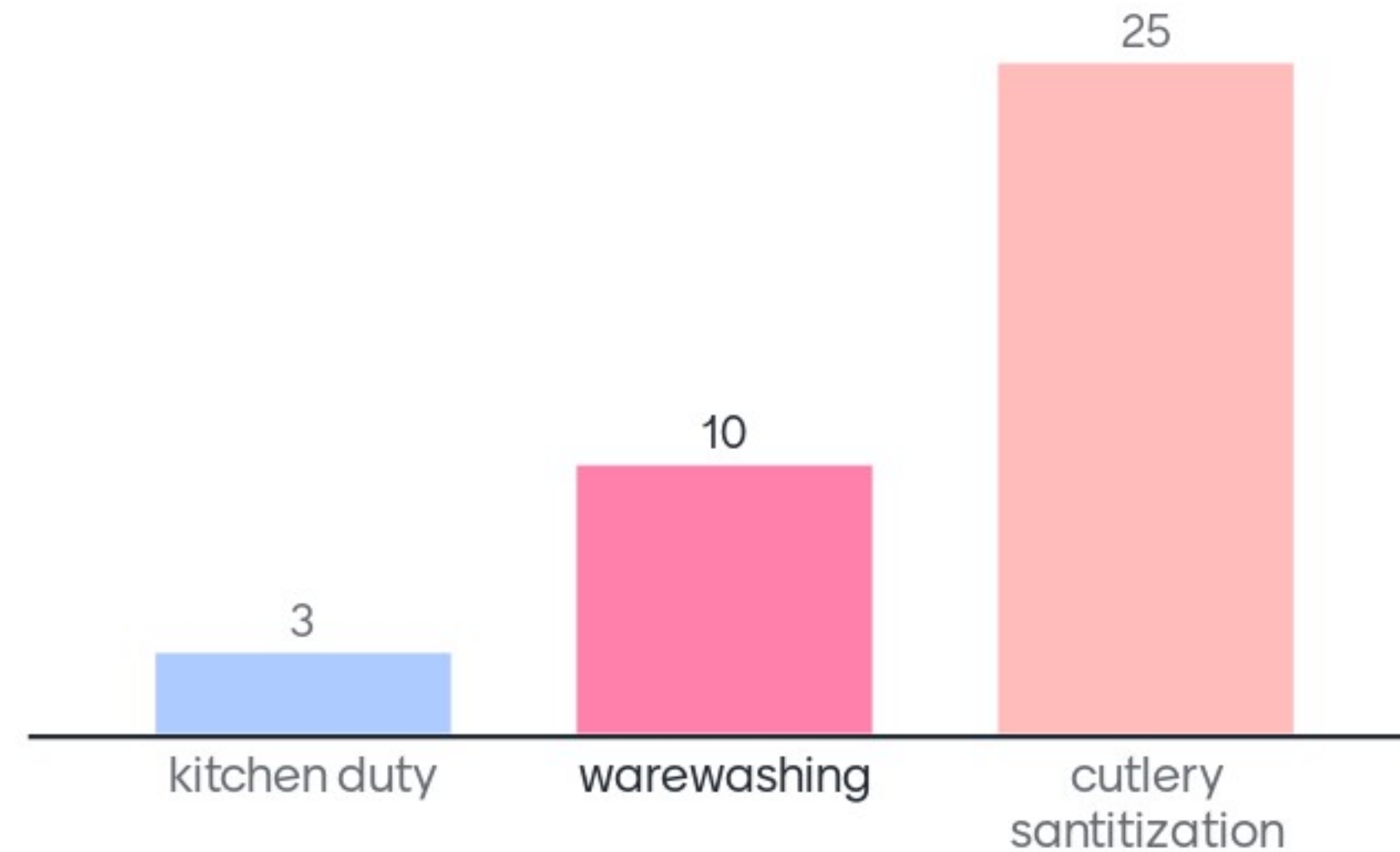


A sink that is used for cleanup of items such as a mop is called:



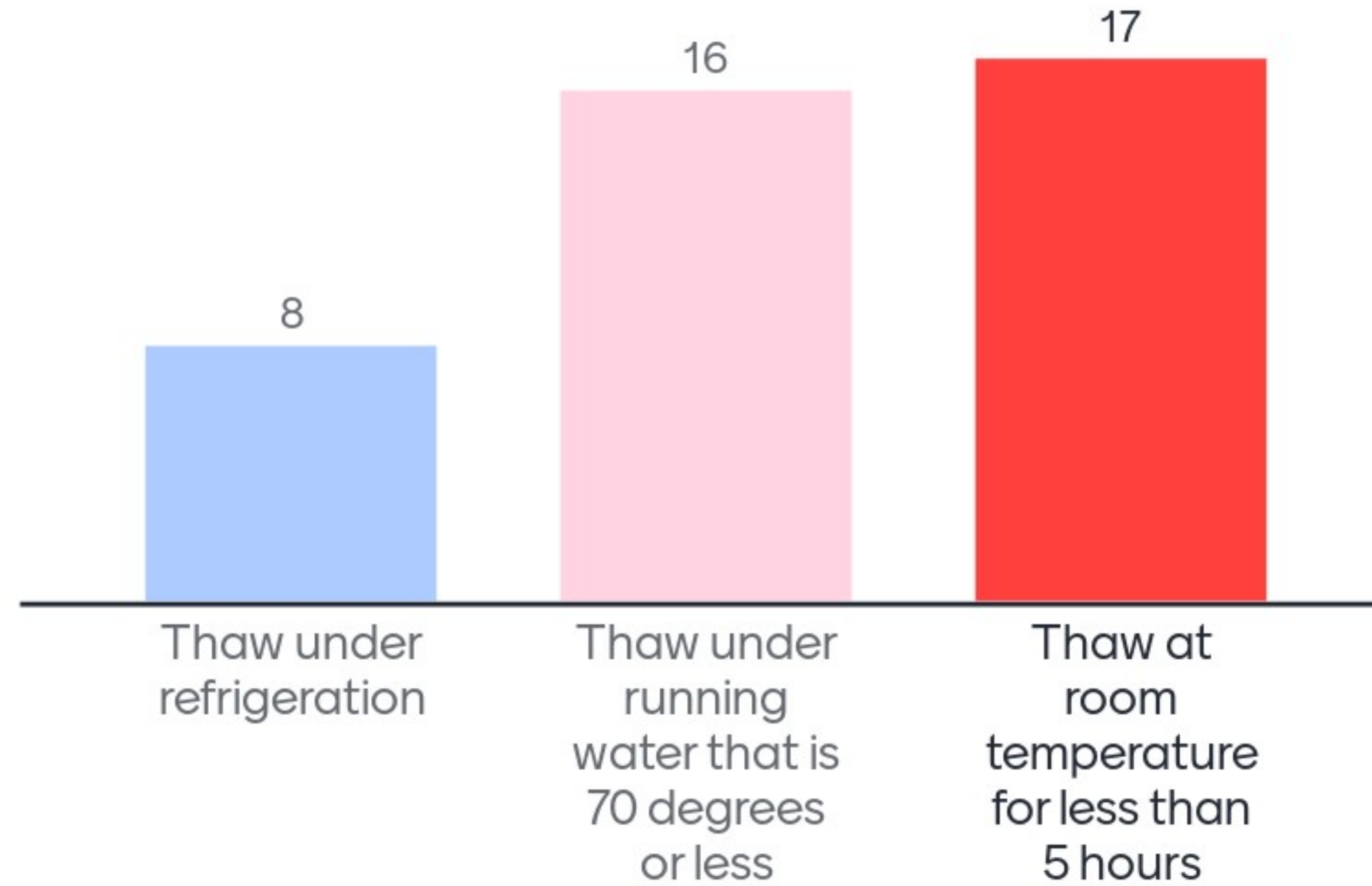


# The process of cleaning and sanitizing of utensils and food contact surfaces of equipment is:





# Thawing TCS foods safely includes all EXCEPT:





# Infection Control: Key Elements

1. Cover food, beverages and utensils properly when outside dining area
2. Plates prevented from contact with staff clothing
3. Handle cups, glasses on the outside of container
4. Knives, forks, and spoons handled by the handles
5. Avoiding contact with hair/face when handling food or assisting with feeding
6. Hand hygiene offered for those dining prior to eating
7. Hand Hygiene performed prior to and during meal service by facility staff
8. Dining areas cleaned including table surfaces after each meal
9. Avoid direct contact with people when staff are ill or have open wounds

Source: Texas Health and Human Services: Dining and Meal Service Evidence-Based Best Practices  
<https://isid.org/guide/infectionprevention/hospital-food/>



# Free Training Resources: Oregon Patient Safety Commission

20 Infection Control related English and Spanish language videos:  
<http://bit.ly/2wctBxC>

**Single-use gloves should be worn as follows:**

- Always wash hands before putting on gloves
- Do not touch ready to eat foods with your bare hands
- Wear gloves that fit
- Do not blow into a glove then put on
- Do not rinse, wash, or reuse
- Wash your hands after removing gloves and before putting on a new pair

**Laundry Training Outline**

1. Physical Area Requirements
2. Cleaning Work Areas
3. Collection: Soiled
4. Transport: Soiled
5. Laundry Cleaning Process

**Infection Control Basics for Healthcare Laundry Services: Part 1**

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- Infection Control Basics for Healthcare Laundry Services: Part 1 (11:57)
- Infection Control for Healthcare Food Service: Part 2 (9:53)
- Infection Control for Healthcare Food Service: Part 1 (11:29)
- Environmental Hygiene: Best Practices to Use When Cleanin... (8:43)





# Thank You!

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