

ServSafe® by the Numbers

To pass the **ServSafe Food Protection Manager Certification Exam**, you need to know a lot of key numbers. We've compiled them all into this single study guide!

Chapter 3

- When washing hands, the water temperature must be at least 85°F (29°C).
- You must scrub your hands vigorously for <u>10-15</u> seconds.
- The handwashing process (from wetting hands to rinsing hands and including lathering) should take at least <u>20</u> seconds.
- Single use gloves can be used for no longer than 4 hours when being used for the same task continuously.

Chapter 4

- The temperature danger zone (where bacteria can survive and grow) is from 41°F 135°F (5°C 57°C).
- The "red zone" is 70°F 125°F (21°C 52°C) and is nested inside the temperature danger zone. The red zone is the range where bacteria not only survive and grow but grow very rapidly.
- Thermometers used for taking the temperature of food directly must be accurate to +/-2°F (+/-1°C).
- Thermometers used for monitoring air temperature must be accurate to $\pm \frac{-3°F (\pm -1.5°C)}{-1.5°C}$.

Chapter 5

- Cold TCS food must be received at 41°F (5°C) or below. Exceptions include milk, shell eggs, and shellfish.
- Milk, shell eggs, and shellfish can be received at an air temperature of <u>45°F (7°C)</u> if they are chilled down to <u>41°F</u> (<u>5°C)</u> or below within four hours of receipt. Shellfish can also be received at an *internal* temperature of no greater than <u>50°F (10°C)</u>.
- Hot TCS food must be received at 135°F (57°C) or above.
- Hot TCS food must be held on a buffet or steam table at 135°F (57°C) or above.
- Live shellfish should be received with shell stock identification tags, and those tags must be kept on file for <u>90</u> days after the last of the shellfish is served.
- Fish that is sushi-grade, or farm raised fish must be received with proper documentation, and that documentation must be kept on file for **90 days** after the last of the fish is served.
- Food products and paper products must be stored at least <u>6 inches (15cm)</u> off the floor in dry storage rooms, walk-in coolers, and walk-in freezers.
- TCS food must be date marked if held longer than <u>24 hours</u>.
- TCS food can only be held for a maximum of <u>7 days</u> when held at <u>41°F (5°F)</u> or below (not including food that is solidly frozen).



Chapter 6

 Minimum internal cooking temperatures for foods are the temperatures required to ensure foods are safe to consume.

This chart should be used with, and not in place of, the temperature chart listed on page 6.11 of the <u>ServSafe®</u> <u>Manager 7th Edition</u> textbook from the National Restaurant Association.

Storage Order	Temperature	"Simplified" Category		
Top Shelf	n/a	Ready-to-eat Foods	Tossed salads; pre-cooked foods; foods that don't require cooking	
	135°F (57°C)	Food from plants such as fruits, vegetables, grains, legumes, & commercially processed and packaged ready-to-eat foods (that will be hot held)	Baked fruit cobbler, steamed California blend vegetables, rice pilaf, baked potatoes, refried beans, hot dogs	
	145°F (63°C) for 15 seconds	Steaks & chops, seafood, commercially raised game, shell eggs for immediate service	NY Strip steak, pork chops, veal cutlets, lamb chops, salmon filet, broiled shrimp, lobster tail, venison tenderloin medallions, scrambled eggs served immediately	
	145°F (63°C) for 4 minutes	Roasts & whole cuts of meat	Beef roasts, pork roasts, veal roasts, leg of lamb	
	155°F (68°C) for 17 seconds	Foods that are not in their original state or condition. Also, large flightless birds; eggs prepared for hot holding	Hamburgers, meatloaf, Italian sausage, teriyaki-injected pork loin, ostrich filet, scrambled eggs on a buffet	
Bottom Shelf	165°F (74°C) for < 1 second (Instantaneous)	Poultry, stuffing, stuffed foods	Thanksgiving turkey and oyster stuffing, roasted duck, mushroom stuffed ravioli	



Chapter 7

- Cold food can be held for no longer than <u>7 days</u> when held at <u>41°F (5°C)</u> or lower.
- Hot, ready-to-eat TCS food must be held at 135°F (57°C) or hotter.
- Cold, ready-to-eat TCS food can be held without temperature control for a maximum of 6 hours if:
 - o the food is 41°F (5°C) or below when removed from refrigeration
 - o the food does not exceed 70°F (21°C) during the 6 hours
 - o the food is labeled as to when it must be sold, served or thrown away
 - o the food is sold, served or thrown away within 6 hours
- Alternatively, if cold ready-to-eat TCS food held <u>without temperature control</u> is discarded within <u>4 hours</u>, it is allowed to reach any temperature during service.
- Ready-to-eat fruit or vegetables that become TCS when cut, and hermitically sealed containers of food that become TCS when opened can have a temperature of <u>70°F (21°C)</u> or lower and:
 - o Must be discarded within 4 hours
 - o Cannot exceed 70°F (21°C) within the 4 hours
 - o Must be labeled with a discard time 4 hours from when it became a TCS food
- Hot food can be held without temperature control for a maximum of 4 hours if:
 - the food is 135°F (57°C) or above when removed from hot holding
 - o the food is labeled as to when it must be sold, served or thrown away
 - o the food is sold, served or thrown away within 4 hours

Chapter 9

- All floor mounted equipment and shelving must be a minimum of <u>6 inches (15cm)</u> off the floor on either legs or wheels or must be mounted directly to a masonry base and sealed to the base. (i.e. Ice machines, floor mixers)
- All countertop equipment must be a minimum of <u>4 inches (10cm)</u> off the countertop or must be sealed directly to the countertop. (i.e., Soda fountains, espresso machines)
- There are <u>5 things</u> required for a hand washing station: warm running water of at least **85°F (29°C)**, soap, a way to dry your hands, a trash can and signage.
- There are <u>3 rules</u> for pest prevention: deny pests access; deny pests food, water and shelter; call a Pest Control Operator (PCO) if infestation occurs.

Chapter 10

- Hot water for hand washing pots and pans must be a minimum of <u>110°F (43°C)</u>.
- Final sanitizing rinse in a stationary rack, single temperature dishwashing machine must be at least 165°F (74°C).
- Hot water for sanitizing by immersion (in a sink) must be a minimum of 171°F (77°C).
- Final sanitizing rinse in a mechanical (multi-compartment or conveyor) dishwashing machine must be at least 180°F (82°C).
- Food contact surfaces and equipment that are in continuous use must be shut-down, cleaned and sanitized at least once every <u>4 hours</u>.



• Chemicals used for sanitizing must be mixed correctly. Here are the parameters for the three chemicals that we study in the ServSafe program:

This sheet should be used with, and not in place of, the sanitizer chart listed on page 10.4 of the ServSafe® Manager 7th Edition textbook from the National Restaurant Association.

	Chlorine	Chlorine	lodine	Quaternary Ammonium	Hot Water Immersion
Water Temperature	less than or equal to 100°F (38°C)	less than or equal to 75°F (24°C)	68°F (20°C)	75°F (24°C)	171°F (77°C)
Water pH	less than or equal to 10	less than or equal to 8	per manufacturer	per manufacturer	n/a
Water hardness	per manufacturer	per manufacturer	per manufacturer	per manufacturer	n/a
Sanitizer concentration	50-99ppm (parts per million)	50-99ppm (parts per million)	12.5-25ppm (parts per million)	per manufacturer	n/a
Sanitizer contact time	a minimum of 7 seconds	a minimum of 7 seconds	a minimum of 30 seconds	a minimum of 30 seconds	a minimum of 30 seconds

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