Study Guide for ServSafe Certification
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Vocabulary Terms

Air Gap  HACCP  Potential Hazardous Food
Back Flow  IPM  Quats
CCP  MAP Packaging  Sous Vide
Cross Connection  MSDS  Spores
FATTOM  Pasteurization  UHT
FIFO  PCO  Vacuum Packed Foods

1. What are the general guidelines of storing pesticides?
2. What is the difference between a foodborne illness and a foodborne illness outbreak?
3. What are the signs of a rodent infestation?
4. What are the 8 common causes of FBI?
5. What are the signs of cockroach infestations?
6. Who are the 5 groups in a High Risk Population?
7. How do you deny pest access to a foodservice facility?
8. What are some examples of PHF? What are the 3 characteristics of PHF?
9. Know the guidelines for storing cleaning supplies in a foodservice facility?
10. What is the difference between cleaning and sanitizing?
11. What are the 5 steps in a three compartment sink area?
12. What is the difference between foodborne infection and foodborne intoxication?
13. What must be done during a raw sewage backup?
14. What is the favorable PH range of bacteria?
15. What must be done during a water emergency?
16. Know the characteristics of Hepatitis A, Botulism, Salmonella and Ciguatera?
17. How many inches from the floor and wall should dry storage be?
18. List the characteristics of a safe food handler?
19. What are the requirements of a restroom facility?
20. Know the steps of proper hand washing in a foodservice facility.
21. What are the requirements of hand washing station/area?
22. What is the differences between proper and improper attire?
23. Know the 7 principles of HACCP.
24. What is management’s role in establishing and maintaining personal hygiene?
25. What are the general guidelines for buffet service?
26. Know the flow of food in a foodservice establishment.
27. What types of foods can be reserved to customers?
28. How do you take the temperature of meats, packaged foods, bulk liquids and cartons?
29. What are the guidelines for using gloves in the kitchen?
30. Know how to calibrate a thermometer using the ice point and boiling point method.
31. Know the hot holding guidelines.
32. What are the acceptable qualities meats, poultry, fish, eggs and dry goods?
33. Know the cold holding guidelines.
34. What temperature should all foods be reheated to?
35. Know the dry storage guidelines.
36. What are the one stage and two stage cooling methods?
37. What are the four acceptable ways to thaw foods in a foodservice area?
38. Know the general guidelines for batters, breads and stuffing?
39. What are the foods associated with the cooking temperatures of 145F, 155F and 165F?
40. What are the microwave cooking guidelines?

*All information in this review was taken from the ServSafe Essentials 4th Edition book provided by the NRAEF.
Vocabulary Definitions:

1. Air Gap — preventive devise used to control or prevent back flows on sinks.
2. Backflow — Unwanted, reverse flow of contaminants through cross connection into potable water supply.
3. CCP — Critical Control Point — points where hazards can be prevented or eliminated.
4. Cross Connection — the link through which contaminants from drains, sewers can enter the potable water supply. A hose connected to a faucet and submerged in a mop bucket is an example.
5. FATTOM — acronym for the conditions needed by foodborne microorganisms to grow: food, acidity, temperature, time, oxygen, and moisture.
6. FIFO — First In First Out
7. HACCP — Hazard Analysis Critical Control Point
8. IPM — Integrated Pest Management — program using prevention measures to keep pests from entering an establishment and control measures to eliminate any pests that do get inside.
9. MAP — Modified Atmosphere Packaging — method by which the air inside of a package is altered using gases, such as carbon dioxide and nitrogen. Many fresh-cut produce items are packaged this way.
10. MSDS — Material Safety Data Sheets — used for hazardous chemicals in the establishment
11. Pasteurization - food that is cooked at very high temperatures to kill microorganisms.
12. PCO — Pest Control Operator — licensed professional who uses safe, up-to-date methods to prevent and control pests.
13. Potentially Hazardous Foods — food favoring the rapid growth of microorganism
14. Quats — the ammonium compounds that are regulated by the State/Federal EPA
15. Sous Vide — packaging method by which cooked or partially cooked food is vacuum packed in individual pouches and then chilled for later use in establishments.
16. Spores — form that some bacteria can take to protect themselves when nutrients are not available. They survive freezing by forming outer shell.
17. UHT — Ultra-High Temperature — food that is heat treated at very high temperatures (pasteurized) to kill microorganisms.
18. Vacuum Packed Foods — processed by removing the air around the product sealed in a package.

Q & A

1. What are the general guidelines of storing pesticides? Always keep in original containers and store away from food prep areas. Always mark products by their product names as well.

2. What is the difference between a foodborne illness and a foodborne illness outbreak? Foodborne illness is the disease carried or transmitted to people by food while foodborne illness outbreak is the incident in which two or more people experience the same illness after eating the same food.

3. What are the signs of a rodent infestation?
   - droppings
   - evidence of gnawing
   - tracks
   - nesting materials
   - holes

4. What are the 8 common causes of FBI (Foodborne Illness)?
   - failure to cool foods properly
   - failure to cook and hold foods at proper temperature
   - poor personal hygiene
   - preparing food a day or more in advance

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- adding raw or contaminated food to already cooked foods
- food held in the danger zone too long
- cross-contamination
- failure to reheat foods to proper temperature

5. **What are the signs of cockroach infestations?**
   - strong, oily smell
   - droppings
   - capsule shaped egg casings everywhere

6. **Who are the 5 groups in a High Risk Population?**
   - elderly
   - pre-school age children
   - people taking certain medications
   - Pregnant women
   - People with weakened immune systems

7. **How do you deny pest access to a foodservice facility?**
   - inspect deliveries
   - screen windows and vents
   - fill holes around pipes
   - seal cracks in floors/walls
   - seal spaces around utensils

8. **What are some examples of PHF (Potentially Hazardous Foods)?**
   - fish
   - egg shells
   - meat — beef, pork, lamb
   - garlic and oil mixtures
   - milk and milk products
   - sliced melons
   - sprouts and raw seeds
   - poultry

9. **Know the guidelines for storing cleaning supplies in a foodservice facility?**
   - store away from utensils, equipment
   - store away from food production areas
   - store in original containers

10. **What is the difference between cleaning and sanitizing?**
    Cleaning is removing food from a surface and Sanitizing is reducing the number of microorganisms on the surface to safe levels.

11. **What are the 5 steps in a three compartment sink area?**
    1. rinse, scrape or soak
    2. wash
    3. rinse
    4. sanitize
    5. airdry

12. **What is the difference between foodborne infection and foodborne intoxication?**
    Foodborne infection is a disease resulting from eating foods containing live microorganism and foodborne intoxication is disease resulting from eating foods containing toxins or poisons from live or dead microorganisms.

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13. What must be done during a raw sewage backup? Close the establishment for 24 hours during raw sewage backup.

14. What is the favorable PH range of bacteria? The favorable PH range of bacteria is $4.6 - 7.5$.

15. What must be done during a water emergency?
   - use bottled or boiled water for beverages, cooking/cleaning
   - purchase ice
   - use single-use items
   - keep boiled warm water for hand washing
   - flush and disinfect water systems and equipment

16. Know the characteristics of Hepatitis A, Botulism, Salmonella and Ciguatera?
   - **Hepatitis A**
     Source: human intestinal track – feces-contaminated water, cross-contamination.
     Symptoms: fatigue, vomiting, jaundice, abdominal pain
     Food: cross-contamination, shellfish, salads, veggies
   - **Botulism**
     Source: almost all food of either animal/vegetable origin
     Symptoms: blurred vision, difficulty breathing/swallowing
     Food: temperature abused, improperly canned stored, swelled cans
   - **Salmonella**
     Source: water, soil, insects, domestic & wild animals, poultry
     Symptoms: nausea, vomiting, cramps, headaches
     Food: raw poultry, salads, fish, shrimp, egg shells
   - **Ciguatera**
     Source: fish that have eaten algae containing toxin (coral fish) ex: amberjack, barracuda, grouper and snapper
     Prevention: cooking **does not** destroy toxins

17. How many inches from the floor and wall should dry storage be? 6" from the floor and 2" from the wall.

18. List the characteristics of a safe food handler?
   - practices hand hygiene
   - keeps self clean
   - stays healthy
   - reports illness
   - wears clean, appropriate clothing
   - avoids unsanitary habits at work

19. What are the requirements of a restroom facility? Must be:
   - equipped with hand washing area
   - self-closing doors
   - adequately stocked with toilet paper and covered waste/trash receptacles

20. Know the steps of proper hand washing in a foodservice facility.
   - at least use 100F water for washing hands
   - soap from soap dispenser
   - 20 seconds of hand washing
   - drying with single paper towel or air dryer

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21. **What are the requirements of hand washing station/area?** Must be equipped with:
   - hot and cold running water
   - soap dispenser
   - a means to dry hands
   - a waste container
   - signage indicating employees to wash hands

22. **What is the difference between proper and improper attire?**
   - hair restrained
   - clean apron
   - clean, short fingernails
   - no jewelry or nail polish

23. **Know the 7 principles of HACCP.**
   - conduct a hazard analysis
   - determine critical control points
   - establish critical limits
   - establish monitoring procedures
   - identify corrective actions
   - verify the system works
   - establish procedures for record keeping and documentation

24. **What is management’s role in establishing and maintaining personal hygiene?**
   - exclude from establishment foodhandlers diagnosed with FBI
   - restrict foodhandlers working with or around food if they have the following symptoms:
     - vomiting
     - sour throat
     - diarrhea
     - severe cold/sinus
     - severe coughing

25. **What are the general guidelines for buffet service?**
   - install sneeze guards or food shields
   - separate raw meat, fish and poultry from cooked ready-to-eat foods
   - don’t let customers use soiled plates and silverware
   - monitor food bars
   - label food items
   - practice FIFO
   - maintain proper temperatures

26. **Know the flow of food in a foodservice establishment.**
   - receiving
   - storage
   - preparing
   - cooking
   - holding
   - cooling
   - reheating

27. **What types of foods can be re-served to customers?**
   - unopened, prepackaged foods

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28. How do you take the temperature of meats, packed foods, bulk liquids and cartons?
- meats: insert thermometer directly into thickest parts of products
- packed foods: insert thermometer between two packages
- bulk liquids: fold bag around thermometer
- cartons: open package and insert thermometer

29. What are the guidelines for using gloves in the kitchen?
- change gloves at least every four hours during continual use
- gloves should never replace handwashing
- before beginning a new task
- before handling raw meats

30. Know how to calibrate a thermometer using the ice point and boiling point method.
- Ice-Point Method
  1. fill container with crushed ice and water
  2. put thermometer stem or probe into ice water so sensing area is completely submerged, wait 30 seconds or until thermometer stops moving
  3. hold calibration head with wrench and rotate head until it reads 32F
- Boiling-Point Method
  1. bring clean tap water to a boil in deep pan
  2. put thermometer in boiling water until submerged and wait 30 seconds
  3. hold calibration head with wrench and rotate head until it reads 212F

31. Know the hot holding guidelines.
- hold at 135F or higher
- discard it after 4 hours if not at 135F or higher
- stir foods at regular intervals

32. What are the acceptable qualities meats, poultry, fish, eggs and dry goods?
- Fresh meat: Beef color = bright red; lamb color = light red; pork color = pink, lean, white fat; Texture: firm and springs back when touched
- Fresh poultry: no discolorization; Texture: firm and springs back when touched; no odor; Packaging: should be surrounded by crushed self-drained ice
- Fresh Fish: bright red gills, bright shiny skin; mild ocean or seaweed smell; bright, clear, full eyes; Texture: firm and springs back when touched
- Fresh Eggs: no odor; clean shells and unbroken; firm, high yolk, whites that cling to yolk
- Dry Food: no holes or punctures; no moisture stains/dampness; no abnormal color or odor; no spots of mold

33. Know the cold holding guidelines.
- hold at 41F or lower
- do not store it directly on ice

34. What temperature should all foods be reheated to?
- Reheat foods to 165F for 15 seconds

35. Know the dry storage guidelines.
- keep storerooms cool, dry, and well-ventilated
- store away from walls at least 6” off the floor
- keep food out of direct sunlight

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36. What are the one-stage and two-stage cooling methods?
   - **One-Stage:** cool from 135F to 41F for 4 hours
   - **Two-Stage:** cool from 135F to 70F for 2 hours then 70F to 41F or lower in additional 4 hours (stocks)

37. What are the four acceptable ways to thaw foods in a foodservice area?
   - in refrigerator at 41F or lower
   - submerged under running, potable water at 70F or lower for no more than two hours
   - in microwave, if food will be cooked immediately
   - as part of cooking process (veggies, shrimp, patties)

38. Know the general guidelines for eggs, egg based mixtures and stuffing?
   - **eggs, egg based mixtures:** cook to 145F for 15 seconds
   - **stuffing:** tend to insulate foods so cook separately at 165F for 15 seconds
   - cook stuffed meats, pasta (ravioli) etc. at 165F for 15 seconds

39. What are the foods associated with the cooking temperatures of 145F, 155F and 165F?
   - **145F:** pork, beef, roast, veal, lamb, steaks, commercial game like duck
   - **155F:** ground, flaked meats
   - **165F:** poultry, stuffing, stuffed meats, casseroles

40. What are the microwave cooking guidelines?
   - after cooking, allow to stand covered 2 minutes
   - check internal temperature in several locations

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