

Your focused review plan

VIDEO 00:00 | SLIDES 1, 71

A learner companion to the Peak Shift **Sustainable Food Safety 201: 60-Minute Exam Review**.

Use this guide to explain the decisions, not just memorize isolated numbers.

FOOD + SETTING + STAGE + PURPOSE = the rule you need.

First ask	Then look for
What is the food?	Raw or ready-to-eat? TCS? Ground, stuffed, whole, or commercially processed?
Who is being served?	Ordinary restaurant or a qualifying highly susceptible population (HSP) setting?
What is happening?	Receiving, cooking, cooling, reheating, holding, or immediate individual service?
What changes the answer?	Time, temperature, clock start, symptom history, diagnosis, or required approval?

Make the review work for you

Read the recall clue, cover the rule, and explain it in your own words. Then answer a practice-exam question without looking. For a miss, identify the condition you overlooked and replay the indicated slide. Revisit the full chapter when a topic is unfamiliar.

Scope: This independent review supports preparation for a food protection manager certification exam from an ANAB-accredited provider. It is not an official examination, an accredited certification program, or a guarantee of passing.

Exam basis: corrected 2022 FDA Food Code plus December 2024 Supplement, retained for these review tables and practice. The exam provider's 2026 transition is unconfirmed. Page 19 separately compares the 2026 operational model; locally adopted requirements govern operations. FDA/CDC guidance and teaching examples remain labeled separately.

Navigation: Topic headers show the matching video time and slide numbers. Source links open official documents; the listed section is the stable lookup anchor. PDF viewers vary in how they handle page links.

SOURCE CHECK

[FDA 2022 Food Code and Supplement landing page](#)

[ANAB food protection manager certification-body directory](#)



Recognize the hazard before the rule

VIDEO 00:57 | SLIDES 2-4

Hazard	Control to recognize
Biological	Harmful bacteria, viruses, and parasites: prevent transfer; use the applicable process controls.
Chemical, including allergens	Prevent chemical contamination and unintended allergen transfer. Cooking is not a universal fix.
Physical	Prevent foreign objects such as glass and metal from entering food.

Two labels, two questions

TCS means time/temperature control for safety: food needs control to limit pathogen growth or toxin formation.

Ready-to-eat means no further preparation is needed for food safety. Cooked chicken can be both. Cooked rice, milk, cut melon, cut tomatoes, and cut leafy greens are important TCS examples.

FAT TOM: Food, Acidity, Time, Temperature, Oxygen, Moisture.

FAT TOM is a learning aid for bacterial growth conditions, not a diagnostic test for a food. Many bacteria favor moist, protein-rich foods closer to neutral pH. Time and temperature are the conditions a restaurant can most directly control during routine work. Foodborne viruses do not multiply in food.

Recall clue	What it actually means
Lower pH = more acid	pH 3 is more acidic than pH 6; pH 7 is neutral. Yeasts and molds can grow in more acidic foods.
Water activity: 0 to 1	Closer to 1 means more water available for growth. It is not just visible wetness.
Do not guess shelf stability	pH, water activity, processing, and packaging interact. Some foods require a product assessment.

Worked example. Dry rice and cooked rice are not the same growth environment. Once cooked, rice needs time-and-temperature control even though it contains no meat. Smell and appearance do not establish safety.

SOURCE CHECK

1-201.10: Hazard, ready-to-eat and TCS definitions; Tables A and B; Annex 3

3-101.11; 3-701.11: food safety and disposition



Employee health: report, then decide

VIDEO 03:17 | SLIDES 5-8

Report vomiting, diarrhea, jaundice, sore throat with fever, and an open or draining infected wound that is not properly covered. Also report the listed diagnoses and specified outbreak/household exposures. The person in charge (PIC) notifies the regulatory authority of reported listed diagnoses and jaundice.

EXCLUDE = out of the establishment as an employee. RESTRICT = no work with exposed food or protected clean items.

The six reportable diagnoses: Norovirus; hepatitis A virus; Shigella species; Shiga toxin-producing E. coli (STEC); typhoid fever caused by Salmonella Typhi; nontyphoidal Salmonella. A manager does not diagnose these illnesses.

HSP = people plus setting. Preschool-age children, older adults, or immunocompromised people receiving food in qualifying custodial, health-care, or assisted-living services, including senior-center nutrition programs. An older guest in an ordinary restaurant does not automatically make it an HSP operation.

Known situation	Non-HSP	HSP
Vomiting or diarrhea, unless noninfectious	Exclude	Exclude
Diagnosed Norovirus, Shigella, or STEC; never symptomatic	Restrict	Exclude
Diagnosed nontyphoidal Salmonella; never symptomatic	Restrict	Restrict
Acute sore throat with fever	Restrict	Exclude
Typhoid fever diagnosis	Exclude	Exclude

A noninfectious explanation for one symptom does not erase a separate diagnosis-based control. A qualifying exposure without symptoms requires restriction in HSP service; not every casual contact qualifies.

Worked example. A well-feeling employee reports Shigella. Do not jump to either "always exclude" or "safe to work." Determine symptom history and HSP status, notify the authority, and apply the correct control.

SOURCE CHECK

1-201.10: Exclude, Restrict, HSP; 2-201.11-.12: reporting and work controls



Return-to-work clocks are not interchangeable

VIDEO 06:42 | SLIDES 9-11

Situation	Full-duty return: model Code summary
Vomiting/diarrhea; none of the six diagnosed	At least 24 hours symptom-free OR written medical documentation of a noninfectious cause.
Diagnosed Norovirus	Regulatory approval AND either qualifying medical clearance or more than 48 hours after symptoms resolved; if never symptomatic, more than 48 hours after diagnosis.
Diagnosed Shigella or STEC	Regulatory approval AND either qualifying medical clearance or more than 7 calendar days after symptoms resolved; if never symptomatic, more than 7 days after diagnosis.

For diagnosed Norovirus, Shigella, or STEC, after at least 24 symptom-free hours the recovering employee is restricted in non-HSP service; HSP exclusion continues pending full clearance. Restricted work excludes exposed food and the listed clean items. A general "fit for work" note is not necessarily the required pathogen-specific documentation.

Jaundice: notify now, do not wait seven days

Jaundice is yellowing of skin or eyes. Notify the authority. Onset within the last 7 calendar days requires exclusion unless qualifying medical documentation establishes the exception. Hepatitis A diagnosis has additional timing conditions; a diagnosed employee without symptoms is also excluded. Return needs regulatory approval and the applicable reinstatement condition; day eight alone is not clearance.

Recognition clues: CDC guidance, not diagnosis	Remember
Norovirus	Vomiting, diarrhea, nausea, stomach pain.
Hepatitis A	Fatigue, nausea, abdominal pain; dark urine and jaundice can be clues. Symptoms overlap.

24 is the undiagnosed-symptom Code path. Diagnosed infection changes the rule. More than 48 is not the same as exactly 48.

Separate CDC advice: food workers should stay home while sick and at least 48 hours after symptoms stop for Norovirus prevention. Follow locally adopted requirements and establishment policy; do not confuse this advice with the Code's conditional return paths.

SOURCE CHECK

2-201.12-.13: restrictions, exclusion and reinstatement

2024 Supplement: 2-201.13(E)-(F) medical-clearance amendments

CDC: Norovirus food-worker prevention guidance

CDC: Norovirus symptoms

CDC: hepatitis A symptoms



Hands, barriers, and personal hygiene

VIDEO 09:35 | SLIDES 12-14

At least 20 seconds for the full handwash. At least 10-15 seconds for vigorous rubbing.

Wet hands and exposed arms with clean running warm water, apply soap, rub thoroughly, rinse, and dry using an approved method. Use the handwashing sink. Under this baseline, the sink must deliver water at least 85 F; that is not a germ-kill temperature.

Trigger	Required response
Before food preparation or gloving for food work	Wash and dry first. Gloves do not replace washing.
After toilet use, dirty equipment, touching the body, or raw-to-ready-to-eat work	Wash again at the task change.
Gloves soiled, damaged, or task interrupted	Discard; wash when required; use new gloves for the next food task.
Exposed ready-to-eat food	Normally use utensils, deli tissue, or gloves, not bare hands. Limited Code exceptions require their stated conditions.

Cover an open or draining infected wound for its location

Location	Protection
Hand, finger, or wrist	Impermeable cover PLUS a single-use glove.
Exposed arm	Impermeable cover.
Other body location	Dry, durable, tight-fitting bandage.

Restrict until an infected wound is properly protected. Keep clothing clean and hair effectively restrained where required. During food preparation, hand/arm jewelry is limited to a plain ring under this declared edition. Nail polish or artificial nails require intact gloves when working with exposed food.

Worked example. The cook touches a phone while wearing gloves, then reaches for a bun. The gloves are now part of the transfer route. Stop, discard them, wash and dry, and use a fresh pair. Sanitizer on the glove is not the correction.

SOURCE CHECK

2-301.12-.16; 5-202.12: handwashing and sink water

2-201.11-.13; 2-401.13: wound protection; 3-304.15: gloves

2-302.11; 2-303.11; 2-304.11; 2-402.11; 3-301.11: personal hygiene and barriers



Allergens: transfer matters, not growth

VIDEO 12:35 | SLIDES 15-17

Know all nine	Keep separate categories separate
Milk, eggs, fish	Fish is not the same allergen category as crustacean shellfish.
Crustacean shellfish, tree nuts, peanuts	Peanuts and tree nuts are distinct.
Wheat, soybeans, sesame	Sesame counts even when you cannot see seeds.

Other foods can also cause allergies. Verify current labels and recipes, including sauces, breading, dressings, and garnishes. Under this baseline, unpackaged foods served or sold to consumers require written notification of major allergens used as ingredients.

CROSS-CONTACT = unintended allergen transfer. CROSS-CONTAMINATION commonly describes transfer of hazards such as pathogens.

Situation	Why the shortcut fails
Remove cheese from an allergy burger	Milk protein may remain. Prepare a new order with verified ingredients and controlled equipment.
Use shared fryer oil for an allergy order	Oil may transfer allergen from another food. High heat does not reliably solve that problem.
Spray sanitizer over food residue	Sanitizing is not a dependable allergen-removal process. Fully clean the surface.

Use washed hands, fresh gloves when used, clean equipment, and protected ingredients. Food-contact surface cleaning includes washing, rinsing, sanitizing, and air-drying. Do not promise an allergy-safe meal when preparation cannot be controlled.

General emergency guidance

Breathing trouble, throat swelling, or faintness after eating may signal a severe reaction. Call 911 immediately and alert the manager. Support the guest's prescribed epinephrine plan within your training and local rules. Emergency medical care is still needed; recipe investigation must not delay help.

Worked example. A guest with a sesame allergy asks about a plain-looking bun. Read the actual ingredient label and check the sauce. Appearance is not an ingredient list.

SOURCE CHECK

1-201.10: Major Food Allergen; 2-103.11(O); 3-602.12(C)

FDA: allergen removal research

FDA Fish Guidance, chapter 19, page 19-3: shared fryer oil

FDA: allergy recognition guidance

MedlinePlus: anaphylaxis emergency response



Receiving, traceability, and fish hazards

VIDEO 14:49 | SLIDES 18-20

Use lawful, approved sources. Inspect identity, condition, packaging, temperature, and required records. A cold shipment can still be unacceptable because of contamination or an unapproved source.

Food or measurement	Receiving rule
Ordinary refrigerated TCS food	41 F or below.
Cooked TCS food received hot	135 F or above.
Raw shell eggs	Refrigerated equipment AIR at 45 F or below; maintain that air limit in storage.
Milk or molluscan shellfish exception	Applicable distribution law controls receiving temperature. TCS food received above 41 F under that exception must cool to 41 F or below within 4 hours. Raw shell eggs use their separate 45 F refrigerated-air rule.
Food labeled and shipped frozen	Receive frozen, without evidence of previous temperature abuse.

Shellfish records: LAST sold or served, then 90 calendar days. Not 90 days from delivery.

Keep required molluscan-shellfish source identification; record the last sale/service date and retain the records for 90 days from that date. Oysters, clams, and mussels are examples.

Recognition clue	Distinction
Temperature-abused tuna; histamine/scombroid	A toxin problem. Cooking does not reliably remove it.
Ciguatera or shellfish toxins	Natural toxins: approved-source controls matter; cooking is not a reliable rescue.
Anisakis; raw or undercooked fish	A parasite problem. Use applicable cooking or parasite-destruction freezing controls, unless a specified exception applies.

One required fish-freezing option is -4 F or below for 7 days. Other complete schedules and exceptions exist; maintain required supplier/freezing records. Do not substitute a household-freezer guess.

SOURCE CHECK

3-201.11; 3-202.11, .15; 3-501.14(C)-(D); 3-501.16(B)

3-203.12; 3-402.11-.12: shellfish identity and fish parasite controls

FDA fish hazard guidance, chapters 5-7



Measure correctly; store deliberately

VIDEO 17:35 | SLIDES 21-25

Tool	Job and limitation
Small-diameter probe	Thin foods; measure internally. Bimetal stems need sufficient food depth over their sensing area.
Infrared	Surface only, not the center of a burger or soup.
Ambient-air thermometer	Equipment air, not proof of the food's temperature.
Fahrenheit-only accuracy	Food device: within 2 F. Ambient air/water device: within 3 F. Tolerances do not raise food limits.

Wait for a stable reading and follow the device instructions. Clean and sanitize the food probe as required. Calibrate per the manufacturer as necessary: an ice-water reference is near 32 F. Boiling is 212 F at standard sea-level pressure, not at every elevation/pressure.

Prevent the next transfer

Separate raw animal foods from ready-to-eat food and unwashed produce. Separate different raw animal foods; a shelf plan can follow their final cooking requirements. Protect food in clean, dry locations, ordinarily at least 6 inches above the floor. A lid does not make storage under a contamination source acceptable.

Date marking: MORE THAN 24 hours held; up to 7 days at 41 F or below; preparation/opening day is DAY 1.

This ordinary rule applies to refrigerated ready-to-eat TCS food, not every chilled product. Use the earliest applicable ingredient date. Freezing pauses the refrigerated count; it does not restart it. A safety-based manufacturer use-by date may be earlier. Specific commercial-food exceptions exist.

Worked example. Food prepared Monday reaches day 7 on Sunday. Mixing it with a fresh batch on Thursday does not create a new Thursday-to-Wednesday clock.

A common-name label identifies WHAT; a date mark identifies WHEN. Separate chemicals from food and food-contact items. Medicine requiring food-refrigerator storage needs an identified, covered, leakproof outer container and protection from children.

SOURCE CHECK

4-203.11-.12; 4-302.12; 4-502.11; Annex 3: thermometers

FDA Fish Guidance, chapter 7, PDF page 32: calibration reference methods

3-302.11-.12; 3-305.11-.12; 3-501.17-.18; 7-201.11; 7-207.11-.12



Preparation and thawing: control the next step

VIDEO 21:44 | SLIDES 26-29, 35

Separate raw and ready-to-eat work. When changing tasks, wash hands and clean/sanitize food-contact equipment. Wash raw produce thoroughly in water before cutting or ready-to-eat service; do not use soap. Follow explicit package instructions for products already processed or washed.

Thawing route	Condition that belongs with it
Refrigeration	Keep the food at 41 F or below.
Running water	Fully submerged; water at 70 F or below with adequate flowing overflow. The food limits below still apply.
Microwave	Immediately transfer to conventional cooking with no interruption.
Part of cooking	Cook from frozen using the complete required process.

Running water has a water limit AND food limits

Thawed portions of ready-to-eat food cannot rise above 41 F. For raw animal food that will be cooked, thawed portions may be above 41 F no more than 4 total hours, including preparation or recooling time. A 70 F water supply does not permit 70 F ready-to-eat food.

Keep-frozen reduced-oxygen-packaged fish: remove from the package before refrigerator thawing. With the permitted running-water route, remove before thawing or immediately when thawing finishes. This is not permission to leave thawed fish sealed in the package.

A method is not the whole answer. Name the method, its limit, and what happens next.

Worked example. Frozen fish thawed in a microwave cannot wait on a prep table until the next order. Immediate uninterrupted conventional cooking is part of that thawing route.

Follow packaged-food cooking instructions. Frozen does not mean ready-to-eat. Ingredient ice is food made from drinking water; ice already used to cool package exteriors cannot be reused in drinks or recipes.

SOURCE CHECK

3-302.15; 3-501.13; 3-401.15; 3-202.16; 3-303.11; 3-304.15

FDA guidance: no soap and pre-washed produce



Cooking: the food changes the endpoint

VIDEO 24:26 | SLIDES 30-34, 36

Common minimum	Food / purpose
165 F, instantaneous	Poultry, including ground poultry; stuffed fish/meat/pasta/poultry/ratites; stuffing containing fish, meat, poultry, or ratites; baluts and specified wild game.
155 F for 17 seconds	Non-intact meat (ground, injected, mechanically tenderized); comminuted fish; ratites; eggs not prepared for immediate individual service; specified comminuted game.
145 F for 15 seconds	Fish and intact meat under the ordinary rule; raw eggs broken for an individual order and served immediately. Whole roasts have a separate process.
135 F	Plant food cooked for hot holding. Not the raw-animal-food cooking rule.

These are selected standard combinations, not every lawful equivalent. Measure throughout as appropriate; check thick portions and more than one location. Wait for the device to stabilize; the probe's response time is different from the food's required hold time.

Ground poultry stays in the POULTRY group. Ground beef and a whole roast do not share one rule.

Special processes need the full conditions

Microwave raw animal food: 165 F throughout; rotate or stir, cover, and stand covered for 2 minutes afterward.

Whole roasts: use the complete roast endpoint/time AND oven table for the roast weight and oven type. 145 F for 4 minutes is one endpoint, not a stand-alone oven recipe.

Partial cooking: written procedures need prior regulatory approval. Initial heating is no longer than 60 minutes, followed immediately by required cooling. Store frozen or at 41 F or below, identify unfinished food, separate it from ready-to-eat food, and complete required cooking before service.

Worked example. An egg broken for one immediate order can use 145 F for 15 seconds. Eggs prepared in a batch for later service use the 155 F/17-second route. The ingredient is the same; the service purpose changed.

SOURCE CHECK

3-401.11-.14: cooking, roast tables, microwave, plants and noncontinuous cooking



Cooling: two checkpoints, one total clock

VIDEO 30:23 | SLIDES 37-40

How the food was made	Required cooling
Cooked hot TCS food	135 F to 70 F within 2 hours; 135 F to 41 F or below within 6 hours TOTAL.
TCS food prepared from ambient ingredients	Cool to 41 F or below within 4 hours. Ambient means ingredients initially at room temperature, such as shelf-stable canned ingredients.

2 hours to 70. 6 total to 41. The first 2 hours are INCLUDED, not added.

Divide food into smaller portions or shallow pans; use suitable rapid-cooling equipment or an ice-water bath with stirring. Space containers for heat transfer. Loosely cover, or leave uncovered only where protected from overhead contamination. Verify the warm areas of the food against elapsed time.

Correct early; do not invent a reset

FDA Annex corrective guidance: cooked food still above 70 F at 2 hours or less may be reheated to 165 F for 15 seconds and cooled again using a different method when the applicable conditions and disposition procedure permit it. A different method means changing what failed: smaller portions, shallower pans, stirring in an ice bath, or effective rapid-cooling equipment.

The Annex directs discard if the food remains above 70 F after 2 hours or above 41 F after 6 hours. Unknown timing is not evidence of a safe cooling process. Stop service and use the applicable disposition procedure; do not assume a new start time.

Worked example. Soup hits 135 F at noon. It must reach 70 F by 2 p.m. and 41 F or below by 6 p.m. If it reaches 70 F at 1 p.m., the final deadline is still 6 p.m., not 7 p.m.

A room-temperature tuna salad prepared with shelf-stable canned ingredients uses the 4-hour ambient-ingredient route. It does not borrow the 6-hour cooked-hot-food schedule.

SOURCE CHECK

3-501.14-.15: cooling limits and methods

Annex 5, section 4(G)(7), Assessing Cooling: corrective-action guidance



Reheating and holding: ask why it is heated

VIDEO 33:51 | SLIDES 41-44

What happens next?	Rule to recognize
Operation-cooked and cooled food, reheated for hot holding	165 F for 15 seconds throughout. No more than 2 hours from 41 F to the required endpoint.
Ordinary operation-cooked/cooled food, microwaved for hot holding	165 F throughout; rotate or stir, cover, stand covered 2 minutes. Meet the 2-hour reheating interval.
Commercially processed, packaged ready-to-eat TCS food	From an inspected processing plant: 135 F for hot holding within the 2-hour reheating interval. This qualifying exception also applies when microwaved.
Properly cooked, cooled and refrigerated food for an immediate individual order	May be served at any temperature. This does NOT waive earlier cooking/cooling controls or apply to a waiting batch.

PURPOSE means immediate service versus holding for later. METHOD means microwave, stove, oven, and so on. Check both.

Worked example. A guest orders a slice of properly cooked, cooled, and refrigerated quiche. Warming that single portion and serving it immediately is not the same as reheating a pan of quiche for a buffet.

After the required process, maintain holding

Ordinary cold holding	Ordinary hot holding	Narrow roast exception
41 F or below	135 F or above	130 F or above only for qualifying roasts cooked or reheated by the specified complete roast process.

Measure food, not just the equipment air. A holding unit maintains already-hot food; it is not automatically suitable equipment for rapid reheating. The remaining unsliced portion of a qualifying roast has a specific reheating option using the full roast process.

SOURCE CHECK

3-403.10-.11: immediate service and reheating; 3-501.16: holding; 3-401.11(B): roasts



Time control and the last handoff

VIDEO 36:51 | SLIDES 45-49

Time instead of temperature	Four-hour route	Six-hour route
Before service	Written procedure prepared in advance.	Written procedure prepared in advance.
Ordinary starting temperature	Cold at 41 F or below OR hot at 135 F or above.	Cold at 41 F or below only.
Marks and monitoring	Mark the 4-hour deadline.	Mark removal and 6-hour deadline; warmest food never above 70 F.
End of period	Serve, or cook and serve, within the limit; otherwise discard.	Serve, or cook and serve, within the limit; otherwise discard.

Discard unmarked food or food marked beyond the permitted time; for the six-hour route also discard food exceeding 70 F. Refrigerating it again does not restart the clock. A narrow four-hour exception for ready-to-eat fruit or vegetables becoming TCS when cut, or hermetically sealed ready-to-eat food becoming TCS when opened, can start at 70 F or below only if it stays at or below 70 F. Count time from cutting/opening.

Time control is planned BEFORE service. It is not a rescue rule after a temperature failure.

Keep protection in place through service

Protect displayed food and monitor self-service. Keep utensil handles above food and containers. Do not re-serve guest-returned food except the narrow qualifying non-TCS protected-container or sound unopened-original-package exceptions. Transport preserves the existing temperature/time controls; location changes do not restart clocks.

HSP safeguards: no raw/partially cooked animal foods or raw seed sprouts as ready-to-eat meals; use pasteurized eggs and juice safeguards where required. No time-only control for raw eggs or prior-approval bare-hand-contact exception. Isolation precautions impose additional re-service restrictions. An advisory cannot override these prohibitions or authorize undercooked ground meat on a children's menu.

Worked example. A permitted undercooked selection in ordinary service may require both written disclosure and a risk reminder. First decide whether the food is permitted, then whether the advisory is required.

SOURCE CHECK

3-501.19: time as a public health control

3-304.12; 3-306.11-.14; 3-603.11; 3-801.11; 3-401.11(D)



Clean, sanitize, and verify the result

VIDEO 40:51 | SLIDES 50-53

Step	Its job
Clean	Remove food, grease, and allergen residue.
Sanitize	Reduce microorganisms on an already-clean food-contact surface.
Disinfect when required	Address pathogens not controlled by available sanitizers, including applicable bodily-fluid contamination under the 2024 Supplement. Follow the EPA-registered label. After food-contact disinfection, rinse with potable water unless that label specifies otherwise.

Scrape, WASH, RINSE, SANITIZE, AIR-DRY. Soil comes off before sanitizer goes on.

During continuous use with TCS food, clean food-contact equipment at least every 4 hours unless a specific exception applies. Clean/sanitize sooner when changing from raw to ready-to-eat food or when contamination may have occurred. Four hours is not permission to continue after contamination.

Manual warewashing	Requirement
Wash	At least 110 F, or the cleaning-agent label temperature.
Rinse	Remove loosened soil and detergent.
Sanitize	Compliant chemical conditions OR hot-water immersion at least 171 F for at least 30 seconds.
Dry	Drain and air-dry on a clean surface; do not towel-dry.

Machine water is not the utensil surface

Hot-water mechanical sanitizing rinse entering the manifold: normally at least 180 F; stationary-rack, single-temperature machines use at least 165 F. The ordinary maximum is 194 F. Follow the data plate. The utensil surface must reach 160 F, verified with an irreversible registering indicator. Chemical machines use the applicable sanitizer and equipment requirements.

Worked example. The machine gauge shows the specified rinse temperature, but the utensil-surface indicator fails. The display alone does not establish that the dish surface reached its required sanitizing temperature.

SOURCE CHECK

4-602.11; 4-603.14; 4-501.19, .111-.112; 4-703.11; 4-901.11

2024 Supplement: 4-1001.11 through 4-1003.11



Sanitizers: keep the conditions together

VIDEO 43:43 | SLIDES 54-57

A chemical name alone does not tell you the correct concentration, temperature, pH, or contact time. Check the actual food-contact-use label and the Code conditions. A longer required label contact time controls.

Selected chlorine combination		Minimum contact time
100 ppm; at least 55 F; pH 10 or less		10 seconds
50 ppm; at least 100 F; pH 10 or less		7 seconds
50 ppm; at least 75 F; pH 8 or less		7 seconds

Other chemical	Conditions
Iodine	12.5-25 ppm; at least 68 F; pH 5 or less, or manufacturer's effective pH. Generally at least 30 seconds, consistent with label.
Quat	Labeled concentration; at least 75 F; water hardness 500 ppm or less or label allowance. Generally at least 30 seconds, consistent with label.

Do not memorize "one bucket number." Remember CHEMICAL + CONCENTRATION + TEMPERATURE + CONTACT TIME, plus pH/hardness when applicable.

Use a test device that matches the sanitizer and range; follow its label instructions. Replace dirty solution and verify the required strength. Hold wet wiping cloths in compliant sanitizer between uses; launder daily. Separate raw-animal-food wiping cloths and keep sanitizer buckets off the floor.

Inspect the hidden food-contact parts

Clean can-opener cutting/piercing parts, not just the handle. Maintain ice-machine food-contact components on the manufacturer's schedule, or often enough to prevent soil or mold buildup when no schedule is provided. Resurface or replace boards that cannot be effectively cleaned and sanitized.

Worked example. A bucket smells strong but tests outside the required range. Remake it correctly. Smell, color, and "extra chemical" are not reliable measurements of sanitizing effectiveness.

SOURCE CHECK

4-501.114; 4-703.11: sanitizer conditions

3-304.14; 4-601.11; 4-602.11; 4-501.12; 4-802.11(D): cloths and equipment

2024 Supplement: 4-302.14; 4-501.116: test devices and use



Facilities, water, light, and pests

VIDEO 46:51 | SLIDES 58-61

Recognize the feature	Reason / rule
Coving	Curved floor-wall junction that supports cleaning. Junctions are closed/sealed as the cleaning method requires.
Fixed equipment	Generally seal floor-mounted equipment or allow 6 inches clearance; counter-mounted equipment: seal or generally 4 inches. Specific exceptions exist.
Hand sink	Accessible, supplied, and used only for handwashing; water-delivery capability at least 85 F under this baseline.
Air gap	At least twice the supply-inlet diameter and never less than 1 inch, measured above the flood-level rim.
Backflow protection	Prevent unprotected cross-connections with the appropriate air gap or approved prevention device.

Air gap: TWICE the inlet, at least ONE inch. Measure above the FLOOD RIM, not the water level.

Light level	Typical location and measurement
10 foot-candles	Walk-ins, dry storage, other rooms during cleaning: 30 inches above floor.
20 foot-candles	Buffets at food surface; reach-ins inside; handwashing, warewashing, equipment/utensil storage and toilet areas at 30 inches above floor.
50 foot-candles	Food work and hazardous utensil/equipment tasks at the work surface.

Prevent pests by inspecting deliveries, maintaining protected openings and door seals, removing food/waste, fixing leaks, and eliminating hiding places. Protect food and involve a qualified pest-control operator, licensed where required for pest-treatment work. Maintain ventilation to control excessive steam and condensation.

Worked example. A hose end sitting below dirty sink water creates a contamination route. Moving it just above the current water level does not prove an adequate air gap above the flood-level rim.

SOURCE CHECK

6-101.11; 6-201.11, .13; 4-402.11-.12; 5-202.12-.14; 5-203.14; 5-205.11

6-303.11; 6-304.11; 6-202.15; 6-501.111; 7-202.12



Management makes the controls repeatable

VIDEO 49:41 | SLIDES 62-67

Role	What it owns
Person in charge (PIC)	Daily monitoring, corrections, required knowledge and employee food-safety practices.
Permit holder	Permit compliance, designating the PIC, required plans/reporting and corrective action.
Regulatory authority	Adopted-rule enforcement, inspections, required variances and reopening approval.

Keep a PIC on duty throughout operating hours. The PIC generally needs food protection manager certification through an accredited-program test. The authority determines any minimal-risk exception. Correct inspection answers do not waive required certification.

FDA: model Code and most foods. USDA-FSIS: most meat, poultry, processed egg products and Siluriformes fish. CDC: illness/outbreak surveillance and investigation support. The responsible local/state/tribal/territorial authority enforces adopted restaurant requirements.

MONITOR = check the process now. CORRECT = fix the failure and affected items. VERIFY = confirm that the control works.

Seven HACCP principles	Chicken-batch example
1 Analyze hazards; 2 Identify CCPs	Pathogen survival; cooking as a critical control point.
3 Set critical limits; 4 Monitor	165 F instantaneous; measure selected pieces appropriately.
5 Correct; 6 Verify	While still cooking, continue if short; check thermometer accuracy and records.
7 Keep records	Document results, corrections and verification.

Special processes require a permission check: smoking for preservation, acidification to preserve food or make it non-TCS, and certain reduced-oxygen packaging. Some ROP processes meet detailed no-variance criteria; a vacuum sealer alone proves nothing. Required HACCP plans and approvals come before starting.

Inspection categories: Priority directly controls hazards; Priority Foundation supports those controls; Core covers other mandatory requirements. Correct Priority/Priority Foundation findings during inspection unless the authority permits more time. Managers cannot grant extensions. Train through demonstration and observed performance, not signatures.

SOURCE CHECK

2-101.11; 2-102.11-.12; 2-103.11; 8-304.11; 8-405.11; 8-406.11

Annex 4 HACCP principles; 3-502.11-.12; 8-201.13-.14

2024 Supplement: Active Managerial Control definition and PIC duties

FDA regulatory responsibilities

FDA: Siluriformes inspection transferred to USDA-FSIS

CDC: outbreak investigation roles

Emergencies, recalls, and your final review

VIDEO 54:57 | SLIDES 68-71

Situation	First decision
Possible outbreak	Report promptly; public health determines the connection and cause. Do not wait to prove it yourself.
Imminent health hazard	Stop affected operations and notify the authority. Correct conditions; obtain approval before resuming discontinued operations.
Recall notice	Match product and lot; stop use, segregate, identify DO NOT USE, and follow authorized return/disposal instructions.
Suspected intentional contamination	FDA response guidance: protect people; secure food/packaging/records without unnecessary handling. Notify appropriate authorities; preserve evidence.

Two or more similar illnesses linked to a common food are an outbreak-recognition clue. **CDC guidance:** even one suspected botulism case is a medical/public-health emergency requiring urgent reporting. Preserve complaint facts and possible evidence safely. Do not serve, taste, donate, or casually discard held product.

STOP + NOTIFY + CORRECT + APPROVAL. Power returning does not itself authorize reopening.

Explain these before your practice exam

Prompt	Strong answer
Why is 135 F not always enough?	It is an ordinary hot-holding minimum, not the usual leftover reheating endpoint.
Why is 24 symptom-free hours not universal clearance?	Diagnosis and setting may require restriction/exclusion and regulatory approval.
Why does a new label not create new safe time?	Date marking and time-control clocks track food history, not container changes.
Why is an advisory not a permission slip?	It cannot override food prohibitions or missing safety controls.

Keep studying when needed. Use missed practice questions to choose a replay topic. This focused review does not cover every Code exception or exam blueprint. Use the edition/materials specified for your exam and locally adopted rules for your operation.

SOURCE CHECK

8-404.11-12; 3-101.11; 3-701.11; 6-404.11: hazards and held food

2024 Supplement: Food Defense and 2-103.11(R)

CDC: outbreak definition

CDC: suspected botulism reporting and response

FDA: nonbinding retail food-security response guidance

2026 operational differences

2026 MODEL ONLY | EXAM PROVIDER TRANSITION UNCONFIRMED

The original review tables and practice retain corrected 2022 + December 2024. These are separate 2026 model differences, not changed exam keys. Locally adopted rules govern operations.

Topic	2026 condition to retain
Illness policy	Provide a written illness policy, available on request: symptoms, specified diagnoses, exclusion/restriction and reinstatement; reporting/compliance for food and conditional employees, the PIC, and required reports to the authority. Verifiable notification remains separate. Vomiting/diarrhea cleanup procedures are now 2-502.11, not the new policy 2-501.11.
Jewelry	A plain ring remains allowed. An individual with an ADA-covered disability may be allowed a medically necessary device kept clean and worn to prevent potential contamination. This is not general watch/bracelet permission.
Gloves	Only if APPROVED: an interior glove may continue under a task-specific, loose exterior glove. Remove the exterior by gravity, without peeling or touching/contaminating hands or interior; immediately discard a single-use exterior. The interior must remain intact and uncontaminated. Discard gloves when damaged, soiled, or contaminated during interruptions. Ordinary single-task use remains.
Cooking instructions	Processing-plant packages before RTE offering/consumption: (A) uncontrolled-pathogen disclosure (21 CFR 117.136): MUST use hazard-appropriate time/temp. (B) USDA-required safe-handling labels (9 CFR 317.2(l)/381.125(b)): MUST follow cooking directions or 3-401.11. (C) other manufacturer directions: SHOULD cook unless they allow uncooked use (Pf). Plant hot holding: 135 F or 3-401.15.
Cooling	Ordinary cooling still meets 135-to-70 F within 2 h and 135-to-41 F within 6 h total; a 2-inch method alone does not waive this. The APPROVED 3-501.15(C) cooked-TCS route requires depth no more than 2 inches, uncovered food, refrigeration air at or below 41 F, and continuous electronic time/air-temperature monitoring. Excludes 3-401.14(B), 3-502.12(D)(2)(e), and 3-501.19. Not a rescue after missed deadlines.
Other sanitizers	OTHER than chlorine, iodine or quat: at least 75 F (24 C), unless EPA-registered label use instructions state otherwise. Keep the named-family rules and all applicable label conditions.
Toilet rooms	Every toilet room needs a covered receptacle; no longer limited to sanitary-napkin disposal.

SOURCE CHECK

2026: illness policy 2-501.11 (PDF71-72); cleanup 2-502.11 (PDF72)

Jewelry 2-303.11 (PDF70); gloves 3-304.15 (PDF86-87)

Cooking 3-401.13/.15 (PDF94-95); cooling 3-501.14/.15 (PDF98-100)

Sanitizers 4-501.114(E) (PDF133); toilet rooms 5-501.17 (PDF158)