Food Safety Manual

Manual de Seguridad Alimentaria

Olmsted County Public Health Services
Environmental Health Services
2100 Campus Dr SE
Rochester MN 55904
sanitarian@olmstedcounty.gov
507-328-7500

Section 1. Active Food Safety Management

Active Food Safety Management*

Having active food safety management means that food safety is built into your daily operation. The goal of active food safety management is to control the leading causes of foodborne illness. We call these *Risk Factors*.

There are eight Risk Factors:

- Employee and customer illness
- Handwashing
- Food source
- Contamination of food
- Cooking
- Hot holding
- Cooling
- Cold holding

What active food safety management looks like

To have active food safety management you must have:

1) Standard **policies/procedures** that eliminate or minimize food safety hazards,
2) Formal **training** on policies/procedures for your staff, and
3) **Verification** that staff follow policies/procedures and are corrected by a manager when they don't.

These three systems are based on the duties of the Certified Food Protection Manager in the Minnesota Food Code (MR 4626.0033F).

How we measure active food safety management

During food safety assessments, your sanitarian will evaluate your *procedures*, *training*, and *verification* systems to evaluate your level of food safety management. They will do this by asking questions about how you do things, what some of your policies are, and they will observe your operation.

See the 'Ideas for Active Management' pages – there is one in each of the risk factor sections.

*Active food safety management and active managerial control have the same meaning

You need a designated Person-in-Charge (PIC)

Whenever the business is open there needs to be one person onsite who is in charge. This person is responsible for food safety, and their job is to make sure that employees are following standard procedures. The PIC does not need to be a manager, and everyone should know who the PIC is.

They need to make sure that employees are:

- Washing their hands at the right times using the right method
- Not working when they're sick
- Cooking foods to the right temperatures
- Using rapid cooling methods
- Sanitizing utensils and equipment.

The PIC must be confident enough to correct employees who are not following procedures.

You probably need a Certified Food Protection Manager (CFPM)

Most food establishments, including mobile food units, need one, unless you have a low-risk license from Olmsted County.

How do you become a Certified Food Protection Manager?

Step 1: Take and pass an accepted food safety training course

- A searchable list of available courses is here:
  Minnesota Certified Food Protection Manager Program: Training Courses - EH: Minnesota Department of Health

Step 2: Apply online. You will need to register with MDH, have a digital copy of your exam and fill an application online at the Minnesota Department of Health.

- Applications in English and Spanish available here:
  Food, Pools, and Lodging Business Safety - Certified Food Protection Manager | Gerente Certificado de Protección de Alimentos - ViewPoint Cloud

Ideas for Active Management

Look for this page at the end of each section of the food safety manual!

It has ideas and suggestions for improving your food safety systems.

Section 2. Employee and Customer Illness

Employee illness

Staying home:

- Employees **must not work** if they have vomiting or diarrhea

Reporting to the manager:

- Employees must tell the manager if they have:
  - Vomiting or diarrhea
  - *Salmonella*, *Shigella*, Shiga toxin-producing *E. coli* (STEC), hepatitis A, norovirus, or other intestinal illness (diagnosed by a doctor)
  - Burns, wounds, or boils on the hands or forearms that are open, blistered, or have pus.
  - Jaundice (yellowing of the skin or eyeballs)
  - Sore throat with a fever
- Employees must also report
  - The date their symptoms started
  - When they've been exposed to or were the source of a confirmed disease outbreak within the last 30 days.

Managers:

- Do not let employees work if they have:
  - Diarrhea or vomiting
    OR
  - Have been diagnosed with hepatitis A, *Salmonella*, *Shigella*, Shiga toxin-producing *E. coli*, or norovirus – even if they haven't had symptoms of illness.

- Don't let employees who've had vomiting, or diarrhea come back to work for at least 24 hours after vomiting and diarrhea has stopped.

- Keep a written record of all employee reports of diarrhea and vomiting.

- Make sure that open, blistered, or infected burns, boils, cuts, etc. on the hands or forearms are covered with a waterproof bandage. If these areas can't be covered, restrict the employee from working with exposed food; or clean equipment, utensils, linens, or unwrapped single-use items.

- Call OCPHS at 507-328-7500 if an employee is diagnosed with hepatitis A, Shiga toxin-producing *E. coli*, *Salmonella*, *Shigella,* norovirus, or other infectious intestinal illness.

Customer illness

- If a customer says they got sick after eating at your establishment:
  - Tell them you will contact the health department
  - Ask the customer for their name and phone number
  - Tell them someone from the health department will follow up
  - Call OCPHS at 328-7500 and ask for 'Environmental Health'

Employee illness log

Olmsted County Public Health Services
507-328-7500
Ask for 'Environmental Health'

Date reported	Name	* Vomiting	* Diarrhea	When did symptoms *start?*	When did symptoms *end*?	* When can employee return?	Cough, sore throat, runny nose	Fever	Date returned to work
		Y N	Y N				Y N	Y N	
		Y N	Y N				Y N	Y N	
		Y N	Y N				Y N	Y N	
		Y N	Y N				Y N	Y N	
		Y N	Y N				Y N	Y N	
		Y N	Y N				Y N	Y N	
		Y N	Y N				Y N	Y N	
		Y N	Y N				Y N	Y N	
		Y N	Y N				Y N	Y N	
		Y N	Y N				Y N	Y N	
		Y N	Y N				Y N	Y N	
		Y N	Y N				Y N	Y N	
		Y N	Y N				Y N	Y N	
		Y N	Y N				Y N	Y N	

*** Employees with diarrhea or vomiting must not work until their <u>symptoms have been gone</u> for 24 hours, *see back of page*.**
If an employee is diagnosed with Salmonella, Shigella, Shiga toxin-producing E. coli, hepatitis A, or norovirus, call OCPHS at 328-7500 or MDH at 1-877-366-3455

IF AN EMPLOYEE REPORTS VOMITING OR DIARRHEA:

Take them off the schedule	Tell the employee they cannot return to work until they've been completely well for 24 hours.
Fill in your log	Record their symptoms and other information on your illness log.
Did they prepare ready-to-eat foods?	Discard any ready-to-eat foods they prepared the day before they got sick.
Sanitize	Sanitize the surfaces that people touch a lot using a 1000 ppm bleach solution. You can use other sanitizers that kill norovirus if it says that on the product label.

TO MIX A 1000 PPM BLEACH SOLUTION:

- Add 1/3 cup of bleach per gallon of water
- Get the surface thoroughly wet and leave the bleach on for 5 minutes; then rinse, or wipe dry with paper towel

REPORTS OF CUSTOMER ILLNESS

CALL RECEIVED (DATE/TIME)	CUSTOMER'S NAME	CUSTOMER'S PHONE #	DESCRIPTION OF CUSTOMER'S COMPLAINT	CALL RECEIVED BY (EMPLOYEE'S NAME)	CALLED OCPHS 328-7500 (DATE/TIME)
		( ) -			
		( ) -			
		( ) -			
		( ) -			
		( ) -			
		( ) -			
		( ) -			
		( ) -			
		( ) -			

When a customer says they got sick from eating here:

1) Get their name and phone number,
2) Call Olmsted County Public Health Services

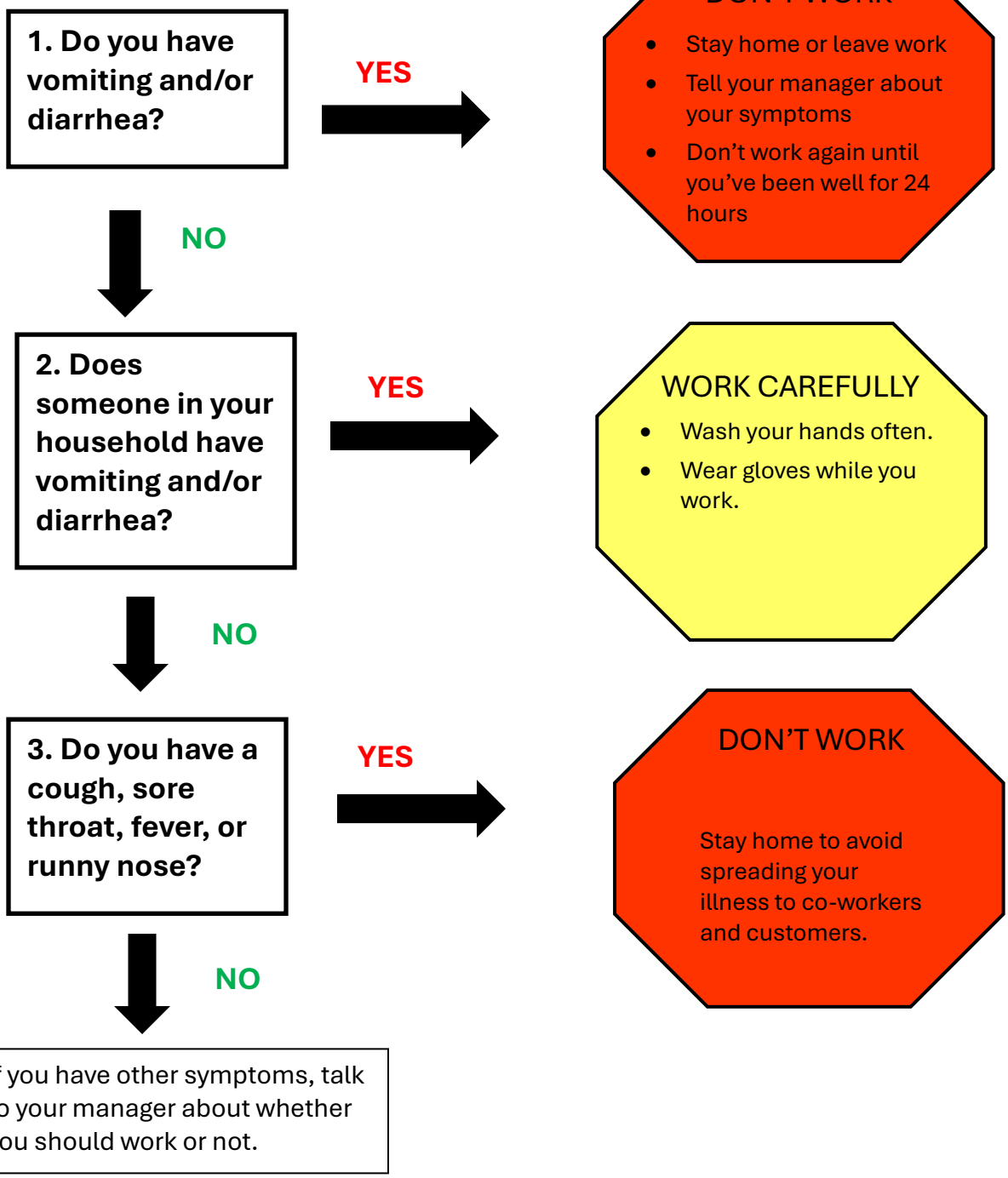
Olmsted County Public Health Services

507/328-7500

WHEN YOU'RE SICK

DECISION GUIDE FOR FOODWORKERS

Ask yourself these 3 questions:



Olmsted County Public Health Services
2100 Campus Drive SE Ste 100
Rochester MN 55904-4722
(507) 328-7500

HERE'S WHAT TO DO WHEN EMPLOYEES REPORT VOMITING OR DIARRHEA

IF ONE EMPLOYEE REPORTS ILLNESS:

Take them off the schedule	Tell the employee they cannot return to work until they've been completely well for 24 hours.
Fill in your log	Record their symptoms and other information on your illness log.
Did they prepare ready-to-eat foods?	Discard any ready-to-eat foods they prepared the day before they got sick.
Sanitize	Sanitize the surfaces that people touch a lot using a 1000 ppm bleach solution. You can use other sanitizers that kill norovirus if it says that on the product label. **See page 14.**

IF TWO OR MORE EMPLOYEES REPORT ILLNESS within 4 days of each other:

Take them off the schedule for longer	Consider keeping the sick people out until they've been well for 72 hours.
Fill in your log	Record their symptoms and other information on your illness log.
Did they prepare ready-to-eat foods?	Discard any ready-to-eat foods they prepared the day before they got sick.
Dump the ice	Empty the ice machine, sanitize the compartment, and make new ice.
Sanitize	Sanitize the surfaces that people touch a lot using a 1000 ppm bleach solution. You can use other sanitizers that kill norovirus if it says that on the product label. **See page 14.**
Wear gloves	Make sure employees are not touching ready-to-eat food with their bare hands.
Ask everybody about illness	When employees report for work, have a manager ask them if they've had vomiting or diarrhea since their last shift.
Review illness and handwashing	Review illness reporting requirements and handwashing procedures with everyone.
Review customer illness reporting	Talk to supervisors about the need to get contact information for ill customers and report it to Olmsted County Public Health.
Emphasize supervision	Talk to supervisors about the need to make sure people properly wash their hands when needed, and using gloves properly.

Olmsted County Public Health Services

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LIST OF TOUCH POINTS TO CLEAN AND SANITIZE

COMMON AREAS

- ☐ Door handles, push plates, and railings
- ☐ Trash container touch points
- ☐ Front counter
- ☐ Drink and condiment dispensers
- ☐ Drinking fountains
- ☐ Display cases
- ☐ Registers and keypads
- ☐ Carts and handles
- ☐ Dining area: chairs, tables, counters, condiment dispensers, etc.

FOOD PREP and STORAGE AREAS

- ☐ Door handles and push plates
- ☐ Equipment touch points: door handles, adjustment knobs, scales, etc.
- ☐ Handles of dispensers (beverage, etc.)
- ☐ Ice scoops and shovels
- ☐ Walk-in and other refrigerator handles
- ☐ Walk-in refrigerator and freezer air curtains
- ☐ Freezer door handles
- ☐ 3-compartment sink and mop sink faucets
- ☐ next
- ☐ Soap dispenser push plates
- ☐ Towel dispenser touch points
- ☐ Thermometers
- ☐ Trash container touch points
- ☐ Cleaning tools: mops and broom handles
- ☐ Buckets
- ☐ Light switches and light fixtures
- ☐ Telephone keypads and handsets
- ☐ Computers and keypads
- ☐ Office area touch points
- ☐ Phones and intercoms

RESTROOMS

- ☐ Door handles
- ☐ Sink faucets and toilet handles
- ☐ Toilet seats and lids
- ☐ Toilet paper dispensers
- ☐ Toilet seat cover dispensers
- ☐ Latch or handle on toilet stall door
- ☐ Towel dispenser touch points
- ☐ Soap dispenser push plates
- ☐ Baby changing stations
- ☐ Trash container touch points

BREAK ROOM

- ☐ Door handles, push plates, and railings
- ☐ Dining tables
- ☐ Chairs and booths
- ☐ Trash receptacle touch points
- ☐ Drinking fountains
- ☐ Exteriors of vending machines
- ☐ Lockers
- ☐ Phones and intercoms

To mix a 1000 ppm bleach solution:

- Add 1/3 cup bleach per gallon of water
- Get the surface thoroughly wet and leave the bleach on for 5 minutes; then rinse, or wipe dry with paper towels

Ideas for Active Management

Procedures:

- Have employees initial containers of ready-to-eat food they prepare. If someone comes down with vomiting or diarrhea, discard the foods they prepared.
- If an employee calls in with vomiting or diarrhea, sanitize their workstation.
- Use the log on page 11 to keep a record of customer complaint calls.
- When a customer reports an illness, have the manager on duty call OCPHS directly instead of notifying the general manager or owner.

Training:

- Train all supervisors in what they should do when an employee calls in sick and when a customer reports an illness.
- When training a new employee, have them sign a statement saying they will not come to work when they are sick.
- Use the FDA illness posters to train people who learn best through stories. They are available in Arabic, English, Hindi, Korean, Russian, Simplified Chinese, Traditional Chinese, Spanish, and Vietnamese at: http://www.fda.gov/Food/GuidanceRegulation/RetailFoodProtection/IndustryandRegulatoryAssistanceandTrainingResources/ucm212661.htm
- Use the City of Minneapolis food safety videos. They are available in Somali, Spanish, Hmong, Vietnamese, and Mandarin Chinese at: https://www.minneapolismn.gov/business-services/business-assistance/run/food-safety/materials-videos/videos/
- Keep a training record for each employee.
- Train new hires about illness during orientation.
- Train volunteers, if applicable.

Verification:

- Greet employees when they come in. Observe them for signs of illness (pale, sweaty, tired, etc.).
- Watch for frequent trips to the bathroom.

Section 3. Handwashing

How to wash your hands

Use handwashing sinks only, not the 3-compartment sink, the food prep sink, or the mop sink.

1. Use SOAP, not a hand sanitizer solution, and WARM RUNNING WATER.
2. RUB your hands vigorously for 10-15 seconds.
3. WASH ALL SURFACES of your hands, including:
    - » the backs of your hands
    - » your wrists
    - » between your fingers
    - » under your fingernails
4. RINSE well under running water.
5. DRY your hands with a paper towel.
6. Use the paper towel to turn off the water, and to open the door when leaving the restroom.

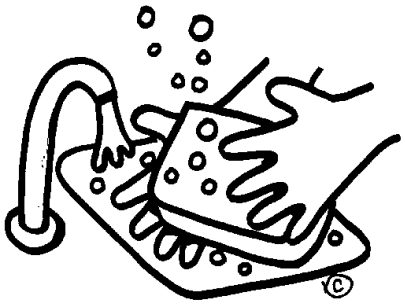
When to wash your hands

Before:
- » Starting work
- » Putting on gloves
- » Preparing food
- » Touching clean equipment and utensils

During:
- » Food preparation, as needed

After touching:
- » Your head, hair, mouth, wounds, or sores
- » Raw poultry, meats, or fish
- » Dirty dishes, equipment, or utensils
- » Trash, floors, soiled linens, etc.
- » When switching between raw and ready-to-eat foods

After:
- » Using the bathroom
- » Break time, smoking, eating, or drinking
- » Coughing or sneezing
- » Touching or blowing your nose
- » Using cleaners or chemicals



The Manager's Guide to Handwashing

Handwashing is the most important thing your employees can do to prevent foodborne illness, and it needs to be done the right way. Let your employees know how important handwashing is, and that you expect them to do it right. Here's how—

Get the hands ready

✓ Rings

♦ Ask food prep employees to remove bracelets, and rings except for plain wedding bands.

- Jewelry interferes with good hand washing technique and collects dirt and germs.

✓ Fingernails

- Nails need to be trimmed, filed, and clean.
- ♦ If employees wear nail polish or glued-on nails they must wear gloves.

When to wash: The Big Three

If you have not been emphasizing handwashing before, start with The Big Three:

✓ BEFORE STARTING WORK
✓ AFTER USING THE TOILET
✓ AFTER TOUCHING RAW MEAT

Use proper technique

✓ Learn the right way to wash your hands and teach your employees or ask your sanitarian to hold a class. Monitor employee hand washing and set a good example.

Make it easy

✓ Are sinks in convenient places? Consider adding or moving sinks to make it easier to wash.
✓ Use moisturizing soap so chapped, dry skin won't stop employees from washing.
✓ Install a hands-free faucet, or a single lever faucet. They are easier to turn on and off and give you water that's a comfortable temperature.
✓ Keep a waste container close to the sink so paper towels can be thrown away easily.

Handwashing station checklist

- ☐ Soap dispenser available and filled
- ☐ Paper towels, heated air, or air-knife hand dryer available
- ☐ Hot and cold water with working faucet - no leaking or dripping
- ☐ Sink readily accessible and unblocked
- ☐ Handwashing reminder sign posted at each sink

Ideas for Active Management

Procedures:

- Post signs that show the proper way to wash your hands. These signs will also satisfy the requirement for handwashing reminders.
- Check handwashing stations for soap and paper towels every day.
- Change the signs posted at handwashing stations from time to time. Otherwise, people stop seeing them.

Training:

- Train a group of employees to be handwashing trainers. Use these employees to train new employees and to conduct periodic retraining.
- Have employees periodically demonstrate safe handwashing.
- Train employees on how to change paper towels and fill hand-soap dispensers.
- Keep handwashing supplies where people can find them when needed.

Verification:

- Listen for sounds that employees are handwashing.
- Watch employees to see if they're washing their hands correctly and when needed.
- If you have security cameras, use a phone app that lets you access the camera feed to check on employee handwashing.
- Check trash cans for used paper towels.
- Ask employees to demonstrate they can wash their hands correctly. Coach them if needed.

Section 4. Food Source

Purchasing food products

Purchasing food products from approved suppliers is the first step in providing safe food to your customers.

Wholesalers

Foods that you buy from commercial wholesalers (such as Sysco or Asian Foods) are from approved sources. So are the foods you buy from grocery stores. If you have any questions about a source, ask your supplier to check it for you.

Locally-grown produce

You can also serve locally grown produce purchased at a farmers market or directly from someone who grows the produce on their own land. You can be your own grower if you garden on land that you own.

It's your responsibility to verify that the grower is a safe source. Talk with your assigned OCPHS staff for more details.

Private home

You cannot serve food that was prepared in a private home.

Examples of sources or conditions for selected food products:

Milk

Pasteurized milk only - you cannot serve raw milk.

Meat, poultry, and eggs

Must be from sources that are licensed and inspected by USDA (United States Department of Agriculture), MDA (Minnesota Department of Agriculture) or equivalent.

Fish

Commercially caught or harvested fish only – you cannot serve fish that someone caught for recreation.

Canned foods

- Commercially canned food only - you cannot serve home-canned food.
- To can food in your establishment and serve it, you must have a HACCP plan before you start.

Shucked shellfish

Molluscan shellstock

Wild mushrooms

Ask your sanitarian for more details

Receiving food

Assign someone to inspect each food delivery.

Receiving temperatures

- Cold TCS foods must be received at 41 °F or colder.

Condition of food cases and containers

- Make sure that food packages are intact and not leaking. If food is delivered in damaged containers, do not accept it.
- Look for signs of contamination by rodents, insects, or birds. If you see any of these problems, reject the product.

Canned products

Reject cans with these problems:

- Severe dents on the top or bottom rim, or on the side seam
- Swollen or bulging cans
- Rusted cans with pitted surfaces

Storing food

Cold storage

- Cold TCS foods must be 41 °F or colder.
- Store food on shelves.

Dry storage

- Store food on shelves.
- Have the bottom shelf at least 6 inches off the floor so you can clean underneath and check for signs of insects and rodents.

Ideas for Active Management

Procedures

- Put newly delivered food items behind the items you already have so that the oldest food is in front and will be used first.
- Keep cooler temperatures colder than 41 °F, especially for coolers that are open often. This will give you a margin of safety in keeping food below 41 °F.
- Have a system for storing food so that everything has a specific location:

  "A place for everything and everything in its place."

Training

- Train several people on how to receive deliveries so there is always backup available.
- If you get key drop deliveries, train the openers on how to check the new foods to make sure they're in good condition.

Verification

- Install cooler alarms that notify your cell phone when the temperature in the walk-in goes below a certain point. This could save a lot of money if the cooler goes down overnight.

Section 5. Protecting Food from Contamination

What is cross-contamination?

It's when bacteria and viruses are transferred to food from other places, like:

1. Dirty hands
2. Soiled surfaces, like cutting boards or slicers
3. Other foods, like raw meat, poultry, and fish

Let's look at these different ways food can be contaminated.

1. **Hands**

   Hands touch nearly everything, including certain parts of our body we'd rather not talk about…

   How to prevent contamination from hands:
   - Wash your hands at all the right times and do it the right way. See Section 3.
   - Always wear gloves or use utensils when you touch ready to eat food (see page 27).

Dirt on your hands = dirt on your food

Poop on your hands = poop on your food

2. **Surfaces**

   You can transfer viruses and bacteria by touching food with something that hasn't been cleaned, like a cutting board, can opener, utensil, or slicer.

   How to prevent contamination from surfaces:
   - Clean and sanitize! (page 28)
   - Use sanitizer correctly (How to, page 29)
   - Use the right amount of sanitizer (page 28)

Bacteria can thrive on dirty knives

3. **Other food**

   Raw meat juices can be full of bacteria. If they drip onto food that won't get cooked, those bacteria go right into someone's mouth and can cause serious illness. They can also contaminate surfaces.

   How to prevent contamination from foods:

   - Keep raw meat and ready-to-eat foods separate during storage and preparation.

Keep ready-to-eat above raw meat

How to use single-use gloves

Cover cuts, scrapes, burns, etc. on the hands with a bandage AND a glove or fingercot.

- Wash your hands before using gloves.
- Wash your hands after using gloves.
- Change gloves when you switch tasks.
- Change gloves when they are ripped.
- Throw gloves away when you leave the work area.

Use gloves only once.

NEVER REUSE GLOVES

REMEMBER: GLOVES CAN SPREAD GERMS

JUST AS EASILY AS HANDS CAN!

How to wash, rinse, and sanitize

Step 1: Wash

Wash in hot, soapy water. You might need to scrape, rinse, soak, or scrub items before you wash them.

Step 2: Rinse

Rinse with clean water. This removes the detergent and remaining food particles.

Step 3: Sanitize

There are two options for sanitizing cleaned items:

Hot water sanitizing (dishwasher)

- The dishware surface must reach 160 ˚F
- You must have a way of measuring the temperature

Chemical sanitizing

Clean items must be rinsed with sanitizer (in a dishwashing machine) or must sit in sanitizer (in a 3-compartment sink). The sanitizer must be at the correct concentration, and the items must be in contact with the sanitizer for a minimum amount of time.

Here are the concentrations and contact times for common sanitizers:

Sanitizer	Concentration (ppm)	Contact time
Chlorine	50 – 100	10 seconds
Quaternary ammonium* (Quat)	200 – 400	30 seconds
Iodine	12.5 – 25	30 seconds

*Use cool water to mix quat

Testing: You need to have test strips or test kits to check your sanitizer concentration. If a sanitizer is too weak it will not be effective. If it is too strong, there can be residue left on the clean items.

Step 4: Air dry

Let clean and sanitized items dry on their own. If you dry items with a towel, you can re-contaminate your equipment.

Sanitizing Surfaces

Approved sanitizers

Chlorine

Aim for 50 to 100 ppm

For each gallon of water, add 1 tsp bleach

Quaternary ammonia (Quat)

Aim for 200 to 400 ppm

Using a spray bottle

- Always label the bottle
- Wipe with paper towels
- Make fresh sanitizer daily OR check the strength with test strips

Wiping cloth bucket

- Store wiping cloths in the bucket
- Change when dirty or at least every 2 hours

Use for:

- Wiping up food spills
- Wiping down surfaces and equipment

Wash, rinse, sanitize, and air-dry food-contact surfaces, equipment, and in-use utensils:
Do this every 4 hours or when they are contaminated Examples:

Prevent. Promote. Protect.

Olmsted County Public Health Services

Ideas for Active Management

Procedures:

- Use the “clean as you go” method - work surfaces and utensils are cleaned as soon as people are finished using them.
- Wash, rinse, and sanitize whenever there is a chance for cross-contamination or when you see a spill.
- Change sanitizer buckets on a routine schedule (example: every 2 hours).
- Sanitize at the start and at the end of the day.
- Develop a cleaning schedule so that all equipment is cleaned and nothing is forgotten.
- Have separate areas for prepping raw meat and ready-to-eat food.
- Prepare raw meat after preparing ready-to-eat foods.
- Have employees wear gloves when handling raw meat – this will keep their hands clean.
- For large spills, use soap and water for cleanup before sanitizing.

Training:

- Have employees demonstrate cleaning and sanitizing and if needed, coach them on how to do it correctly.

Verification:

- Document warewashing sanitizer concentration or temperature every day.
- Check temperatures and concentrations yourself, **don’t rely on an outside vendor.**

Section 6. Cooking

Cooking temperatures

Cook proteins to the right internal temperature to kill bacteria.

Cook to this temperature or greater:

Poultry		**165 °F**
Ground beef Tenderized steak		**155 °F**
Game animals*		**145 °F**
Pork		**145 °F**
Eggs		**145 °F**
Fish		**145 °F**

*Commercially raised

Additional food temperatures:

145 °F:

- The tops and bottoms of “whole muscle, intact beef” steaks that will be served undercooked.

155 °F:

- Meat that has been:
  - Mechanically tenderized or injected
  - Ground, chopped, or otherwise reduced in size (‘comminuted’)
  - ‘Restructured’ such as gyros and sausage
- Raw eggs that are not cooked and served immediately
- Ratites (ostrich, emu, etc.)

165 °F:

- Stuffed food, if the stuffing contains fish, meat, poultry, or ratites.

How to use a thermometer to check food temperatures

1. Clean and sanitize the stem of the thermometer.
2. Insert it into the thickest part of the food:

   »»Use a thin-tipped metal thermometer with a digital readout.

3. Wait until the thermometer reading stops changing and then read the temperature.

   NOTE: When possible, do not puncture sealed packages.

   Instead, place the thermometer between two packages.

How to check a thermometer for accuracy

1. Fill a glass with ice water and stir it using the thermometer.
2. Wait 3 minutes and then check the thermometer reading:

   a. If it reads between 30 ºF and 32 ºF that's GOOD.

   b. If it is less than 30 ºF or over 32 ºF that's BAD, and you need to adjust it using the manufacturer's instructions.

3. Replace the thermometer if it cannot be adjusted.

Raw or undercooked animal products:

If you serve them, you must tell your customers

Because eating raw and undercooked meat and eggs increases the risk of foodborne illness, you must tell your customers about the food items that are served raw or undercooked using a *Disclosure* and a *Reminder*.

Disclosure

Two ways to show disclosure on your menu:

1. Describe the items that are served raw or undercooked, such as:
   - "Oysters on the half-shell (raw oysters)"
   - "Hamburgers (can be cooked to order)"

   OR

2. Put an asterisk (star) next to the food items, and another one next to a footnote that says:

   "Served raw or undercooked"

   OR

   "Contains (or may contain) raw or undercooked ingredients"

Reminder

Three choices for the reminder

You must put an asterisk next to the raw or undercooked items, and another one next to a footnote.

The footnote must be one of the following statements:

Consuming raw or undercooked meats, poultry, seafood, shellfish, or eggs may increase your risk of foodborne illness.

OR

Consuming raw or undercooked meats, poultry, seafood, shellfish, or eggs may increase your risk of foodborne illness, especially if you have certain medical conditions.

OR

Regarding the safety of these items, written information is available upon request.

How to present this information to customers:

- The most common place is on the menu.
- You can also use brochures, table tents, placards, or other written material if it is effective.

How to do non-continuous cooking safely

What is non-continuous cooking?

It's a 2-step cooking process for meat, fish, or poultry with a cooling step in-between.

Why is this method used?

It's convenient for pre-preparing popular foods, such as hamburgers or chicken wings, so they don't take as long to cook during a busy time.

Approval needed

If you want to use this process, you need to get approval from OCPHS first.

Step 1 - 1st cook

- Partially cook the food – it will be below the safe cooking-temperature for that food.
- The maximum time for this step is 60 minutes.

Step 2 - Cool

- Start cooling the food immediately after the 1st cook step.
- Cool the food from 135 °F to 70 °F within 2 hours, and from 70 °F to 41 °F within 6 total hours. See page 49.

Step 3 - 2nd cook

- Cook the food until the internal temperature reaches the safe temperature for that food (165 °F for poultry, etc.).

Step 4 - Hold hot, serve, or cool

- Do one of the following:
  - Keep the food hot (above 135 °F),
  - Serve the food immediately, or
  - Cool it again.

Written procedure required

Develop and follow a written procedure - keep it onsite for reference.

If you want to use this process, there is a sample plan that you can use – See page 70 in the appendix.

Cooking roasts

Cooking requirements depend on:

- Type of oven used,
- Size of the roast, and
- Final temperature that you want.

1. Use this chart to select the correct cooking temperature for your oven type and roast size.

Oven types	Oven Temperature for Roasts less than 10 lbs.	Oven Temperature for Roasts larger than 10 lbs.
Still dry	350 ºF	250 ºF
Convection	325 ºF	250 ºF
High humidity	250 ºF or less	250 ºF or less

2. Cook the roast to the final temperature you want.
3. Use the chart to determine how long you need to hold the roast at that temperature.

Temperature	Holding time (minutes)
130 °F	112
131 °F	89
133 °F	56
135 °F	36
136 °F	28
138 °F	18
140 °F	12
142 °F	8
144 °F	5
145 °F	4

For additional approved time/temperature combinations contact your assigned sanitarian.

Food safety for raw or partially cooked fish

What to know:

- Some kinds of fish have parasites that can infect humans.
- Freezing kills these parasites if it is done at the right temperature for the right amount of time.

What to do:

- Ask your supplier for a letter that says the fish was properly frozen.
  - Keep the letters for 90 days after the fish has been served.
  - Your sanitarian will ask to see these letters during your food safety assessment.

OR

- Freeze the fish yourself – there are two ways to do this:
  - At - 4 °F (or colder) for at least 168 hours (7 days), or
  - At - 31 °F (or colder) for 15 hours.
  - If you freeze the fish yourself, you must keep a record of the freezer temperature and how long you kept the fish frozen.

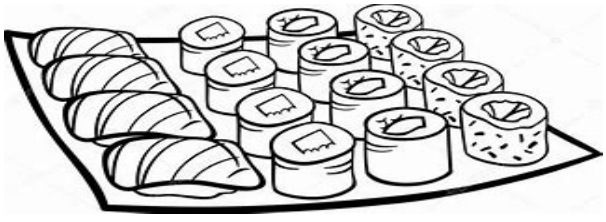
Exceptions:

- Certain tuna species
- Farmed fish (also called “aqua culture”)
  - Ask your supplier for a letter that says the fish were raised in a way that prevented them from becoming infected with parasites.
  - Keep the letters for 90 days after the fish has been served.

FYI - If you serve escolar:

- You must call it *escolar* on your menu - you can’t call it “white tuna”.

If you have any questions about raw or partially cooked fish, ask your sanitarian.



Ideas for Active Management

Procedures:

- Have a thermometer at each workstation.
- Keep spare, calibrated thermometers on hand.
- Routinely calibrate food thermometers.
- Use digital thermometers with quick read settings so staff are more likely to use them during busy times.
- Develop a list of food items that you will check cooking temperatures regularly.

Training:

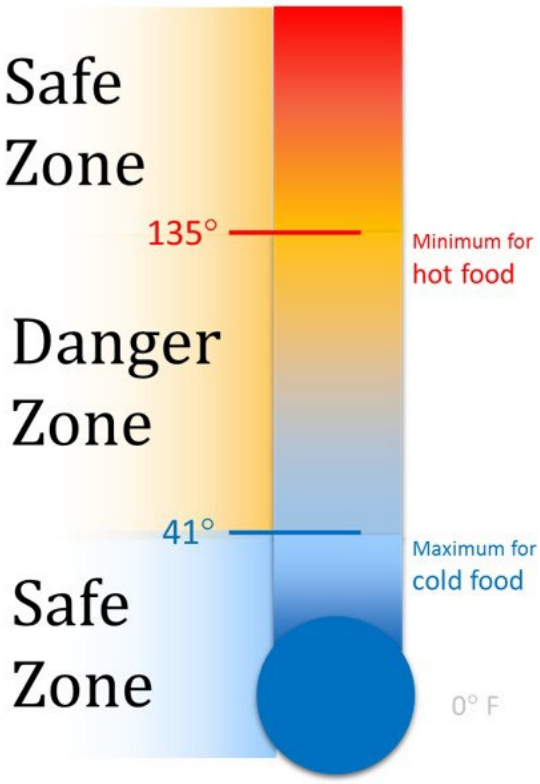
- Train employees on how to clean, sanitize, and use a thermometer.
- Train staff to understand the difference between oven temp and food temp (e.g., the oven is 350 °F, the food in the oven may be at 180 °F).

Verification:

- Keep a log of your cooking temperatures.
- Talk to your inspector to help you develop your own log.
- Set a time aside each week to review the cooking log.

Section 7. Hot and Cold Holding

Hot & cold holding for TCS food



The Danger Zone of temperature is between 41 °F and 135 °F. This is where bacteria grow the fastest – especially the bacteria that cause illness.

If you keep food out of the Danger Zone, disease-causing bacteria won't be able to grow.

✓ Hot food:
- Keep food above 135 °F whenever possible.
- Reheat cooled food to 165 °F before hot holding. Reheating to 165 °F must not take longer than two hours.

✓ Cold food:
- Keep at 41 °F or colder. Food must be in refrigeration equipment, not on ice.

✓ Using time to control bacterial growth
- You can keep food in the Danger Zone for a limited time if you get approval from your sanitarian. See the next page for more information.

Using time as the only public health control

You can keep food in the Danger Zone (between 41 °F and 135 °F) for a limited amount of time if you follow the requirements below.

Two options for using time as the only public health control (TPHC)

- 4-hour time control. This can be used for both hot and cold holding.
- 6-hour time control. This is for cold foods only that have a starting temperature of 41 °F or colder.

Requirements for using 4-hour time control

- ✓ Develop a written procedure *and* get approval from your sanitarian.
  There is an application in the appendix that you can fill out and use as your procedure.
- ✓ Start with food that is 41 ºF or colder or over 135 ºF.
  The 4 hours starts when the food is removed from the equipment you were using for temperature control (cooler, oven, etc.)
- ✓ Mark the food container with the 4-hour discard time.
  The 4 hours starts when you take the food out of the equipment you were using for temperature control (cooler, oven, etc.)
- ✓ Discard any leftovers after 4 hours.
- ✓ Discard any food that is not marked with the discard time.

Requirements for using 6-hour time control

- ✓ Develop a written procedure *and* get approval from your sanitarian.
  There is an application in the appendix that you can fill out and use as your procedure.
- ✓ Start with food that is at 41 ºF or colder.
- ✓ Mark the food with two times: the time it was removed from temperature control and the time it needs to be discarded.
- ✓ Check the food temperature at its warmest spot to make sure it stays under 70 ºF.
- ✓ Discard food if:
  - It gets warmer than 70 ºF or
  - At the end of the 6 hours or
  - If the food container is not marked.

Insert “Time as a Public Health Control”

Temperature Log

Equipment: _____

Date	Food Item	Time	Temperature	Time	Temperature

Ideas for Active Management

Procedures:

- Put a thermometer in each cooler near the door and keep extras on hand.
- Take food temperatures, not just the air temperature or the display temperature.
- Take temperatures at opening and closing times. This will help you save your food if the cooler or the power goes down overnight.
- Tape a cold holding log to the door of the refrigerator – this makes it easy for people to record the temperature.
- Set cooler temps to between 36 ºF and 38 ºF.

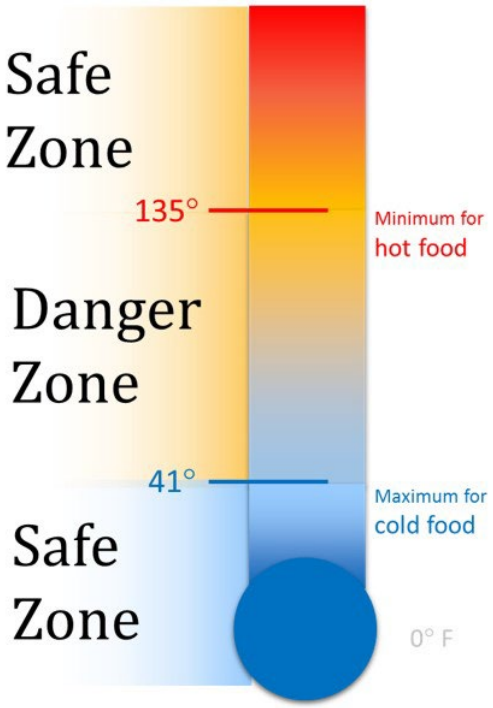
Training:

- Train employees on what to do when cooler or food temperatures are over 41 ºF or when hot food temperatures drop below 135 ºF.
- Train employees on how to take temperatures.

Verification:

- Keep a log of your temperatures.
- Ask your sanitarian to help you develop a custom log.
- Set time aside each week to review the cold holding logs and ensure staff took corrective action when needed.

Section 8. Cooling



How to cool food

Quick cooling for safe food

You need to cool hot foods through the Danger Zone quickly. If you don't, bacteria will grow and some of them cause disease. The faster you cool the food, the less chance there is for bacteria to grow.

Rapid cooling means that the food temperature drops from 135 ˚F to 70 ˚F within 2 hours, and then from 70 ˚F to 41 ˚F within 6 hours total.

Check your cooling speed

Use a thermometer to check cooling – see the Validation page (52) for more information.

Methods for quick cooling

Use SHALLOW PANS

Use this method for soups, sauces, gravies, and small to medium-sized pieces of meat.

1. Put a 2-inch layer of food in a shallow metal pan.
2. Do not cover the pans and do not stack them.
3. Put the pan in the cooler where cold air can circulate around it.
4. Cover the food *after* it has cooled.

Use an ICE BATH

1. Put the food container into a larger container that has ice and water in it. You can use your 3-compartment sink for large pots.
2. The ice should be deep enough to almost reach the top of the food container.
3. Stir the food often.

ADD ICE as an ingredient instead of water

1. Add only half the water before cooking.
2. After cooking, add the other half as ice.

Use an ICE WAND

Place the clean, frozen wand in the food and stir often.

Use COLD INGREDIENTS

Pre-chill the ingredients for cold foods.

Examples: canned tuna and mayonnaise, dressings for pasta salad.

Cooling methods

GOAL: To cool food from **135 °F to 70 °F** in 2 hours or less, and then from **70 °F to 41 °F** in 4 more hours

Ice bath

- ⇒ Use a mixture of ice & water
- ⇒ The ice must come up to the same level as the food
- ⇒ Use an ice wand for large batches
- ⇒ **Stir often**

Ice wand

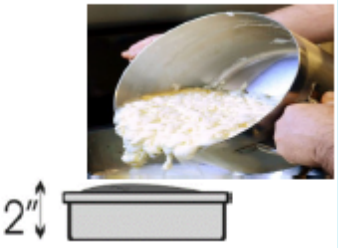
In the cooler—

- ⇒ Leave uncovered so heat escapes
- ⇒ Put on the top shelf
- ⇒ Never stack hot foods

For best results use multiple methods!

Small portions

- ⇒ Divide into smaller portions
- ⇒ Use shallow pans - 2" deep or less



More quick methods

- ⇒ Put in the freezer for a short time
- ⇒ Instead of water, use ice as an ingredient in soups and stews
- ⇒ Pre-chill ingredients

Remember to:

Check food temperatures every hour and record the time and temperature on a log

COOLING LOG

Cool food to 70°F within 2 hours and then to 41°F in 6 hours total

Food ______________________________

Date ____________ By ____________

Starting cooler temperature: __________

Temperature __________ Time __________

Temperature __________ Time __________

Temperature __________ Time __________

Temperature __________ Time __________

Temperature __________ Time __________

Temperature __________ Time __________

Temperature __________ Time __________

Hours to reach 70 °F ________

Hours to reach 41 °F ________

Notes:

Food ______________________________

Date ____________ By ____________

Starting cooler temperature: __________

Temperature __________ Time__________

Temperature __________ Time__________

Temperature __________ Time__________

Temperature __________ Time__________

Temperature __________ Time__________

Temperature __________ Time__________

Temperature __________ Time__________

Hours to reach 70 °F ________

Hours to reach 41 °F ________

Notes:

Food ______________________________

Date ____________ By ____________

Starting cooler temperature: __________

Temperature __________ Time __________

Temperature __________ Time __________

Temperature __________ Time __________

Temperature __________ Time __________

Temperature __________ Time __________

Temperature __________ Time __________

Temperature __________ Time __________

Hours to reach 70 °F ________

Hours to reach 41 °F ________

Notes:

Food ______________________________

Date ____________ By ____________

Starting cooler temperature: __________

Temperature __________ Time__________

Temperature __________ Time__________

Temperature __________ Time__________

Temperature __________ Time__________

Temperature __________ Time__________

Temperature __________ Time__________

Temperature __________ Time__________

Hours to reach 70 °F ________

Hours to reach 41 °F ________

Notes:

How to do a cooling validation study

What is a validation study?

It's a way of checking whether your method for cooling food is effective. If you don't have a standard method, it helps you develop one.

How to do the validation study

Use the validation form on the next page.

1. Fill out the top part of the form, describing the method you usually use.
2. Start taking temperatures and writing down the times you took them.
   - If you let food sit out at room temperature, make a note of this; it's best to limit this time to about 20 minutes.
   - Be sure to take a temperature when you put the food in the cooler, and then again 2 hours later.
3. After 2 hours, see if the food temperature gets down to 70 °F (or colder). If it does, the first phase of your method is successful.
4. Six hours after you put the food in the cooler, see if the food temperature gets down to 41 °F (or colder). If it does, your cooling method is successful.

If your validation study is successful

- Train staff to use this method every time they cool that food.
- You will probably need different methods for different foods (rice on a sheet tray vs. a gallon container of cream soup).
- Do a validation study for each type of food (thin soup, thick soup, chunks of meat, etc.).

If the first 2 hours is almost up and the food isn't cooling quickly enough

- Re-heat the food to 165 °F and use another method.
- See the cooling poster on page 50 for ideas.

Note: Technically, the 2-hour cooling phase doesn't start until the food temperature drops to 135 °F. The most effective methods, such as an ice bath, should be able to cool food from temperatures above 135 °F down to 70 °F within 2 hours.

COOLING VALIDATION STUDY

Objective: Find out if food is cooling to 70°F within 2 hours and then to 41°F in 6 hours total

Date: _____ By: _____

Food: _____

Amount of food: _____
(*cups, pounds, etc.*)

Description of the rapid cooling methods used:
(ice bath, ice wand, shallow pans, etc.)

_____

_____

Which cooler was used: _____

Air temperature of the cooler: _____

Food location in the cooler: _____
(*height of shelf, speed rack in aisle, distance to fan, etc.*)

Notes:

_____

_____

_____

Food temperature _____ Time _____
Food temperature _____ Time _____
Food temperature _____ Time _____
Food temperature _____ Time _____
Food temperature _____ Time _____
Food temperature _____ Time _____
Food temperature _____ Time _____
Food temperature _____ Time _____

Hours to reach 70°F: _____ Hours to reach 41°F: _____

___ Cooling successful *or* ___ Modify cooling method(s) and repeat study

Ideas for Active Management

Procedures

- Get a digital thermometer.
- Consider using an ice bath - it's a very effective way to cool food.
- Use metal containers instead of plastic ones.
- Pre-chill or pre-freeze pans so they're already cold when you add the food.
- Use cooling logs to record times and temperatures.
- Designate a location in the cooler for foods to be cooled.

Training

- Have cooks do the validation studies and train other cooks.

Verification

- Review cooling logs to make sure foods are cooling quickly enough.
- Repeat the validation study occasionally to be sure your procedure is still working.

Section 9. Date Marking

Date marking

Definition

A system for making sure that **opened packages and containers of ready-to-eat food are discarded after 7 days of refrigeration.**

Why we do it

It's done to prevent *Listeria* bacteria from multiplying to levels that can make people sick. *Listeria* is unusual because it can grow at refrigerator temperature.

Foods that need to be date marked

Any food that is:

- Ready-to-eat, *and*
- Refrigerated for more than 24 hours, *and*
- Needs to be refrigerated for safety (TCS).

Day 1 of the 7-day period

Food prepared onsite: the day the food is prepared.

Examples: Tuna salad and other cold salads, cut fruit.

Food from a processing plant: the day you open the container.

Examples: Cold cuts, hummus, cut melons.

Tracking the 7-day period

- Mark the food containers with the date of preparation or opening, and
- Have an effective procedure for identifying Day 7.

Frozen food

Freezing a food stops the 7-day clock but does not set it back to zero. If the food was not labeled before it was frozen, it must be served within 24 hours after thawing.

Exceptions

There are foods that don't need to be date-marked, such as commercially prepared salad dressings, hard cheeses, ketchup, mustard, and pickles.

The best practice is to date mark all the ready-to-eat foods stored in your coolers.

Section 10. Norovirus

Olmsted County Public Health Services
2100 Campus Drive SE Ste 100
Rochester MN 55904-4722
(507) 328-7500

HERE'S WHAT TO DO WHEN EMPLOYEES REPORT VOMITING OR DIARRHEA

IF ONE EMPLOYEE REPORTS ILLNESS:

Take them off the schedule	Tell the employee they cannot return to work until they've been completely well for 24 hours.
Fill in your log	Record their symptoms and other information on your illness log.
Did they prepare ready-to-eat foods?	Discard any ready-to-eat foods they prepared the day before they got sick.
Sanitize	Sanitize the surfaces that people touch a lot using a 1000 ppm bleach solution. You can use other sanitizers that kill norovirus if it says that on the product label. **See page 54.**

IF TWO OR MORE EMPLOYEES REPORT ILLNESS within 4 days of each other:

Take them off the schedule for longer	Consider keeping the sick people out until they've been well for 72 hours.
Fill in your log	Record their symptoms and other information on your illness log.
Did they prepare ready-to-eat foods?	Discard any ready-to-eat foods they prepared the day before they got sick.
Dump the ice	Empty the ice machine, sanitize the compartment, and make new ice.
Sanitize	Sanitize the surfaces that people touch a lot using a 1000 ppm bleach solution. You can use other sanitizers that kill norovirus if it says that on the product label. **See page 54.**
Wear gloves	Make sure employees are not touching ready-to-eat food with their bare hands.
Ask everybody about illness	When employees report for work, have a manager ask them if they've had vomiting or diarrhea since their last shift.
Review illness and handwashing	Review illness reporting requirements and handwashing procedures with everyone.
Review customer illness reporting	Talk to supervisors about the need to get contact information for ill customers and report it to Olmsted County Public Health.
Emphasize supervision	Talk to supervisors about the need to make sure people properly wash their hands when needed, and using gloves properly.

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LIST OF TOUCH POINTS TO CLEAN AND SANITIZE

COMMON AREAS

- ☐ Door handles, push plates, and railings
- ☐ Trash container touch points
- ☐ Front counter
- ☐ Drink and condiment dispensers
- ☐ Drinking fountains
- ☐ Display cases
- ☐ Registers and keypads
- ☐ Carts and handles
- ☐ Dining area: chairs, tables, counters, condiment dispensers, etc.

FOOD PREP AND STORAGE AREAS

- ☐ Door handles and push plates
- ☐ Equipment touch points: door handles, adjustment knobs, scales, etc.
- ☐ Handles of dispensers (beverage, etc.)
- ☐ Ice scoops and shovels
- ☐ Walk-in and other refrigerator handles
- ☐ Walk-in refrigerator and freezer air curtains
- ☐ Freezer door handles
- ☐ 3-compartment sink and mop sink faucets
- ☐ Handwash sink faucets
- ☐ Soap dispenser push plates
- ☐ Towel dispenser touch points
- ☐ Thermometers
- ☐ Trash container touch points
- ☐ Cleaning tools: mops and broom handles
- ☐ Buckets
- ☐ Light switches and light fixtures
- ☐ Telephone keypads and handsets
- ☐ Computers and keypads
- ☐ Office area touch points
- ☐ Phones and intercoms

RESTROOMS

- ☐ Door handles
- ☐ Sink faucets and toilet handles
- ☐ Toilet seats and lids
- ☐ Toilet paper dispensers
- ☐ Toilet seat cover dispensers
- ☐ Latch or handle on toilet stall doors
- ☐ Towel dispenser touch points
- ☐ Soap dispenser push plates
- ☐ Baby changing stations
- ☐ Trash container touch points

BREAK ROOM

- ☐ Door handles, push plates, and railings
- ☐ Dining tables
- ☐ Chairs and booths
- ☐ Trash receptacle touch points
- ☐ Drinking fountains
- ☐ Exteriors of vending machines
- ☐ Lockers
- ☐ Phones and intercoms

To mix a 1000 ppm bleach solution:

- Add 1/3 cup bleach per gallon of water
- Get the surface thoroughly wet and leave the bleach on for 5 minutes; then rinse, or wipe dry with paper towels

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HOW TO CLEAN UP VOMIT AND DIARRHEA

Diarrhea and vomit can spread diseases, especially norovirus, so it's important to clean it up right away *and* to protect the staff who do the cleanup.

First steps

1. Protect yourself: put on the apron, mask, goggles, and gloves.
2. Remove as much material as you can.

- Hard surface, such as a bathroom floor:
  - Use the scraper or wipe up with paper towels and immediately put the towels in a trash bag.
- Carpeting and upholstery:
  - Cover the area with the absorbent and wait until the liquid is soaked up.
  - Use the scraper or paper towels to pick up the absorbent and immediately put the towels in a trash bag.
  - DO NOT USE A VACUUM.

3. Wash the area with a strong detergent solution.
4. Rinse the area thoroughly with plain water.
5. Wipe dry with paper towels and put those towels in the trash bag.

Disinfect to kill any remaining germs

1. Apply the disinfectant.

- Hard surface, such as a bathroom floor:
  - Apply a disinfectant that is effective against norovirus, such as a strong bleach solution (See the instructions on page 2).
  - Apply the disinfectant to the soiled area AND to the surrounding area.
- Options for carpeting and upholstery (chlorine will damage these materials):
  - Steam cleaning is recommended.
  - An alternative disinfectant such as an accelerated hydrogen peroxide product; many medical centers, hospitals, and nursing homes use this type of product.

2. Leave the disinfectant on the surface for the required amount of contact time, which is 5 minutes for bleach. For other products, see label for directions.
3. Wipe up the disinfectant with paper towels and put those towels in the trash bag or let the area air-dry.

Last steps

1. Take off your apron and throw it away. Carefully take off your gloves.
2. Wash your hands thoroughly with soap and water.
3. Take off your mask and goggles.
4. Wash your hands again.
5. Put on clean gloves and rinse any food-contact surfaces that were sanitized such as cutting boards, and mouth-contact surfaces such as silverware.

Be prepared

You can buy a pre-made cleanup kit.

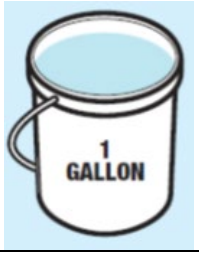
If you don't buy a premade kit, have these materials available:

- ☐ Disposable gloves (vinyl, latex, or rubber)
- ☐ Disposable mask (N-95)
- ☐ Disposable plastic apron
- ☐ Eye protection, such as goggles
- ☐ Absorbent material (such as kitty litter, baking soda, or a commercial product) to soak up liquids
- ☐ Disposable scoop or scraper (such as an inexpensive dustpan)
- ☐ Paper towels
- ☐ Trash bags and ties
- ☐ Buckets for detergent and rinse water
- ☐ Disinfectants that are effective against norovirus
- ☐ Spray bottles for applying disinfectants
- ☐ Signs that say "Caution – Wet floor" or safety cones

References:
Clean-up and Disinfection for Norovirus ("Stomach Bug") www.disinfect-for-health.org March 2015
OSHA FactSheet: Noroviruses www.OSHA.gov May 2008
SafeMark Best Practices: Norovirus Information Guide, Ecolab and Food Marketing Institute July 2010

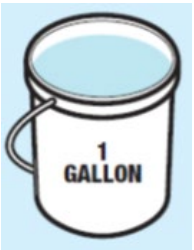
MIXING CHLORINE BLEACH FOR DISINFECTION

FOR CLEAN SURFACES, 1000 PPM



⅓ CUP BLEACH	**+**	**1 GALLON WATER**

FOR SOILED SURFACES, 5000 PPM



1 ⅔ CUPS BLEACH	**+**	**1 GALLON WATER**

HOW TO SANITIZE:

- Get the surface thoroughly wet.
- Leave the bleach on for 5 minutes.
- Let the bleach air dry.

For food-contact surfaces and eating utensils: rinse with clean water before using them.

VOMIT

CLEAN UP

1
Put on your gear

Supplies needed:

a) Cat litter
b) Shovel & scraper
c) Mask
d) Gloves
e) Goggles
f) Disposable apron
g) Garbage bags
h) Soap & water
i) Paper towels
j) Norovirus sanitizer

Add cat litter...WAIT... Scrape & toss

Clean with soap & water

Spray with sanitizer...WAIT...
Wipe up, then get rid of garbage

For carpeting
DO NOT vacuum
Use a steam cleaner

Sanitize everything in
a 10 foot circle

Follow these steps to take off your gear

1) Take off apron

2) Take off gloves

3) Wash hands

4) Take off goggles & mask

5) Wash hands again

6) Get rid of garbage

7) Wash hands again

Created by Olmsted County Public Health, MN 2017

What happens during a foodborne illness investigation

If OCPHS receives two independent reports that people came down with vomiting or diarrhea after eating at your establishment, we will start a foodborne illness investigation.

Here's what will happen:

1. **You'll get a phone call from us, and we'll explain that we are going to:**
   - ➤ Send a team to your site to find possible causes of the outbreak
   - ➤ Advise you on steps to take to prevent the spread of illness
   - ➤ Interview your employees to ask if they've had vomiting or diarrhea recently
2. **Someone from the onsite team will ask you for the following information:**
   - ☐ The name and phone number of the person who will be our main contact
   - ☐ A list of current employees and their phone numbers
     - ○ We'll also ask you to note which of your employees don't communicate well in English, and their preferred language
   - ☐ Work schedules; we'll give you a date range for this request
   - ☐ Sources of patron names:
     - ○ Reservations
     - ○ Contact information for large parties
     - ○ Credit card receipts for a range of dates
   - ☐ Menus, along with any recent changes, substitutions, or specials that were not on the menu
   - ☐ A copy or picture of the employee illness log
   - ☐ Whether you've had any public vomiting incidents or unusual situations
3. **We'll ask you to tell your employees to expect a call from us, to answer their phone when we call, and that it's important for them to answer our questions honestly.**

We will interview patrons and employees, we might ask employees for stool samples, we will try to figure out the organism and what went wrong – but we may never know exactly what went wrong.

The goal of the investigation is to prevent any further spread of illness.

This process can be overwhelming – we will walk you through it.

Ideas for Active Management of Norovirus

Procedures:

- If employees sign in on a POS system, program the system to ask, “Have you been free of vomiting and diarrhea for the last 24 hours?”
- After hiring, have a new employee sign a statement saying they will not come to work when they are sick.
- Have supervisors call OCPHS as soon as possible with customer illness reports instead of waiting for a general manager/owner.
- Post signs that show the proper way to wash your hands.
- Make proper handwashing a part of employee evaluations.
- Have employees label the ready-to-eat foods they prepare with their initials or name. If that employee comes down with vomiting or diarrhea, discard those foods.

Training:

- Conduct a refresher training on the importance of employee illness reporting, handwashing, and no bare hand contact at the start of the norovirus season.
- Train a group of employees to be handwashing trainers. Have these employees train new employees and conduct periodic retraining.
- Have employees periodically demonstrate safe handwashing.

Verification:

- Greet employees when they come in and see if they are showing signs of illness (pale, sweaty, tired, etc.).
- Watch for frequent trips to the bathroom.
- Watch or listen for sounds that employees are handwashing when required and are washing correctly.
- Some managers have apps on their phones that allow them to periodically watch employees off site and monitor handwashing.

Section 11. Appendices

Changes in the restaurant that require plan review

These kinds of changes **need to be reviewed** by OCPHS staff:

- Menu changes:
  Examples:
  - Starting higher-risk processes, such as cooking raw meat or cooling
  - Starting special processes, such as reduced oxygen packaging or sous vide

- Extensive remodeling:
  Examples:
  - Additions or changes to the building
  - Additions or changes to the food preparation areas

- Major equipment additions or changes:
  Examples:
  - Adding sinks
  - Adding or replacing a dishwashing machine
  - Replacing a ventilation hood

Talk to your assigned sanitarian or OCPHS plan reviewers **before** starting work – this will likely save you time and money.

These changes **don't need to be reviewed**:

- Some equipment replacement
  Examples:
  - Replacing one reach-in cooler with a similar cooler
  - Installing minor equipment, such as a microwave or toaster

- Remodeling customer seating areas
- Maintenance work such as painting, cleaning, or replacing damaged tiles

When in doubt, call OCPHS.

TCS food: Time/Temperature Control for Safety

'TCS food' is the new term for 'Potentially Hazardous Food'.

Here's the definition from the new Food Code:

> *… a food that requires time/temperature control for safety to limit pathogenic microorganism growth or toxin formation.*

This is another way of saying there are two ways to keep these foods safe:

Temperature control	Keep foods at or below 41 °F or above 135 °F
Time control	Hold foods between 41 °F and 135 °F for a limited amount of time

Time control is also called TPHC, or time as the only public health control. See page 44 for more information.

Examples of TCS foods:

- Animal foods - either raw or heat-treated
- Plant foods that are heat-treated
- Raw seed sprouts
- Cut melons
- Cut leafy greens
- Cut tomatoes
- Garlic-in-oil mixtures, unless they are modified so that bacteria can't grow in them

Examples of non-TCS foods:

- Air-cooled hard-boiled eggs, if the shells are intact
- Pasteurized shell eggs, if the shells are intact
- Commercially canned foods
- High acid foods
- Foods with certain combinations of pH and water activity - these combinations are listed in two tables in the Food Code and apply mostly to food manufacturers.

Olmsted County Public Health Services
2100 Campus Dr SE Ste 100
Rochester MN 55904-4722

APPLICATION TO USE TIME AS THE ONLY PUBLIC HEALTH CONTROL (TPHC)

A written procedure is required if you are using time as the only public health control for either:

- A working supply of potentially hazardous food, or
- Food that is displayed or held for service and immediate consumption.

Before you start using TPHC, fill in this form and send it to your sanitarian at Olmsted County Public Health Services (OCPHS). Keep a copy of the procedure onsite.

1. Complete the following information:

Establishment information		
Establishment name		
License number	Primary contact	
Establishment address		
City	State	Zip
Email address		Phone

2. Check each box to show that you understand and will comply with the TPHC requirements.

- ☐ I will have a written procedure, and I will keep it at the food establishment so it can be reviewed by OCPHS staff.
- ☐ My written procedures will include all TPHC requirements listed below.
- ☐ Once the TPHC period begins, food will not be returned to temperature control.

Requirements for 4-hour time control

- ☐ When the four hours starts, food will be colder than 41 °F or hotter than 135 °F.
- ☐ Food containers will be marked with the end of the 4-hour period
- ☐ Food that is left at the end of the 4-hour period will be discarded
- ☐ Food in unmarked containers will be discarded

Requirements for 6-hour time control

- ☐ When the six hours starts, food will be colder than 41 °F.
- ☐ Food will be marked with two times: the time it was removed from temperature control and the time it needs to be discarded.
- ☐ Food temperatures will be monitored to make sure the food is under 70 °F.
- ☐ Food will be discarded if it reaches 70 °F. Leftovers will be discarded at the end of the 6-hour period. Unmarked containers of food will be discarded.

3. Complete the following information and attach additional pages if needed.

What specific foods will you control with TPHC? List the foods, where each food will be held, and if the food is a working supply of raw food or ready-to-eat food.
What methods will you use to properly cool food that is prepared, cooked, and refrigerated? Write NA if foods are not cooled prior to TPHC.
How will you mark each food to show its disposal time?
Who will be responsible for:
Marking each TPHC food?
Verifying that TPHC foods are properly marked?
Ensuring that TPHC foods are removed within 4 or 6 hours?

4. Indicate agreement to comply

I understand that I must operate my food establishment according to these written procedures each day the establishment is using Time as the Public Health Control in its operation.

I agree to update these written procedures when my procedure changes.

Name (please print): _____ Title: _____

Signature: _____ Date: _____

Olmsted County Public Health Services

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APPLICATION TO USE A NON-CONTINUOUS COOKING PROCESS

- A written procedure is required if you are going to cook raw animal foods in two steps with a cooling step in-between.
- Before you start non-continuous cooking, fill in this form and send it to your sanitarian at Olmsted County Public Health Services (OCPHS). Keep a copy of the procedure onsite.

1. Complete the following information:

Establishment information		
Establishment name		
License number	Primary contact	
Establishment address		
City	State	Zip
Email address		Phone

2. Check each box to show that you understand and will comply with the requirements for non-continuous cooking.

- ☐ I will have a written procedure, and I will keep it at the food establishment so it can be reviewed by OCPHS staff.
- ☐ My written procedures will include all the requirements listed below.

Requirements

- ☐ The 1st cook step will take no longer than 60 minutes.
- ☐ The food will be cooled immediately after the 1st cook step using rapid cooling methods.
- ☐ The cooled food will be held at 41 °F or colder.
- ☐ Partially cooked animal foods will be kept away from ready-to-eat foods during preparation, display, and storage
- ☐ Containers of partially cooked foods will be labeled so that employees can see which foods need further cooking.

- ☐ A consumer advisory will not be used for these foods.
- ☐ In the 2nd cook step, the food will be cooked to the minimum safe temperature for that food, for example, 165 °F for poultry.
- ☐ The food temperature will be checked at the following times:
  - During cooling
  - During cold holding
  - Final cooking
  - Other times, depending on options available after the 2nd cook step.
- ☐ Temperatures will be written down and kept onsite
- ☐ This procedure will be kept onsite and will be available for review upon request.

3. Complete the following information - include corrective actions for each step - attach additional pages if needed.

A. What specific foods will be non-continuously cooked?
B. How will you monitor the 60-minute limit for initial cooking? How will you document this?
C. How will partially cooked foods be separated from ready-to-eat foods?
D. How will partially cooked foods be marked to show they need to be cooked before service?

E. How will you monitor cooling time? How will you document this?
F. After cooling, how will you monitor the cold-holding temperature? How will you document this?
G. For the 2nd cook step, how will you monitor the cooking temperature? How will you document this?
H. After the 2nd cook step, the food will be: (check one, and answer the questions below your choice)
___ Served immediately ___ Kept hot for service How will you monitor the holding temperature? How will you document this? ___ Held using time as a public health control *This requires a separate TPHC plan.* ___ Re-cooled How will you monitor the cooling time? How will you document this?

4. Indicate your agreement to comply

I understand that I must operate my food establishment according to these written procedures each day the establishment is using non-continuous cooking in its operation.

I agree to update these written procedures when they change.

Name (please print): _____ Title: _____

Signature: _____ Date: _____

Variances and HACCP plans

What's a variance?

It means you've been approved to use methods that don't meet the requirements in the Food Code but still offer the same level of protection to public health.

When do I need a variance?

You need to get a variance if you want to do one of the following:

- Smoke food for preservation, not for flavoring
- Cure food
- Use additives as a method of preservation
- Use additives to render a food non-TCS (temperature controlled for safety)
- Use reduced oxygen packaging (ROP) - in some circumstances
- Serve shellfish from a tank
- Process game animals in the establishment for your personal use
- Sprout seeds or beans
- Fermentation such as kimchi, sauerkraut, yogurt
- Use any other food preparation method that does not comply with Food Code requirements

How do I get a variance?

You'll need to fill out an application and develop a HACCP plan for the process you're proposing to use.

Call OCPHS - Environmental Health and we'll get you started.

What's a HACCP plan?

HACCP stands for hazard analysis and critical control points.

Hazards are things in food that are reasonably likely to hurt people or make them sick if they aren't controlled.

There are three kinds of hazards:

Hazard type	Examples
Physical	Metal fragments
Chemical	Cleaning chemicals or other toxics
Biological	Bacteria, viruses, and parasites

To do a *hazard analysis*, you develop a list of hazards for a product. For instance, Salmonella is a hazard associated with raw eggs and poultry.

Critical control points are steps where a **control** can be applied to prevent a hazard, eliminate it, or reduce it to an acceptable level. An example is a cooking temperature that kills bacteria.

A **HACCP plan** is documentation of your hazard analysis, the critical control points in your process, and good retail practices.

When do I need a HACCP plan?

- As part of a variance application
- To use sous vide and cook-chill methods.

Call OCPHS - EH for more information

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What to do if the power goes out

Plan ahead

- The biggest food safety and business concerns are refrigerated and frozen food.
  - Consider having an electrical generator for backup. It would need to be big enough to operate the electrical equipment in your facility, and its installation and use would need to be coordinated with your power company for safety.
  - Find out where you can rent a refrigerated truck.
- Think about creating an "emergency menu" of foods that can be served with minimal preparation and without additional cooking.
- Keep a list of emergency numbers, including the number for OCPHS.

What to do when an outage happens

- Write down the time the outage began.
- Stop using gas or solid fuel cooking and heating equipment if the hood is off.
- Discard partially cooked foods if they're not at the proper temperature.

How to keep food safe for several hours

- Cold foods
  - Keep cooler and freezer doors closed as much as possible.
  - Group packages of cold food together.
  - If you have a display cooler, move the food into a closed cooler.
  - Surround food with ice.

  CAUTION: If you use dry ice, unsafe levels of carbon dioxide can build up in enclosed spaces.
- Hot foods
  - Don't put hot foods in coolers or freezers.
  - Empty steam tables and put canned chafing dish fuel under the food pans.

Close your establishment and call OCPHS if:

- Food can't be kept at safe temperatures.
- There is no hot water or enough water pressure.
- Utensils can't be washed, rinsed, and sanitized properly after you run out of clean utensils.
- There isn't enough light for employees to work safely.

What to do after power is restored

- Write down the time the power came back on.
- Check the internal temperature of all hot and cold TCS food.
- If cold foods were grouped together to keep them cold, space them out again so they will cool more quickly.
- Decide what food to keep and what to throw away using the table on the next page.
- If you have any questions about what needs to be discarded, call OCPHS.

How to decide what to do with TCS food

Whether food needs to be discarded or not depends on its temperature and how long it was at that temperature.

Cold Food Safety Based on Duration of Power Outage and Temperature

# of hours power is out	45 °F or below	46 °F to 50 °F	51 °F or above
0 - 2	OK	OK	**X**
2 - 4	OK	OK	**X**
More than 4	OK	**X**	**X**

OK = Food can be sold as long as it was 41 °F or colder when the power went out.

X = This food may be unsafe and must not be sold.

Hot Food Safety Based on Duration of Power Outage and Temperature

# of hours power is out	130 °F or above	129 °F or below
0 - 2	OK	OK
2 - 4	OK	OK
More than 4	OK	**X**

OK = Food can be sold as long as it was 135 °F or hotter when the power went out.
Reheat immediately to at least 165 °F. After reheating, hold at 135 °F to 50 °F

X = This food may be unsafe and must not be sold.

If you were closed, here's what to do before reopening

- Make sure you meet these requirements before you reopen:
  - All unsafe TCS food has been discarded.
  - Hot and cold potable running water is available.
  - All systems are operating properly, including lighting, refrigeration, hot holding, ventilation, and toilet facilities.
  - Refrigerator temperatures are 41 °F or colder.
  - Electricity and gas utilities have been restored.
  - All circuit breakers have been properly reset.

How to dispose of food

- When in doubt, throw it out!
- Document the type and amount of food you throw away and the reason it was discarded - your insurance company might need this information.
- For a small amount of food, wrap it in a garbage bag and dispose of it in your regular garbage.
- For large amounts of food, contact your garbage hauler or the Olmsted Waste to Energy Facility.

OLMSTED COUNTY PUBLIC HEALTH SERVICES

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Food safety after a fire

The smoke, extreme heat, and chemicals from fires can affect food in ways that can endanger health.

These food safety and cleanup tips will help protect you and your customers if your food establishment is damaged by fire.

Here's what to do first:

- Close your establishment - you need approval from OCPHS before you can open again.
- Call OCPHS. We will help you decide which foods, dry goods, etc. can be salvaged.

Food might not be safe after being in a fire:

- Heat can cause jars and cans to split and crack- this allows contaminants to get inside.
- Even if cans and jars look undamaged, heat can cause the food to spoil.
- Smoke and chemicals from the fire travel through Cryovac packaging and plastic wraps of all kinds; they can also get under bottle caps and screw tops.
- Chemicals from fire extinguishers - including your hood system - can taint food, beverages, and packaged products.

Discard the following foods and beverages:

- Foods and beverages in permeable packaging such as cardboard, foil, paper, screw top jars or bottles, or plastic wrap.
- Unwrapped fruits and vegetables.
- Foods stored outside a cooler and exposed to smoke and fumes.
- Foods stored inside a cooler if they have signs of smoke damage or off odors.
- Ice in serving bins and machines.
- Foods touched by firefighting chemicals. If you are not sure about a food, throw it away.
- **When in doubt, throw it out.**

Discard single-service utensils (plastic plates, cups, etc.) that were exposed to smoke and chemicals.

Don't feed discarded food to pets. If it's not fit for humans, it's not fit for them.

If you serve alcohol, call the Alcohol & Gambling Enforcement Division for guidance on how to dispose of liquor.

Cleaning and sanitizing

Cleaning and sanitizing are an important step before reopening. Even though the surface looks clean, chemicals from extinguishers, and fine particles may be present.

- Consider having a professional cleaning service do the work. Be sure they are familiar with food service operations. Check with your insurance agent for recommendations.
- Clean and sanitize items in a 3-compartment sink or dishwasher.
- Tables, outside surfaces of equipment, shelving, etc. should be washed with detergent, rinsed with clear water, and then sanitized.
- Some pieces of equipment, such as pop machines or coolers, may have special cleaning requirements. Check with the manufacturer.
- If you have questions, call OCPHS.

What if the fire causes a power outage?

- Keep the refrigerator and freezer doors closed as much as possible.
- Check for signs of power outage, such as liquid or re-frozen meat juices, and soft or melted ice cream.
- If you're not sure if the power was shut off and then turned back on, check with your utility company.
- Minimize traffic in and out of walk-in coolers so people don't track contaminants in.
- Discard any food that has an unusual color, odor, or texture.
- Discard any meat poultry, seafood, milk, or eggs that have been above 41 °F for more than 2 hours.
- Call OCPHS if you have any questions.

If food has been over 41 °F for more than 2 hours:

DISCARD	Meat, poultry, seafood, dairy products, baby formula, cream pies & pastries, casseroles, soups, stews, fruits & vegetables (fresh cut & cooked), vegetable juice (opened), sauces & creamy dressings, pasta (fresh & cooked), doughs, cheese (soft), gravy, stuffing, broth
safe to keep	Baked goods, pasta, grains, fruit pies, peanut butter, jelly, relish, taco sauce, mustard, ketchup, olives, pickles, Worcestershire sauce, soy sauce, barbecue sauce, open vinegar-based dressings, fruit juices, opened canned fruits, cheese (hard)

Quat binding: Why is my quat bucket concentration low?

If you use cotton cloths, you may be depleting sanitizer from your bucket. Quat is absorbed onto cotton fabric because they have opposite charges – quat has a positive charge and cotton has a negative charge.

It's a problem because if most or all of the quat you put in a wiping cloth bucket is absorbed onto a cloth, the quat is not available as a sanitizer – this is true for both the water in the bucket and the cloth. This means that when you put a soiled cloth back in the bucket, the next time you use it you will transfer whatever is in the bucket (including bacteria and viruses) to any surface you wipe with it.

There are several methods for minimizing quat absorption and continuing to use cotton cloths:

- Spray and wipe
  - Disadvantage: overspray and inhaling disinfectant
- Dip and wipe
  - Disadvantage: the cloth will continue to absorb quat while it is in use
- Soak and wipe
  - Disadvantage: you need to start with excess quat so that there will be enough in the water to act as a sanitizer once the cloth has absorbed all it can.

The best solutions seem to be:

- Use the soak and wipe method. This might not work if you're starting with 200 ppm quat.
- Switch to a disinfectant that does not bind to cotton, such as bleach or peroxide.
- Switch to microfiber cloths; microfiber cloths have a positive charge, which means:
  - They do not absorb any significant amount of quat, and
  - They attract and hold dust and dirt, which are negatively charged.