Apply Your Knowledge

Mary's Dilemma

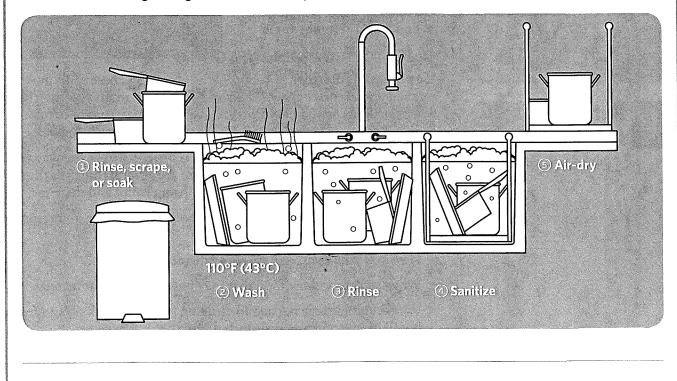
Mary noticed that the dirty dishes had started to pile up. She quickly unloaded the dishwashing machine and got a dish cart. Mary saw a few crumbs on the cart. To clean it, she dipped a cloth towel in the dishwater in her three-compartment sink and wiped off the crumbs.

In the meantime, the carts of dirty dishes had grown. Mary quickly loaded a dish rack with as many dishes as she could fit into it. She glanced into the dishwasher before pushing in the rack. She noticed a heavy buildup of mineral deposits on the spray arm and inside the compartment. She closed the door and started the load.

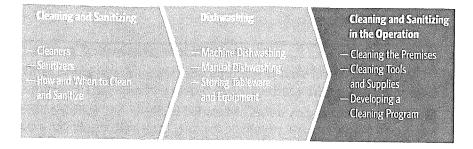
What did N	ary do wrong?
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What's Wrong with This Picture?

There are several things wrong with this three-compartment sink. Identify as many as you can in the space provided.



For answers, please turn to page 10.21.



Cleaning and Sanitizing in the Operation

Keeping your operation clean means using the correct tools, supplies, and storage to prevent contamination. Many of the chemicals you will use are hazardous, so you also have to know how to handle them to prevent injury.

For all of your cleaning efforts to come together, you need a master cleaning schedule. Making this schedule work also means training and monitoring your staff to be sure they can follow it.

Cleaning the Premises

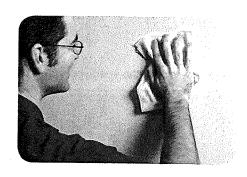
Nonfood-contact surfaces must be cleaned regularly. Examples include floors, ceilings, equipment exteriors, restrooms, and walls, as shown in the photo at left. Regular cleaning prevents dust, dirt, and food residue from building up.

Cleaning Up After People Who Get Sick

If a person has diarrhea or vomits in the operation, these spills must be cleaned up the correct way. Vomit and diarrhea can carry Norovirus, which is highly contagious. Correct cleanup can prevent food from becoming contaminated. It will also keep others from getting sick.

The way you clean up these substances is different from the way you clean other items in the operation. There are several things to think about when developing a plan for cleaning up vomit and diarrhea.

- How you will contain liquid and airborne substances, and remove them from the operation
- · How you will clean, sanitize, and disinfect surfaces
- When to throw away food that may have been contaminated
- What equipment is needed to clean up these substances, and how it will be cleaned and disinfected after use
- · When a food handler must wear personal protective equipment
- How staff will be notified of the correct procedures for containing, cleaning, and disinfecting these substances
- · How to segregate contaminated areas from other areas
- When staff must be restricted from working with or around food or excluded from working in the operation
- · How sick customers will be quickly removed from the operation
- How the cleaning plan will be implemented







Cleaning Tools and Supplies

Your staff needs many tools and supplies to keep the operation clean. However, these items can contaminate food and surfaces if they are not used and stored correctly.

Storing Cleaning Tools and Supplies

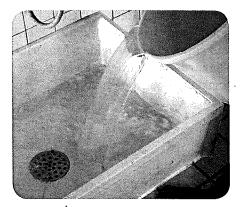
Cleaning tools and chemicals must be stored in a separate area away from food and prep areas. The storage area should have the following.

- · Good lighting so staff can see chemicals easily
- · Hooks for hanging mops, brooms, and other cleaning tools
- Utility sink for filling buckets and washing cleaning tools
- Floor drain for dumping dirty water, as shown in the photo at left

To prevent contamination, NEVER clean mops, brushes, or other tools in sinks used for handwashing, food prep, or dishwashing. Additionally, NEVER dump mop water or other liquid waste into toilets or urinals.

When storing cleaning tools, consider the following.

- Air-dry towels overnight.
- Hang mops, brooms, and brushes on hooks to air-dry.
- Clean and rinse buckets. Let them air-dry, and then store them with other tools.







Many of the chemicals used in the operation can be hazardous, especially if they are used the wrong way. To reduce your risk, you should only use chemicals that are approved for use in a foodservice operation. You should also follow these guidelines.

Storage and labeling Store chemicals in their original containers away from food and prep areas, as shown in the photo at left. Separate by spacing or partitioning. If chemicals are transferred to a new container, the label on that container must list the common name of the chemical.

Disposal When throwing out chemicals, follow the instructions on the label and any requirements from your local regulatory authority.

Material Safety Data Sheets The Occupational Safety and Health Administration (OSHA) has requirements for using chemicals. OSHA requires chemical manufacturers and suppliers to provide a Material Safety Data Sheet (MSDS) for each hazardous chemical they sell. An MSDS contains the following information about the chemical.

- Safe use and handling
- Physical, health, fire, and reactivity hazards
- Precautions
- Appropriate personal protective equipment (PPE) to wear when using the chemical
- First-aid information and steps to take in an emergency
- Manufacturer's name, address, and phone number
- Preparation date of MSDS
- Hazardous ingredients and identity information

MSDS are often sent with the chemical shipment. You can also request them from your supplier or the manufacturer. Staff have a right to see an MSDS for any hazardous chemical they work with. Therefore, you must keep these sheets where they can be accessed. The photo at left shows how one operation makes them available to staff.



Developing a Cleaning Program

To develop an effective cleaning program for your operation, you must focus on three things.

- Creating a master cleaning schedule
- Training your staff to follow it
- Monitoring the program to make sure it works

Creating a Master Cleaning Schedule

Create a master cleaning schedule with the following information.

What should be cleaned List all cleaning jobs in one area. Or list jobs in the order they should be performed.

Who should clean it Assign each task to a specific individual.

When it should be cleaned Staff should clean and sanitize as needed. Schedule major cleaning when food will not be contaminated or service will not be affected. Schedule work shifts to allow enough time.

How it should be cleaned Have clear, written procedures for cleaning. List cleaning tools and chemicals by name. Post cleaning instructions near the item, as shown in the photo at left. Always follow manufacturers' instructions when cleaning equipment.

Training Your Staff to Follow the Program Schedule time for training. Work with small groups or conduct training by area.

Monitoring the Cleaning Program

Make sure the cleaning program is working.

- Supervise daily cleaning routines.
- Check all cleaning tasks against the master schedule every day.
- Change the master schedule as needed for any changes in menu, procedure's, or equipment.
- Ask staff during meetings for input on the program.



Apply Your Knowledge

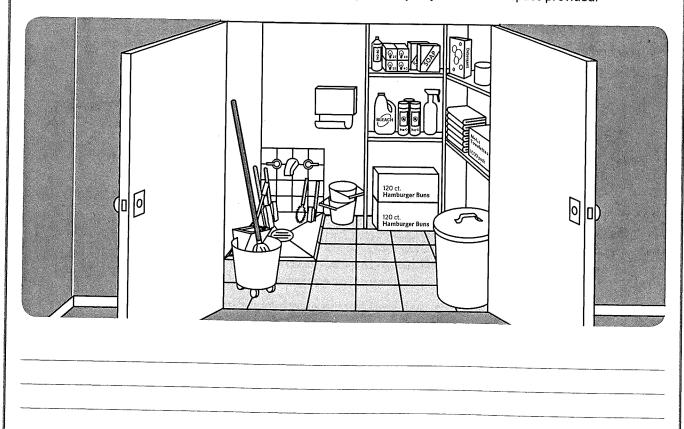
Is It Stored Correctly?

Write an \mathbf{X} next to the situation if the food handler stored the cleaning tool or material the correct way.

- Sheryl received a shipment of cleaning supplies. Along with the invoice, the supplier gave her an MSDS for the new brand of cleaner she ordered. She filed the MSDS with the invoice in a locked cabinet.
- Raul noticed that a bottle of chemical cleaner in the storage area was leaking. Fortunately, there was a nearly empty spray bottle of the same cleaner, so he poured the remainder into it. The label on the spray bottle listed the common name of the chemical.
- 3 _____ Sasha emptied a bucket of dirty mop water into the floor drain in the chemical-storage room. He rinsed the mop and hung it to dry. Then he cleaned and rinsed the bucket.
- Laura washed and rinsed a prep table. Then she sanitized the table by spraying it with sanitizer and allowed it to air-dry. When she was finished, she placed the bottle of sanitizer on the prep table so it would be there the next time she needed it.
- Maurice used a cleaner on the dishwasher. The sprayer on the bottle stopped working when it was only half empty, so he threw it in the garbage.

What's Wrong with This Picture?

There are many things wrong with this storage area. Identify as many as you can in the space provided.



For answers, please turn to page 10.22.

Chapter Summary

- Cleaning removes food and other dirt from a surface. Sanitizing reduces the number of harmful pathogens on a surface to safe levels. You must clean and rinse a surface before it can be sanitized. Then the surface must be allowed to air-dry. Surfaces can be sanitized with hot water or a chemical-sanitizing solution.
- All surfaces should be cleaned and rinsed. Food-contact surfaces
 must be cleaned and sanitized after every use. You should also
 clean and sanitize each time you begin working with a different
 type of food or when a task is interrupted. If items are in constant
 use, they must be cleaned and sanitized every four hours.
- Tableware and utensils can be washed in dishwashers or by hand in a three-compartment sink. Always follow manufacturers' instructions when using dishwashers. Make sure your machine is clean and in good working condition. Check the temperature and pressure of wash-and-rinse cycles daily.
- Three-compartment sinks and drain boards must be cleaned and sanitized before they are used for dish washing. Items washed in a three-compartment sink should be rinsed or scraped clean before washing. They should then be washed in a detergent solution and rinsed in clean water. Next, they should be sanitized in either hot water or in a chemical-sanitizing solution for a specific amount of time. Finally, they should be air-dried. Once cleaned and sanitized, tableware and equipment should be protected from contamination.
- Make sure chemicals are clearly labeled. Keep MSDS for each chemical in a location accessible to all staff while on the job.
- Create a master cleaning schedule listing all cleaning tasks.
 Monitor the cleaning program to keep it effective and supervise cleaning procedures. Make adjustments as needed.

Chapter Review Case Study

Keeping a clean and sanitized operation involves using the correct tools and products for a cleaning job; cleaning and sanitizing items the correct way at the right time; storing items so they remain safe to use; handling chemicals the correct way; and developing and following a cleaning program.

Now, take what you have learned in this chapter and apply it to the following case study.

Tom was just hired as the new general manager at the Twin Trees Family Restaurant. One of his first projects was to create a new cleaning program. He started by taking a walk through the operation. His first stop was the storage area for cleaning tools and supplies. It had a utility sink and a floor drain, but the hot water in the sink wasn't working. He also noticed two sets of mops and brooms stored on the floor. The storage area was small, but it was well organized and well lit. All the containers were clearly labeled.

① Should Tom suggest any changes to the storage room, tools, or chemicals?

Yes	No	If yes, what changes should he suggest?	
Next, Tom watched Clara, a new prep cook, to see how she cleaned and sanitized her areas. Clara cut some melons on a cutting board. Then she wiped it down with a cloth towel. Clara put the cloth towel in a bucket of sanitizing solution to soak while she butterflied some pork chops on the board. Using the same cloth towel, she wiped down the board after she finished the pork chops. Then, she chopped some onions and sautéed them in a large stock pot. While the onions were sautéing, Clara wiped the board a third time with the same cloth towel.			
② Did Clar	a do anythin	g wrong?	
Yes	No	If yes, what changes should he suggest?	
sanitizing	tasks that	any other staff members perform cleaning and week. With the help of some senior staff, Tom ning schedule.	
	eps should T schedule?	om take to make sure everyone follows the master	

Study Questions

Circle the best answer to each question.

- ① Which thermometer should be used to monitor the temperature of the sanitizing rinse in a dishwashing machine?
 - A Glass
 - B Infrared
 - C Bimetallic stemmed
 - D Maximum registering
- 2 What is sanitizing?
 - A Reducing dirt from a surface
 - B Reducing the pH of a surface
 - C Reducing the hardness of water
 - D Reducing pathogens to safe levels
- ③ If food-contact surfaces are in constant use, how often must they be cleaned and sanitized?
 - A Every 4 hours
 - B Every 5 hours
 - C Every 6 hours
 - D Every 7 hours
- 4 What must food handlers do to make sure sanitizing solution for use on food-contact surfaces has been made correctly?
 - A Test the solution with a sanitizer kit.
 - B Use very hot water when making the solution.
 - C Try out the solution on a food-contact surface.
 - D Mix the solution with equal parts of water.
- S A food handler was assigned to clean a slicer that was too difficult to move. The slicer was unplugged. Then the removable parts were taken off the slicer and cleaned and sanitized in a three-compartment sink. Food bits on the slicer were removed. After the machine was wiped down with detergent and water, it was sanitized and allowed to air-dry. Then the food handler put the machine back together. What mistake did the food handler make?
 - A Failed to dry the machine with a clean cloth after sanitizing it
 - B Failed to sanitize the machine before taking the removable parts off
 - C Failed to rinse the machine after wiping it down with detergent and water
 - D Failed to wash the machine with detergent and water before taking it apart

▶ Continued from previous page

6 What should be done when throwing away chemicals?

- A Seal the container and recycle it.
- B Seal the container in a bag and place it in the garbage.
- C Follow label instructions and regulatory requirements.
- D Pour leftover chemicals into a drain and throw the container away.

How should flatware and utensils that have been cleaned and sanitized be stored?

- A With handles facing up
- B Below cleaning supplies
- C In drawers that have been washed and rinsed
- D Four inches (10 centimeters) from the floor

® What is the correct way to clean and sanitize a prep table?

- $\ensuremath{\mathsf{A}}$ Remove food from the surface, wash, rinse, sanitize, air-dry
- B Remove food from the surface, sanitize, rinse, wash, air-dry
- C Remove food from the surface, wash, sanitize, air-dry, rinse
- D Remove food from the surface, air-dry, wash, rinse, sanitize

For answers, please turn to page 10.22.