

Appendix F: Dishwashing Procedures



Following proper dishwashing steps for washing and sanitizing reusable dishes, such as dishware, utensils, cutting boards, and pots and pans, is important in the prevention of food-borne illness.

- There are two main methods that can be used to clean and sanitize dishware:
 - manual dishwashing in a properly sized three-compartment sink (wash, rinse, sanitize), or
 - mechanical/machine dishwashing
- Water from the kitchen tap shall be sufficiently hot—at least 50°C (120°F)—to ensure the three-sink manual dishwashing method can adequately clean and sanitize.
- After proper washing, rinsing, and sanitizing dishes, ensure dishware are properly air-dried before placing them away for storage or for use.
- Drying racks should be self-draining into the sink, easily cleanable, and clean to prevent recontamination of the dishes.
- Do not use cloth towels to dry dishes, as this may re-contaminate sanitized dishware.
- Use sanitizer test strips/papers to verify the strength of the sanitizer level in the third sink. Test strips can be purchased from restaurant supply stores or where you buy your chemicals.

DISHWASHING PROCEDURE



- Check sanitizer concentration with appropriate chemical test kit

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WASH
With detergent in
hot water
(minimum 43°C/110°F)

RINSE
In clean,
warm water

SANITIZE

By soaking for
1 minute in warm
water & sanitizer
(24°C/75°F)

- CHLORINE 50-200 ppm
- IODINE 12.5-25 ppm
- QUATERNARY AMMONIUM 200 ppm

**Do not rinse
after sanitize**

<https://www.gov.mb.ca/health/publichealth/environmentalhealth/protection/docs/dishwashing-procedure.pdf>

Alternative Manual Dishwashing Methods

The three-compartment sink method provides the best practice for manual dishwashing; however, in family child care homes or schools where limited food menus are provided, using a two-compartment sink dishwashing method may provide adequate results for achieving the same level of sanitization.

Steps for manual dishwashing two-compartment sink method:

1. Scrape and/or pre-rinse food debris off the dishes.
 2. In the first sink, wash with hot soapy/detergent water and rinse with warm clean running water.
 3. In the second sink, sanitize by immersing the dishes in the sink for a minimum of one minute in an approved food-grade sanitizer or as per manufacturer's instructions.
 4. Air-dry on drying or draining racks.
- When only a two-compartment sink is available, child care facilities and schools may consider using a designated dish bin to create a third compartment. Washing would then be done in the first sink, rinsing in the second sink, and sanitizing in the designated dish bin.
 - Some kitchenettes, school food labs, or home economics rooms may require physical modifications that require longer-term planning. Before proceeding, it is important to consider whether a space is adequate for the food handling being done.

TWO SINK DISHWASHING METHOD

for limited food menus in child care facilities and schools



*Check sanitizer concentration with approved chemical test kit



WASH & RINSE

Wash with detergent in hot water
(minimum 43°C/110°F)

Then rinse with warm running water
-Rinse water must drain into the wash sink

SANITIZE

By soaking for 1 minute in warm water & sanitizer
(24°C/74°F)

-CHLORINE 50-200ppm
-QUATERNARY AMMONIUM 200ppm

Do not rinse after sanitize

Mechanical/Machine Dishwashing

- Mechanical dishwashers must be commercial grade and certified to NSF/ANSI standard 3 or equivalent. Domestic dishwashers have long cycle times and cannot meet the demands of a larger kitchen facility.
- There are two types of dishwashers: one that uses an approved chemical sanitizer, and one that uses high-temperature water at 82°C/180°F in the final rinse cycle.
- Water from the kitchen tap shall be sufficiently hot—at least 50°C (120°F)—to ensure that a dishwashing machine will effectively clean and sanitize.
- Ensure the dishwashers are equipped with sufficient dishwashing detergent, rinse agent, and sanitizer, as per the dishwasher manufacturer's instructions.
- Scrape and/or pre-rinse food debris off of the dishes.
- Properly rack dishes according to size and type in the appropriate rack. Overloading the machine can result in dishes that are not adequately cleaned and sanitized.
- Once the dishwasher has completed the wash, rinse, and sanitize cycles, air-dry dishes rather than towel-dry to prevent recontamination of the dishes. The drying towel and hands can harbour disease organisms that can contaminate the clean dishes.
- Use appropriate testing equipment for the type of dishwasher (e.g., sanitizer test strips/papers for the appropriate chemical, or temperature-sensitive tape labels for high-temperature dishwashers.)
- For high-temperature dishwashers, monitor the water temperature by checking the temperature gauges during the wash and sanitizing cycles to ensure that adequate temperatures are reached.
- Use dishwasher according to manufacturer recommendations.
- The dishwashing set-up shall provide adequate space and equipment for dirty dish storage and clean storage to air-drying wares in a manner that will prevent recontamination of cleaned and sanitized dishes, utensils, and equipment.
- Equipment and storage areas shall be clean and in good repair to minimize risk of recontaminating dishes and utensils.
- **Note:** Do not clean and sanitize mouthed toys and dishware together in the dishwasher.

Alternate Mechanical/Machine Dishwashing Methods

Proper dishwashing in food handling spaces is important in child care facilities or schools that do not provide a full food service menu. A commercial-level mechanical dishwasher provides the best practice for mechanical dishwashing. In some child care facilities or schools where limited food menus are provided, a domestic dishwasher may provide adequate results for achieving sanitization. Limited menus are snacks with ready-to eat foods that require little to no food handling (such as crackers, cheese, pickles, and muffins) and simple reheating of frozen items.

- Domestic dishwashing machines should be operated on the hottest temperature cycle or sanitizing cycle where applicable.
- Certified domestic dishwashers can achieve the same level of sanitization as commercial dishwashers, but they do so at a lower temperature by extending the duration of the rinse cycle (e.g., cycle time for a domestic dishwasher is two hours while the cycle time for a commercial dishwasher is two minutes).
- Sanitizing rinse temperatures measured in domestic dishwashers must meet or exceed 150°F (66°C) to provide continued effectiveness.
- When replacement of dishwasher is necessary, a domestic dishwasher certified to NSF/ANSI standard 184 or equivalent is recommended. This NSF standard provides confirmation that the domestic dishwasher can achieve sanitization when operated on the sanitizing cycle.

Testing Equipment for Verifying Sanitizing Concentration and Temperature for Mechanical and Manual Dishwashing

Test kits shall be used in accordance with the label instructions and can be purchased from restaurant supply stores and chemical supply companies.

- To verify the concentration of the chemical used for sanitizing, obtain the appropriate sanitizer test kit (e.g., litmus paper specifically designed for testing chlorine levels, if you are using chlorine bleach). Check chemical sanitizer levels a minimum of once daily when in use.
- For high-temperature dishwashers, temperature-sensitive tape labels or observation of the wash and rinse cycle dial temperatures, as per the dishwasher data plate, can be used to measure the final rinse water temperature. Check the dishwasher high-temperature gauge at minimum once daily when in use. Use temperature-sensitive tape labels weekly to verify temperature gauges are working adequately on the mechanical high-temperature dishwasher.

Test Kits

- Chemical test papers/strips are required to measure the concentration of the sanitizer solution. They indicate the concentration with a comparative colour chart identifying parts per million (ppm).
- Use the correct chemical test papers for the type of sanitizer chemical. There are different test papers for chlorine bleach testing and quaternary sanitizer testing.
- Use test papers/strips to confirm the correct sanitizer concentrations for effectiveness.
- For testing the concentration of the sanitizer, dip the strip in sanitizing solution, agitate the strip, and immediately compare the colour of the strip to the colour chart provided on the label of the kit.
- Follow the manufacturer's instructions on the test papers.

