



# FOOD EQUIPMENT STANDARDS IN A COVID-19 WORLD

Compliance with NSF/ANSI standards for commercial food equipment may help with COVID-19 risk mitigation based on the following, currently known information:

- > COVID-19 is not a foodborne disease; however, the virus can contaminate the surfaces of food equipment
- > The SARS-CoV-2 virus, which causes COVID-19, is just as susceptible to removal or destruction as other known coronaviruses
- > Food equipment standards establish minimum criteria for cleanability and sanitization as a means of reducing the spread and harboring of illness-causing microorganisms

## HOW FOOD EQUIPMENT STANDARDS ADDRESS CONTAMINATION

NSF/ANSI standard requirements applicable to sanitation and hygiene are based on bacterial reduction. The purpose of this measure is to successfully control a wide variety of pathogens.

- > Existing evidence suggests foodservice establishments do not need to change current cleaning and sanitizing processes for certified equipment to mitigate the potential risk of COVID-19.
- > Continuing to adhere to the food equipment manufacturer's recommended cleaning instructions is essential for reducing potential contamination.
- > To protect public health, follow established [best practices](#) for food safety per the U.S. FDA.

## WHAT FOOD EQUIPMENT STANDARDS EVALUATE AND REVIEW

NSF/ANSI standards for commercial food equipment are designed to establish minimum requirements for the materials, design, construction and performance of food handling and processing equipment.

Since food equipment surfaces can get contaminated during use and operation, NSF/ANSI standards provide specific requirements for hygienic design, validation of clean-in-place (CIP) methods and the cleanability of contact surfaces.

### > Hygienic Design

- Facilitates manual and clean-in-place (CIP) procedures
- Helps ensure clean and sanitary contact surfaces when the manufacturer's cleaning instructions and recommended sanitizing solutions are followed

### > Validation of CIP Methods

- Certified equipment designed for CIP undergoes rigorous performance testing as part of its certification.
- Testing is performed in accordance with standard requirements to validate the efficacy of the manufacturer's recommended CIP procedure in achieving 99.9999%, or 6 log, reduction of illness-causing microorganisms.

### > High-Touch Nonfood Contact Surfaces

- In accordance with CDC guidelines, the FDA recommends regular cleaning and disinfection of high-touch nonfood contact surfaces such as handles, knobs and control panels to help reduce contamination.
- A list of EPA-registered disinfectants for use against SARS-CoV-2 can be found on the EPA's [List N page](#).



## DEFINITIONS OF CLEANING, SANITIZATION AND DISINFECTION

### > **Cleaning**

- The physical removal of food residue and other soiling materials, usually with detergent and water, rendering the surfaces visually clean
- Should be performed prior to disinfecting or sanitizing

### > **Sanitization**

- The application of cumulative heat or chemicals on cleaned surfaces that is sufficient to yield a reduction of 99.999% (5 log reduction) of disease microorganisms
- Required for food-contact surfaces in foodservice establishments and food production facilities
- Sanitizers should be used in accordance with the product label and equipment manufacturers' cleaning instructions to ensure appropriate concentration delivery and contact time.

### > **Disinfection**

- Refers to the destruction (versus reduction) of bacteria and other pathogenic microorganisms
- EPA-registered disinfectants are recommended for use on nonfood contact surfaces per label instructions.

## FOOD EQUIPMENT STANDARDS AT WORK—NSF/ANSI 3: COMMERCIAL WAREWASHING EQUIPMENT

This standard is for commercial dishwashers used in facilities subject to public health inspections. Given the importance of cleaning and sanitizing tableware, dishwashers certified to NSF/ANSI 3 are tested for:

### > **Soil Removal**

- Must render dishes free of soil and detergents when operated in accordance with the manufacturer's instructions

### > **Sanitization Efficacy**

- Chemical sanitizing machines must achieve a minimum 99.999 %, or 5 log, reduction of microorganisms on the surface of dishes.
- Hot water sanitizing machines are tested to ensure a minimum amount of heat unit equivalents (HUEs) are delivered to the surface of dishes to ensure more than adequate sanitization.

Recommendations to help ensure a dishwasher continues to operate as intended and maintains NSF certification status include:

- > Verifying adequate detergent is being delivered to the wash tank as intended
- > All wash and rinse temperatures being at or above the temperatures indicated on the data plate when in operation
- > Using recommended sanitizer types and ensuring concentrations specified on the data plate are sustained during the sanitizing rinse of chemical sanitizing dishwashers
- > Using an irreversible temperature indicator (for hot water sanitizing machines only) to periodically spot check that the surface of a dish cycling through the machine achieves a temperature of at least 160° F when the machine is functioning properly

To learn more, contact NSF International at 1.800.NSF.MARK or [foodequipmentinfo@nsf.org](mailto:foodequipmentinfo@nsf.org).

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