



**Last updated: 3/9/21**

*This is a living document and will be continually updated as more information becomes available.*

## **Reusables and Sanitation Toolkit**

*Addressing Safety Concerns During and After the COVID-19 Pandemic*

The [Post-Landfill Action Network](http://www.postlandfill.org) is a 7-year old nonprofit with a network of 500 college campuses in the US. Our mission is to support the zero waste movement on college campuses, with a focus on supporting student leadership.

As a result of the COVID-19 pandemic, we have received dozens of inquiries from campus sustainability staff looking for guidance on how to work with campus dining facilities that are considering switching to disposable (instead of reusable) dishes and take out containers. Staff are also concerned about the future of reuse programs for items like furniture and electronics.

**We are providing this document as general guidance for how to have necessary conversations with campus stakeholders.** Specific resources are cited from the most reliable and widely trusted resources such as the CDC, FDA, and scientific journal publications.

We are also including in this toolkit a series of questions that we currently don't know the answers to, alongside ideas for how campuses may explore solutions to these questions with experts in their own locality. *Those sections are clearly marked in this color.* We are currently trying to identify a food protection officer or public health specialist that can help us answer these questions. **We encourage all campus sustainability staff to reach out to their dining service providers, environmental health and safety departments, or local health boards and health inspectors to raise these questions with them.** Our goal here is to help campuses think through strategic planning efforts that can be employed while campuses are operating remotely to map out long-term sanitary solutions for when students come back to campus. If you find answers, please be in touch with us at [info@postlandfill.org](mailto:info@postlandfill.org). We will update this document as we come across new information.

These are tough times and campus staff are making difficult decisions right now. We are here to support you in whatever path you choose, and we look forward to hearing from you to discuss the specifics of your campus system, the challenges you are facing, and the concerns you have. Please feel free to reach out to us at any time at [info@postlandfill.org](mailto:info@postlandfill.org).



## - Is it sanitary to use reusable dishware, silverware, cups, mugs and reusable to-go ware?

Based on our research, the concern is less about the dishes/containers themselves, and more about how those dishes are picked up by users and dropped off (see below). As long as dishes have been properly washed and sanitized, and haven't been re-contaminated by food-service staff, they can be considered as safe as the cookware that was used to prep the food. At the moment, the US Food and Drug Administration (FDA) has not indicated in any of their guidance documents or resources that they will be advising facilities to switch to disposables.

The FDA's [Best Practices for Retail Food Stores, Restaurants, and Food Pick-Up/Delivery Services During the COVID-19 Pandemic](#) says to:

- “Verify that your ware-washing machines are operating at the required wash and rinse temperatures and with the appropriate detergents and sanitizers.”
- “Remember that hot water can be used in place of chemicals to sanitize equipment and utensils in manual ware-washing machines.”
- On Feb 19, 2021, acting USDA Secretary Kevin Shea and Acting FDA Commissioner Dr. Janet Woodcock said in a [statement](#) “After more than a year since the coronavirus disease 2019 [COVID-19] outbreak was declared a global health emergency, the U.S. Department of Agriculture, the U.S. Food and Drug Administration and the U.S. Centers for Disease Control and Prevention continue to underscore that **there is no credible evidence of food or food packaging associated with or as a likely source of viral transmission** of ... the virus causing COVID-19.”

The CDC, in their [Considerations for Restaurants and Bars](#) recommends either/or:

- “Use disposable food service items (e.g., utensils, dishes, napkins, tablecloths). If disposable items are not feasible **or desirable**, ensure that all non-disposable food service items are handled with gloves and washed with dish soap and hot water, or in a dishwasher. Change and launder linen items (e.g., napkins and tablecloths) after each customer or party's use. Employees should [wash their hands](#) after removing their gloves or after handling used food service items.”

All reusable foodware used in food service facilities must be washed and sanitized to meet State Retail Food Codes that are guided by the US FDA's Federal Safety Guidelines. All standard mechanical dishwashers in the United States, especially industrial dishwashers used in food-service facilities, are built to meet those guidelines for sanitary “warewashing” practices. You can double check your dishwashers to ensure that they meet these guidelines, which reference the specifics of water temperature, soap, and chemical sanitizers necessary to effectively neutralize pathogenic organisms.



On Page 506 of the FDA [Food Code](#), it says that sanitization is achieved when the surface temperature of the tableware or utensil reaches 171°F (77°C). All mechanical dishwashers use detergents and in some cases chemical sanitizers, as well as water temperatures that range between 165°F (74°C) and 194°F (90°C) for sustained periods of time.

## - Is it sanitary to have students serve themselves at salad bars / buffet lines / bulk bins / drink dispensers?

On the [FDA's Food Safety and the Coronavirus Disease 2019](#) page it says the following (with our emphasis included):

**“How do I handle self-service food buffets such as salad bars in a retail setting related to COVID-19? (Posted March 17, 2020)**

*Restaurants and retail food establishments are regulated at the state and local level. State, local, and tribal regulators use the [Food Code](#) published by the FDA to develop or update their own food safety rules. **Again, there is no current evidence to support the transmission of COVID-19 associated with food or food packaging.***

*It may be possible that a person can get COVID-19 by **touching a surface or object that has the virus on it and then touching their mouth, nose, or possibly eyes, but this is not thought to be the main way the virus spreads.***

*The coronavirus is mostly spread from one person to another through respiratory droplets. However, it's always critical to follow the 4 key steps of food safety—clean, separate, cook, and chill—to prevent foodborne illness.*

*As an **extra precaution** to help avoid the transmission of COVID-19 through surface contact, **we recommend frequent washing and sanitizing of all food contact surfaces and utensils.** Food-service workers also must practice frequent hand washing and glove changes before and after preparing food. **Include frequent cleaning and sanitizing of counters and condiment containers. Consumers should wash their hands after using serving utensils.***

*In communities with sustained transmission of COVID-19, state and local health authorities have implemented social-distancing measures which discourage or prohibit dining in congregate settings. **We also recommend discontinuing self-service buffets and salad bars until these measures are lifted.***

*Unlike foodborne gastrointestinal (GI) viruses like norovirus and hepatitis A that often make people ill through contaminated food, SARS-CoV-2, which causes COVID-19, is a virus that causes respiratory illness. Foodborne exposure to this virus is not known to be a route of transmission.”*

**Without clear guidance from the FDA on the operation of self-serve stations after social distancing restrictions are lifted, many campuses will need to check with**



**their local health boards and health inspectors.** It appears that the majority of recommendations right now don't explicitly say that self-serve stations need to be discontinued, as long as strict social distancing measures are followed and sanitary practices are established.

Campuses will need to find the answers to the following questions so that they can appropriately plan for and make necessary re-designs to campus dining operations for when students eventually return to campus:

- *Can campus dining halls switch self-service stations to stations where dining staff directly serve students in a "no contact" system?*

- *When social distancing measures are lifted, are there protocols that campuses can take to safely allow self-service stations to operate?*

We absolutely understand that there are valid concerns here with students touching the same serving spoon or dispenser button/lever and then touching their face or eating with their hands - although according to the FDA quoted above that risk is minimal. We are concerned that if campuses don't choose to have dining staff serve students directly, that they may choose to switch buffet-style eateries to stations with pre-packaged, single-use disposable containers - *but does that solve the problem of preventing students from infecting themselves with potentially contaminated hands?*

- Disposable plastic containers can [carry the virus](#) for as many as two to three days which can create hazardous conditions for the consumers of the products if someone before them touched more than one before selecting what they want.
- If a student touched other surfaces (door knobs, light switches, cooler doors, counter tops, and other high-contact locations) - prior to eating and then didn't wash their hands, it doesn't matter if their vessel is reusable or disposable.

ServSafe - the food safety certification issued by the National Restaurant Association has a [COVID-19 Fact Sheet and FAQ](#):

**"Should we shut down self-serve areas and salad bars?"**

It's very difficult to make a recommendation to shut down a self-service area. It's possible to manage these areas with vigilant cleaning and sanitizing procedures. There is no magic bullet answer to questions like this. Also, think about promoting hand hygiene, hand sanitizers, handwashing procedures to patrons prior to use of these common utensils."

*What are safety protocols that campuses can establish that would allow them to safely operate self-serve stations?*



- **Establish social distancing guidelines** - Ensure that students approach buffets one at a time, and remain 6 feet apart while waiting in line. Maybe use tape or markers to help space students out. Create one-way flow in dining halls to reduce students walking past each other.
- **Install handwashing or hand-sanitizing stations** at the entrance to buffet lines, before students pick up tableware, and serving utensils, and before touching dispenser buttons/levers.
- **Install clear signage** that tells students that they have to wash/sanitize hands before touching anything.
- Also install similar handwashing or hand-sanitizing stations at the exit of facilities and/or in and around seating areas with clear signage that **reminds students of the importance of washing/sanitizing their hands before eating.**
- Establish regular cleaning schedules and remove and replace common utensils frequently.
- Ensure that buffet food is behind a [sneeze guard](#)\*
- Ensure that serving utensil handles either have a designated holder or a [lip on their handle](#)\* to prevent them from sliding into food trays.
- Ensure that bulk dry goods are in [gravity fed dispensers](#).\* This ensures that students will be unable to reach their hand into any bulk food dispenser.<sup>1</sup>

The National Restaurant Association recently released a 10-page resource that covers [Guidance for Reopening for the Restaurant Industry](#). This guide mirrors a lot of our recommendations here, and also has specific information related to ServSafe practices and worker safety. EcoLab also released a [63-page Guide for Resuming Operations](#).

## - Is it safe to have dining staff collect and clean used dishes?

- *Are there any risks to dining staff who collect used dishes as long as they wear gloves? Should they also wear masks or other PPE while cleaning dishes?*

Whether a campus is operating dining halls with reusable dishes, or **take out programs that utilize reusable to-go containers**, would it be feasible and sanitary to establish a “no contact” dishware collection station? Here is an example of what a campus could explore:

- Retrofit and reconfigure all collection stations to include clear signage that instructs students to follow a step-by-step process:
  1. Scrape all food scraps and paper napkins into the compost bin.  
Place any compostable containers or recyclable containers in their respective collection bins as well.

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<sup>1</sup> We are not endorsing the \* products linked in this section, but providing them as examples for what we are referencing.



2. Place all cups, mugs, bowls, plates and containers in their respective [dishwasher peg racks](#)\*. Include pictures or examples in your signage to show students how to properly place items in the racks.
3. Place all utensils in a bin filled with a [soap or sanitizer solution](#)\*.
- Instruct dining staff always to wear gloves and appropriate PPE when removing full dish racks and replacing them with empty ones. Dining staff should place full dish racks immediately into the dishwasher. Once dishes have gone through the dishwasher they will be sanitized and can be scrubbed if food remains stuck to the surface.

## **- *Is it safe for students to bring their own reusables with them to dining facilities?***

The State of California recently passed [AB-619](#) relative to the safe handling of personal reusable containers at food establishments. AB-619 speaks specifically to the process of isolating personal containers, ensuring that personal containers don't come into contact with serving utensils, and that surfaces and hands that touched personal containers are washed before and after the container is handled. *If specific dining facilities can meet these standards, is it sanitary to allow students to bring their own containers?* We anticipate that the FDA may provide more guidance on questions like this in the near future.

## **- *Are there safe practices for handling reusable items (from towels at the gym, to used furniture)?***

The CDC recently released [Reopening Guidance for Cleaning and Disinfecting Public Spaces, Workplaces, Businesses, Schools, and Homes](#) which has a lot of specific information for multiple different types of facilities, including colleges and universities. In particular the CDC released [Guidance for Cleaning and Disinfecting Public Spaces, Workplaces, Businesses, Schools, and Homes](#).

After social distancing measures have been eased in your locality, there are two documented methods of ensuring that household goods are no longer carrying the SARS-COV-2 virus. There is also a third method that we are continuing to research and cannot confirm at this time:

1. **Cleaning and Disinfecting:** The US Center for Disease Control and Prevention (CDC) has a website dedicated to providing [guidance on cleaning and disinfecting](#) a variety of materials and surfaces during the COVID-19 Pandemic. The most effective method of cleaning items is with soap and water. Soap works so well because the [SARS-COV-2 virus](#) *"is a self-assembled nanoparticle in which the weakest link is the lipid (fatty) bilayer. The soap dissolves the fat*



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*membrane and the virus falls apart like a house of cards and “dies”, or rather, we should say it becomes inactive as viruses aren’t really alive.” For this reason soap works on your hands, on hard surfaces, and as a detergent for both dishes and cloth materials.*

Other methods of disinfection include:

- [EPA registered household disinfectants](#) - NOTE: This website has a list of 392 disinfectants, only some of which can be used on “Porous” surfaces like upholstered furniture. Export the list and sort them by “Surface Types [Hard Nonporous (HN) or Porous (P)]” to see which products are approved for Porous surfaces.
  - A bleach solution of 4 teaspoons bleach per quart of water. You should always clearly label bleach containers and you can purchase [bleach test strips](#)\* to ensure that you are using quantities that are deemed safe.
  - Alcohol solutions with at least 70% alcohol
2. **Give it Time:** While less of a guarantee than cleaning and disinfecting, it may be the safest option to simply leave reusable goods like donated items unattended in quarantine for a significant period of time. According to a recent study published in the [New England Journal of Medicine](#), the longest the SARS-COV-2 virus was viable on any surface was 72 hours. The CDC’s recent guidance indicates that the recommendation will be to [quarantine items for 7 days](#).
3. **Heat:** *Could reuse facilities build heat trailers or in-house “kilns” to briefly heat items to effectively disinfect them?*

Many labs around the world are testing the viability of the SARS-COV-2 virus on various surfaces and under various environmental conditions. We have been following and trying to better understand if heat can effectively neutralize the virus, and if so, whether reuse programs and facilities could build kilns and heat trailers to create an environment that the virus would not be able to survive in. Some studies, like [this one](#) and [this one](#) have shown that the SARS-COV-2 may be neutralized at sustained temperatures of 56°C to 70°C for around 30-60 minutes. We need more research to confirm that these methods will work on items like furniture. If your campus has connections with labs that are researching this, please reach out to us at the contact information below - we would love to talk with you! We hope to provide updates on this method as we all continue to learn more!

*If you have any updated information, questions about this fact sheet, suggestions, or case studies from your campus, please reach out to us at: [info@postlandfill.org](mailto:info@postlandfill.org)*

*Shout out to the Zero Waste Interns at Williams College for their help in creating this Fact Sheet!*



## **Resource List**

(in order of appearance above):

1. FDA: [Best Practices for Retail Food Stores, Restaurants, and Food Pick-Up/Delivery Services During the COVID-19 Pandemic](#)
2. CDC: [Considerations for Restaurants and Bars](#)
3. FDA [Food Code](#)
4. [FDA's Food Safety and the Coronavirus Disease 2019](#)
5. New England Journal of Medicine: [Aerosol and Surface Stability of the SARS-COV-2 Virus](#)
6. ServSafe: [COVID-19 Fact Sheet and FAQ](#)
7. National Restaurant Association: [Guidance for Reopening for the Restaurant Industry](#)
8. EcoLab: [63-page Guide for Resuming Operations](#)
9. EcoLab: [Coronavirus FoodService Resource Library](#)
10. CDC: [Reopening Guidance for Cleaning and Disinfecting Public Spaces, Workplaces, Businesses, Schools, and Homes](#)
11. CDC: [Guidance for Cleaning and Disinfecting Public Spaces, Workplaces, Businesses, Schools, and Homes.](#)
12. CDC: [guidance on cleaning and disinfecting](#)
13. Virology Down Under: [Why Does Soap Work So Well on the Coronavirus?](#)
14. [EPA registered household disinfectants](#)
15. CDC: [Interim Recommendations for US Community Facilities](#)