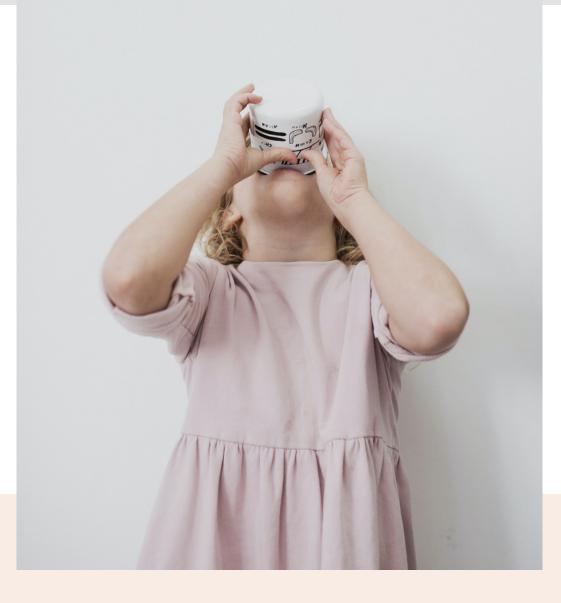
WATER DISPENSERS FOR SCHOOLS AND UNIVERSITIES.



ACCESSING SAFE DRINKING WATER AFTER COVID-19.

INTRODUCTION:

As Schools and Universities adapt to the new normal in a return to in school education, they require guidance to ensure the safety of their Students, Faculty, employees and visitors. With the viral nature of COVID-19, organizations will need to mandate a doubling-down on hygiene practices and become much more careful about the products they use. This paper has been prepared to offer practical insights and measures to help authorities and educational establishments set the necessary protocols to mitigate the risks of using drinking water dispensers during the COVID-19 pandemic. The information aims to support getting people back to education while being safely hydrated in a healthy and sustainable new normal.



WHAT THIS GUIDE COVERS

In this guide we cover the use of freestanding water dispensers, countertop dispensers and integrated drinking water dispensers that are connected directly to the main supply of water to the premises.

There are many shared resources in schools, all of which have the potential to facilitate viral cross-contamination, such as computers, resources, and the water dispenser. Prohibiting access to essential equipment is counterproductive to maintaining a functional educational environment. A balance must be struck to allow people to safely access the same critical resources with confidence.

There will be some obvious choices to be made, but equally some that require a more educated and informed approach. Just as with most high-touch equipment, the risks posed using drinking water dispensers needs to be understood.

The following pages provide some background on the different drinking water facilities available plus recommended measures on how to get machines up and running after a period of closure and how to keep them operating safety.



BOTTLED WATER COOLERS

Bottled water dispensers are the most found type of dispenser and usually incorporate both hot and cold-water dispensing. Water coolers use large bottles of sourced water. Particularly useful where there is no access to the main water supply, water coolers require bottles of water to be delivered and stored on the premises. However, this is the simplest form of dispenser, has no filtration or sterilization at all, and requires a lot of physical interaction both with bottle delivery, bottle handling and lifting. All of which increase the risk of COVID exposure through multiple touch points through the supply chain.

Since the pandemic outbreak authorities have limited the use of bottled water dispensers as bottles require handling right from source through to warehousing, delivery, storage, usage and dispatching empties. Consequently, establishments should look to enhance hygiene protocols around the handling of bottles before and after use.



FREESTANDING DISPENSERS

Plumbed-in freestanding dispensers eliminate bottle delivery, lifting and handling and typically use UV light to purify water against bacteria, viruses and cysts to over 99% in some cases. This helps prevent germs from contaminating drinking water and causing illness. Mains connected dispensers typically include particulate filtration to remove contaminants like sand, sediment, pollen and rust. However, since they are mains connected the municipality supply is likely to include some amount of chloride, fluoride and sodium.

INTEGRATED DISPENSERS

Integrated dispensers like free standing dispensers use under-counter systems to filter the water from the mains supply through to a tap or facet on the surface. Also, like free standing dispensers they include particulate filtration to remove contaminants like sand, sediment, pollen and rust, but usually do not have any form of UV sterilization as they do not have mains connected power. again, since they are mains connected the municipality supply is likely to include some amount of chloride, fluoride and sodium

THE DISADVANTAGE AND RISK

Water from the tap found at the dispenser can be accessed by anyone in the building and it is an extremely high touch fixture. Most taps have no antimicrobial surface protection offering a layer of defense against surface contamination.

An extremely high level of hygiene would need to be maintained in order to keep the sink tap clean. It can become easily contaminated by the hands of an infected person, if that person coughs or sneezes close-by or touches the nozzle with bottles and glasses. The water quality may also be questionable depending on location.

With all three types of dispenser the tap handle should be sanitized regularly throughout the day to ensure hygienic operation and prevent the spread of COVID.



THE ALTERNATIVES TO WATER DISPENSERS:

Single use plastic

As with bottled water coolers, single use bottles require handling right from source through to warehousing, delivery, purchase and storage. They also require responsible disposal, both in terms of the contamination risk they pose and their impact on the environment. If the provision of drinking water is largely satisfied by bottled water, there could be several partially consumed bottles in the workplace at any one time. There is an inherent risk in spreading the virus through the unintended sharing of those bottles or indeed in picking the bottles up to dispose.

Touchless water

100% touchless water as the name suggests incorporates all the necessary risk mitigation that prevents the spread of COVID-19 and even airborne viruses.

Touchless water comes from an appliance that produces water from thin air by condensing humid air from the environment around us. This appliance is called an Atmospheric Water Generator, So, let's look further into this option:

Touchless water 1st and foremost uses sensors and electronics to dispense water into reusable bottles without the need to touch any button, handle or tap. Atmospheric Water Generators (AWG's) produce water form humid air that is drawn through a HEPA grade carbon air filter before condensing the water from the air.

The produced water is then filtered and sterilized periodically and automatically before water is dispensed. Indoor atmospheric water generators typically incorporate eight layers of protection, which includes: Air filtration, 5 stages of water filtration including carbon filters, particulate filters and mineralization, before sterilization by UV light and Ozone gas.

The end result is water that is produced on-site, without chemicals or preservatives, is healthier and more sustainable and mitigates the risk of COVID exposure from the handling, delivery and touch of water from bottles or dispensers.

HOW TO ACCESS SAFE DRINKING WATER IN THE WORKPLACE

The following guidelines set out how workplaces can get safely up-and-running following a period of closure, as well as daily hygiene protocols.

Using a drinking water dispenser for the first time

Many workplaces will have been closed for a period of time during the COVID-19 pandemic. Before using a dispenser, machine or equipment for the first time following a dormant period, we recommend taking the following steps to ensure that any harmful bacteria and toxins are removed and the water is safe to drink:

• If a plumbed-in machine has had a break in operation, dispense a minimum of 5 liters/l gallon each of ambient, cold and sparkling water, and 3 liters/0.6 gallons minimum of hot water. Dispose of the water.

• If a bottled water cooler has had a break in operation, replace the bottle with a new sealed bottle of water.

• Sanitize all external surfaces of the machine and bottle, including all nozzles/taps/tap handles, decals, drip trays and faucets using a food grade sanitizer.

• Wash all glassware, re-usable bottles, carafes and other drinking vessels by hand using hot water and dishwashing liquid, then rinse or place in a dishwasher or glass washer and run through two wash cycles to clear any residue.

• For ice dispensers, dispose of any stored ice and the first set of freshly made ice before use.

• For coffee machines empty coffee deposit trays that have any remnants of coffee. Run at least 1 liter/0.2 gallons of hot water through the coffee machine and dispense 3-4 cups of coffee before using.

ENHANCING DAY-TO-DAY HYGIENE PROTOCOLS

New habits and behaviors will need to be adopted, and every opportunity should be taken to encourage regular sanitization of equipment and consumables as well as heightened personal hygiene protocols to help prevent the spread of germs.

HAND HYGIENE

Hands should be washed with soap and water or sanitized with an alcohol-based gel before and after using a dispenser. Germs can be spread through person-to-person contact with surfaces. Washing hands kills the virus and prevents the spread of COVID-19. We recommend keeping a hand sanitizer within easy reach of the dispenser.

RESPIRATORY HYGIENE

Whilst at the dispenser, sneezes and coughs should be covered to help prevent the spread of COVID-19. Disease spreads from person to person through small droplets from the nose or mouth, which are expelled when a person coughs or sneezes. We recommend keeping tissues within easy reach of the dispenser, and a bin to dispose of used tissues. Alternatively, workers can choose to wear face masks.

SOCIAL DISTANCING

Users should keep a safe distance from others at the water dispenser. It is recommended that a distance of at least 1 .8meters/6ft be maintained at all times



DISPENSER SANITIZATION

Use an alcohol-based spray disinfectant or disposable disinfectant wipes to sanitize the dispenser regularly, paying particular attention to the dispensing area. Users can become infected by touching contaminated surfaces, then touching their eyes, nose or mouth. This is one of the main ways that COVID-19 spreads. Additionally, for bottled water coolers pay particular attention to the bottle opening when attaching it to the cooler.

Disposable gloves should be worn or hands thoroughly washed/sanitized before opening the bottle and lifting it in place. When bottles are delivered to the workplace, sanitize the exterior surfaces of the bottle with an alcohol-based disinfectant spray or wipe.

SANITIZATION AND DISPOSAL OF GLASSES AND CUPS

All glassware, re-usable bottles, carafes and other drinking vessels must be washed in a dishwasher or glass washer after every use without exception. A second cycle for all items is recommended. If disposable cups are used, encourage disposal after each use. Disposable cups should not be reused or left for others to dispose of.



ENFORCING PROTOCOLS

Dispensers will likely be located in communal areas such as the reception, kitchen, communal eating area, public space, hallway, for example. To help enforce protocols for use of the dispenser, we recommend including instructions on social distancing and hygiene. This can be in the form of posters, stickers or tent cards placed on or around the dispenser and socialized accordingly to all staff and visitors. Other measures could include redesigning the office layout by introducing barriers and guards to better allow for social distancing in public or communal areas.

SITE VISITS

Engineers and technicians who visit premises to deliver bottles, install or service dispensers should follow strict hygiene protocols that include maintaining a safe distance from others; applying hand sanitizer before and after every site visit; wearing latex disposable gloves throughout the visit; and using sanitizer to disinfect the bottle and/or dispenser. Regular maintenance is recommended to ensure that the machine is safely performing at its best. This includes sanitization of the dispenser, filter and UV lamp replacements where applicable.



GETTING SAFELY BACK TO EDUCATION

The provision of potable drinking water in the workplace is a right. It's vital for our health and wellbeing. It's therefore crucial that originations put the correct infection prevention measures in place to ensure that access to drinking water is not withheld but provided in the safest way possible to prevent the spread of COVID-19. Providing resources and a educational environment that promotes handwashing, respiratory and distancing etiquette will help keep education settings open and operating safely. By following strict hygiene standards across the workplace and choosing products that offer users maximum protection and security, businesses and organizations across all sectors can continue to offer access to a fresh, clean source of drinking water for their students, faculty and employees.

ABOUT MAYEE WATER

Mayee water is an innovative Product as a Service providing pure fresh mineralized alkaline water from a 4-in-1 appliance designed for environments such as homes, offices, factories, hospitals, restaurants, hotels, schools and public spaces. Mayee freestanding indoor atmospheric water generators (AWG's) are a healthier, more convenient and sustainable alternative to bottled water dispensers, water filling stations, fountains and single use plastic. Every Mayee air to water maker delivers the best quality water in the most sustainable way. Delivering AWG's through our subsidiaries since 2016, we have become one of the first companies to introduce pure fresh drinking water from air to over 100 customers in the UAE. Mayee is at the forefront of the market promoting sustainable healthily mineralized alkaline water from air and the use of AWG technologies.

Mayee through its subsidiary company Hydrologic AWG has delivered AWG technology across the Middle East including Oman, Bahrain, the Seychelles, Pakistan, the Maldives and Malta.

#DrinkBetter For more information please visit: www.mayeewater.com or www.hydrologic-AWG.com

