

The IMPORTANCE OF WATER QUALITY in School and Childcare Buildings

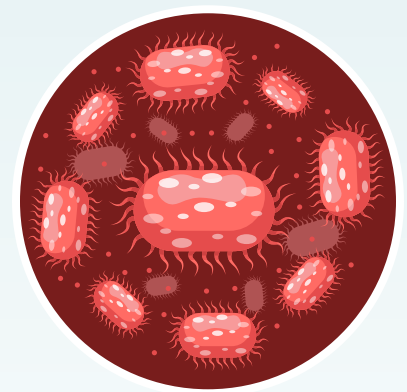
Middlesex Water Company (MWC) delivers water that meets or exceeds all state and federal standards. However, school and childcare building owners, administrators, and managers share a responsibility to maintain drinking water quality throughout their buildings.

Water stagnation – which occurs if water sits in pipes for long periods of time, like overnight, weekends, or school breaks – can lower water quality and cause it to become unsafe.



How does stagnation make water unsafe?

- When water is not used for a long period of time, the disinfectant will break down and the water temperature can change. This can cause bacteria to grow in water pipes and faucets.
- When water sits in a pipe or fixture for a long time, it can decrease the normal protective barrier on the inside of the plumbing. With the barrier gone, metal from the plumbing, like lead, may dissolve into the water. Lead is not safe to drink or eat.



What can I do about it?

Ensure all of the drinking water in your building is used and/or replaced with fresh water on a regular basis. That happens through regular usage by students and staff, and implementing a routine flushing and maintenance plan. For larger buildings, creating a building profile and water management plan can help ensure water quality efforts are a success.



How to MAINTAIN WATER QUALITY

What is flushing?

“Flushing” is the process of running water through the building until what comes out of the faucet or fountain is “fresh” water pulled straight from the main instead of from water sitting in building plumbing.

How do I create a flushing plan?

Take the following steps and write them (and their location) into a checklist for others to follow in the future.



STEP 1

Find where water is coming into the building.



STEP 2

Run the cold water from the tap closest to where water enters the building for at least ten minutes or until the water runs cold. This is usually in the basement or lowest floor. The water may not be meant for drinking (e.g., a janitorial sink).



STEP 3

Run the tap farthest from where water enters the building for at least ten minutes. If the building has more than one wing, run the farthest tap in each wing. If a building has multiple floors, start at the top floor. Complete this step on all floors starting from the top floor and moving down by floor.



STEP 4

Run each tap that may be used for drinking and or/cooking for at least 30 seconds. This includes each kitchen faucet and classroom faucets.



STEP 5

Run basic water fountains that do not have filters or refrigeration for at least 30 seconds.



STEP 6

Run water at all unfiltered refrigerated water fountains for at least 15 minutes.



STEP 7

Run drinking fountains or filling stations with inline filters for at least 30 seconds. **Do not remove** filter cartridges.



STEP 8

Give the checklist to the person who will be in charge of flushing and ask them to document each time they flush.



For Larger Facilities: HOW TO CREATE A WATER SYSTEM BUILDING PROFILE

What is a water system building profile?

A water system profile is a basic building water system drawing or flow diagram. It shows how the water system is connected, the general direction of water flow, and all fixture locations used for consumption. Larger, more complex buildings may need a profile to ensure a flushing plan is adequate to eliminate all stagnant water.

How do I create a profile?



STEP 1

Outline your building water system using an up-to-date building floor plan. This is your base drawing.



STEP 2

Walk through the building and note every sink, fountain, and fixture used for consumption on the drawing.



STEP 3

Locate and describe every water fixture on your drawing.



STEP 4

Locate where the water comes into your building (the service line entry point) and the following water fixtures on your drawing:

- Closest to the entry point.
- Farthest away from the entry point (on the top floor if the building has multiple floors).
- Farthest away from the entry point on each lower floor (if applicable).

Water will generally flow from the identified entry point towards the points farthest away.



NOTE THE FOLLOWING ON YOUR PROFILE:

- Plumbing “dead ends,” areas of low usage, or fixtures removed from service for an extended time. They may require specific flushing actions or need a qualified professional, such as a licensed plumber, to address their risk.
- If the fixture(s) used for consumption are “lead free” certified.
- Devices like water storage tanks, heaters, or treatment additions like water softeners that may need regular maintenance.

Follow EPA guidance for how to read fixture stamps and labels here: [How to Identify Lead Free Certification Marks | https://tinyurl.com/348x3vjd](https://tinyurl.com/348x3vjd)

How should I use my building profile?

Once your building profile is complete, you can use it to create an accurate, step-by-step checklist staff can use to successfully flush the building. See the next page for examples of you can include building-specific information in the checklist and document completed flushing.



