

## SCHOOL DRINKING WATER PROGRAM

### WHY FLUSH SCHOOL BUILDING PLUMBING SYSTEMS BEFORE RESUMING CLASS?



#### Why should schools flush their plumbing systems before resuming class?

During extended periods of school closure, such as over summer break, the drinking water system within a school building will not be under typical daily use for an extended period until class resumes. Water stagnation may affect the quality of drinking water; therefore, flushing is an essential procedure for water quality management.

#### Why is water stagnation a concern?

Water that remains motionless in the pipes for extended periods may increase the release of lead and copper into the drinking water and promote bacteriological growth.

#### Why is lead in drinking water a concern?

The potential for lead in school drinking water is a concern because exposure to lead is a significant health concern that impacts growing children and infants more than the average adult. According to the Centers for Disease Control and Prevention (CDC), exposure to lead in children can cause damage to the brain and nervous system, learning and behavior problems, slowed growth and development, and hearing and speech problems. Lead exposure can lead to a lower IQ, decreased ability to pay attention, and underperformance in school.

#### Why is copper in drinking water a concern?

Excess copper exposure can cause stomach and intestinal distress, liver or kidney damage, and complications of Wilson's disease. Children's bodies absorb more lead and copper than the average adult because of their rapid development.

#### Why are bacteria in drinking water a concern?

Bacteria are present throughout our environment. They have adapted to live and reproduce in a variety of environments including inside animals, humans, and in water, soil and food. If harmful bacteria are present in community drinking water sources, most are removed during the disinfection process. However, some may survive the disinfection process and make their way through the distribution system. Bacteria can also enter the distribution system if there is a breach in the plumbing. Bacteria that make their way into the system can take hold and begin to grow. Bacteria's ability to grow to large numbers in the system is usually held to a minimum by the continued use of the water. When water is not used for extended periods of time, these bacteria tend to flourish.

## What is plumbing system flushing?

Moving the water throughout the building plumbing system on a regular basis is essential to flush out contaminants and maintain or improve water quality. “Flushing” involves opening taps and letting the water run to remove water that has been standing in the interior pipes and/or the outlets. There are two basic types of flushing procedures: flushing to remove dissolved contaminants and flushing to remove particulates (solids) in the water.

## Where do I find the plumbing system flushing guidance?

Guidance documents and videos may be found at [Michigan.gov/SchoolWater](https://Michigan.gov/SchoolWater). Routine flushing programs are always recommended. At a minimum a deep and thorough flushing to remove particulates from the plumbing system should occur immediately prior to the return of children and staff to the building.

## Where do I find additional information on minimizing lead exposure?

Please visit [Michigan.gov/MiLeadSafe](https://Michigan.gov/MiLeadSafe) for more information on minimizing lead exposure.

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