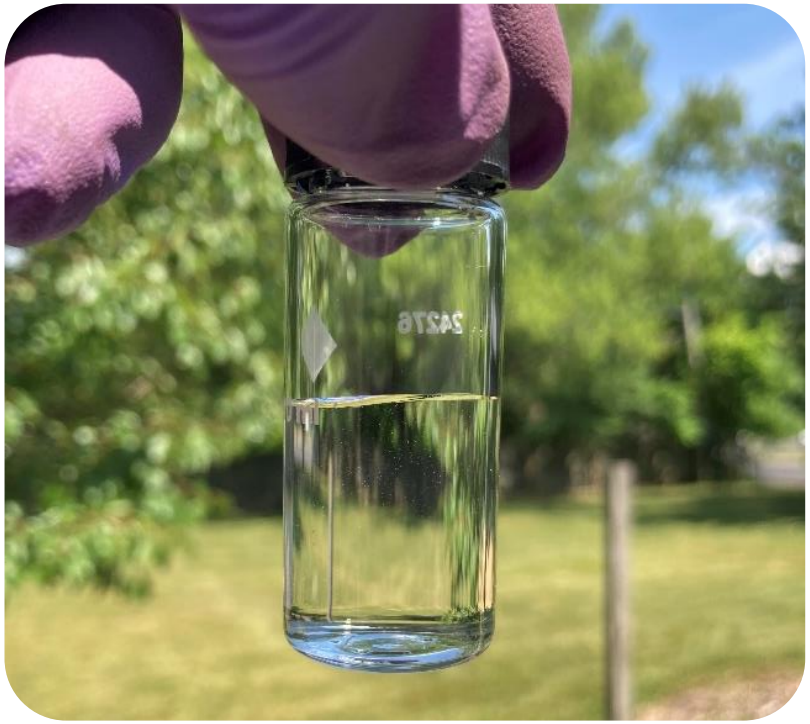
COVID-19: Ensuring Safe Water in Sparsely Occupied Buildings
June 16 2020

the international water association



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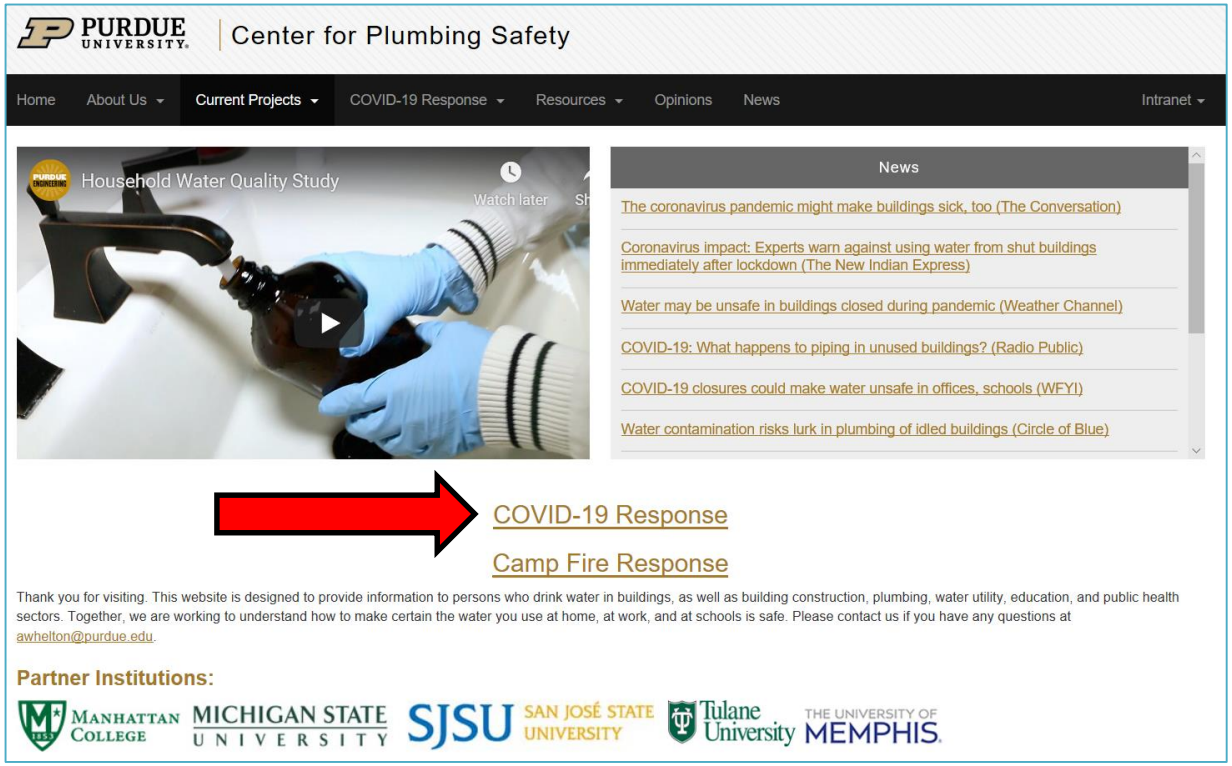
More Information about Us

www.PlumbingSafety.org



Plumbing news
Plumbing explainers
Scientific opinions
Scientific reports

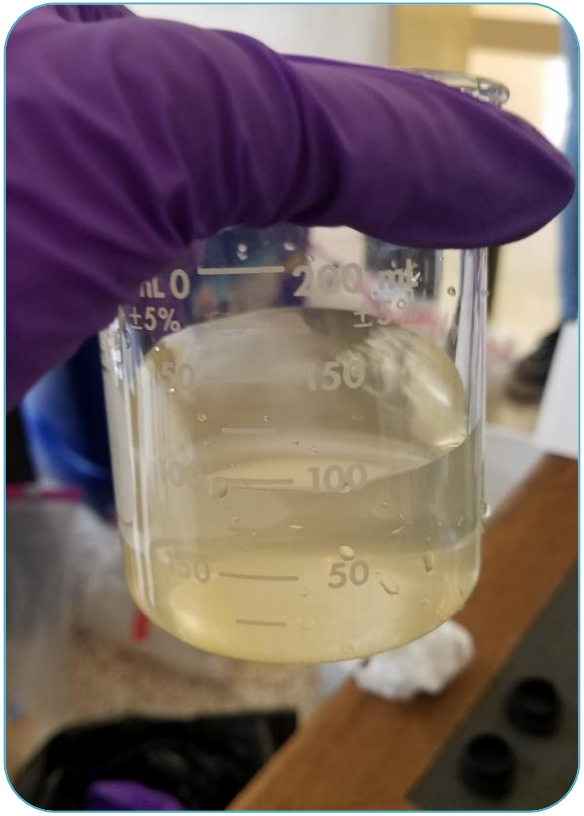
Plumbing education videos
List of projects
Resources → presentations
External plumbing docs

Stagnated water can poses health risks

Copper leaching (can exceed safe limits in just 48 hours sometimes): Nausea, vomiting, gastrointestinal distress

Lead leaching: Developmental issues with children and acute effects

Harmful organisms e.g., *Legionella pneumophila* and other opportunistic pathogens: Many organisms cause respiratory illness, other infections can occur



U.S. National Science Foundation RAPID Award 2027049

Shutdowns and Consequences - Extreme Plumbing Stagnation and Recommissioning

1. State of science review of water stagnation with experts from 7 private and public sector organizations, *[done]*
2. Support to the plumbing and public health sectors on guidance and decisions, *ongoing*
3. Field testing to examine building water safety, *ongoing*
4. Lab testing to examine contaminated systems and devices, *planned*
5. Help transform public awareness, *ongoing*

Lessons from the Field: Building Water System Interventions

DOWNLOAD FREE STUDY HERE ➔ https://doi.org/10.1002/aws2.1186

Review Article | Open Access | AWWA WATER SCIENCE

Considerations for Large Building Water Quality after Extended Stagnation

Caitlin R. Proctor, William J. Rhoads, Tim Keane, Maryam Salehi, Kerry Hamilton, Kelsey J. Pieper, David M. Cwiertny, Michele Prévost, Andrew J. Whelton

First published: 16 June 2020 | https://doi.org/10.1002/aws2.1186 | Citations: 1

Lessons from the Field: Building Water System Interventions

Indiana State Department of Health

Indiana Health Alert Network Notification – July 10, 2020

Legionellosis Testing: Reminder for Seasonality and Building Reopenings

ISDH is alerting healthcare providers to an anticipated seasonal increase in *Legionella* infections combined with a potential increase in cases resulting from building re-openings. ISDH reminds all healthcare providers to test for *Legionella* when evaluating adults with symptoms of pneumonia, even during the COVID-19 pandemic.

Testing should include both urine antigen testing (UAT) and *Legionella* sputum/respiratory culture following these guidelines:

In the US, healthcare providers are being warned

We have already had confirmed illness during the pandemic

Kettering schools taking safety measures after Legionella find in water at Fairmont High

Fairmont High School.

Share Share Share

By: WHIO Staff
Updated: July 10, 2020 - 11:22 PM

- ✓ Staff member died (2019), Legionnaires Disease
- ✓ Staff member sick (June 2020), Legionnaires Disease
- ✓ Found LP in aerators at select locations including janitor sink

Safety: Exposure to Contaminated Water during Flushing and Heat Exhaustion

Personal Protective Equipment

OSHA and other worker safety agencies recommend respirators (N95) *if* Legionella is *suspected or possible*

For respirators, medical clearance and a respiratory protection program is needed

Reduce exposure by applying controls

My personal warnings…

- Some people are sending workers to flush stagnant water that may have pathogens without any respiratory protection. Bad idea.
- Some people think “masks” are respirators. They are not.
- Persons with preexisting conditions should avoid this activity
- Getting a building flushed is a lot of work. Don’t do too much at once.

Lessons from a School, Indiana USA

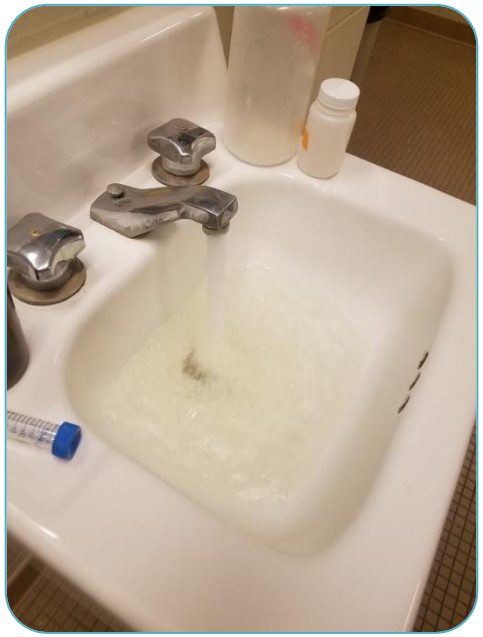
3 buildings on campus, built in the 1960s

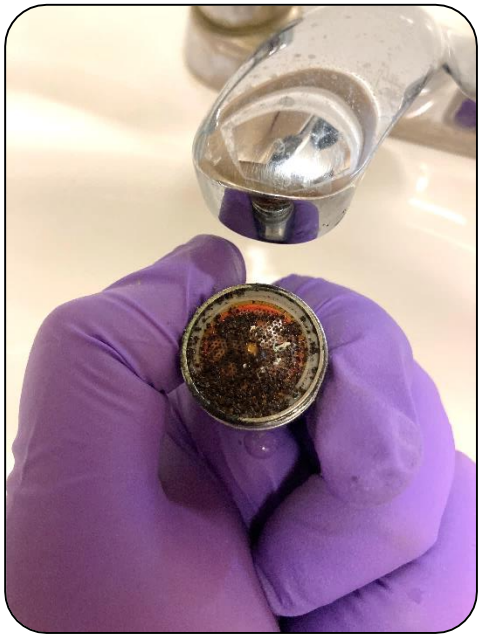
3 months of low to no water use, little irrigation use

Characteristics

- Public water supplier service area chlorine residual range <0.2 to 1.3 mg/L
- Each building has 1 service line, 1 water heater, no recirc loops
- Copper pipe, kitchen, classroom, bathroom sinks, toilets, water fountains; outdoor spigots; refrigerators, dishwashers, coffeemaker connected to the building water system; ***no showers, no cooling towers***

Clean aerators



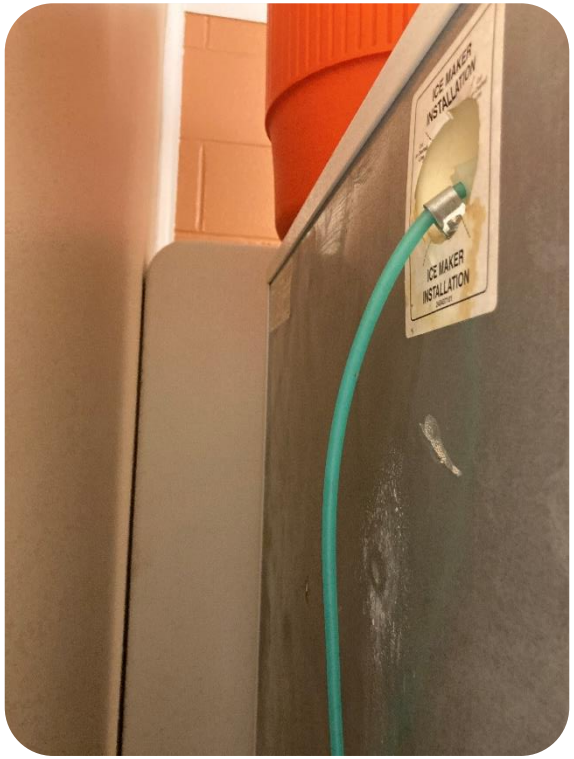


Address all outlets

Clean them well

Deal with water treatment

Tackle high risk components



Flush appliances

Thank You.

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the international water association

Reports Coming Soon from Us in 2020:

A look back at the Camp Fire disaster drinking water contamination

School water copper and legionella contamination investigation

Testing results of our ongoing rapid response water stagnation study