

Safe, Reliable Drinking Water During the COVID-19 Pandemic

Resources from the
American Water Works Association



American Water Works Association
Pacific Northwest Section



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Happening Now

AWWA WEBINAR

Current and Emerging Technologies for PFAS Treatment and Lessons Learned

JUNE 24, 2020 | 11:00 A.M. - 12:30 P.M. MT

Lessons in PFAS Treatment

Join the webinar for real-world case studies.

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Coronavirus and Water

Find the latest information on risks and
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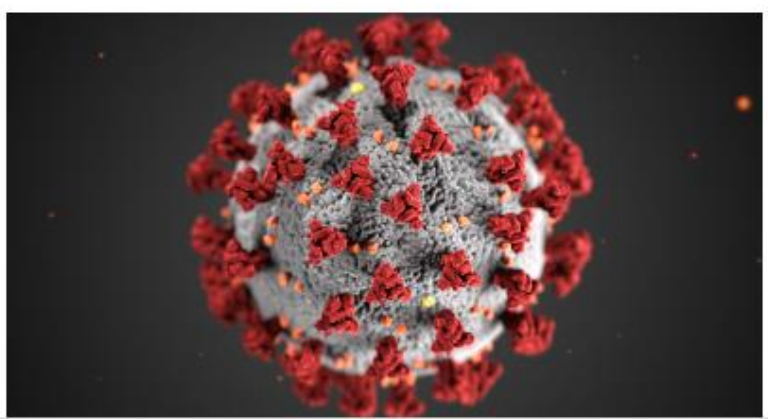
CORONAVIRUS

Resources & Tools / Resource Topics / Coronavirus

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Coronavirus (COVID-19)

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With the coronavirus (COVID-19) pandemic impacting communities throughout the world, water professionals are working around the clock to ensure that safe, reliable water service continues to flow.

[Read a letter from AWWA President, Jim Williams thanking our members for helping to save lives.](#)

Website

- <https://www.awwa.org/Resources-Tools/Resource-Topics/Coronavirus>
- Report – Financial Impact
- Member surveys
- References – USEPA, CDC
- Utility experience
- Document templates
- FAQ
- Most recent resources
- Shut down advisory



The Financial Impact of the COVID-19 Crisis on U.S. Drinking Water Utilities


APRIL 14, 2020



This project was funded by the Water Industry Technical Action Fund of AWWA.



Many Resource Links

June 5, 2017 Version 1.1



Developing a Water Management Program to Reduce *Legionella* Growth & Spread in Buildings

A PRACTICAL GUIDE TO IMPLEMENTING INDUSTRY STANDARDS

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

MAINTAINING OR RESTORING WATER QUALITY IN BUILDINGS WITH LOW OR NO USE

Building and business closures for weeks or months reduce water usage potentially leading to stagnant water inside building plumbing. This water can become unsafe to drink or otherwise use for domestic or commercial purposes. For example, optimal growth conditions for undesirable pathogens, such as *Legionella* bacteria, can occur when hot water temperatures decrease and disinfectant residuals (e.g., chlorine) drop to low levels. Water chemistry changes may also increase corrosion and leaching of metals, including lead, and may cause the formation of disinfection by-products. Turning on the water for immediate use after it has been stagnant can pose a risk to public health if not properly managed. Additionally, turning on water after a prolonged period of non-use could disrupt pipe and plumbing scales to such an extent that microbial and chemical contaminants could be released into the water.

EPA recommends that building owners and managers take proactive steps to protect public health by minimizing water stagnation during closures and taking action to address building water quality prior to reopening.

How can we maintain water quality while buildings/businesses are closed?

While buildings/businesses are closed, proactive steps can be taken to prevent stagnation and maintain building water quality. Maintaining the water quality may help prevent the need to perform more complex restoration steps before reopening. The following are recommended steps to take while buildings are closed:

For building owners/managers:

- **Review and understand the plumbing configuration and water usage in your building.** The U.S. Centers for Disease Control and Prevention (CDC) provides guidance on building water systems in their Water Management Program toolkit (see Resources section below for a link to that guidance).
- **Inspect the plumbing** to ensure it is functioning properly and is in good condition.
- **Contact your water utility** if you have questions on the status of water usage and quality in the distribution system in your area and to coordinate maintenance activities, if necessary. See the "For public water systems" section below for specific information that may be useful to discuss with your water utility.
- **Maintain any water treatment systems** used in the building, such as any point-of-entry or point-of-use filters or water softeners.
- **Maintain the hot water system**, including keeping the temperature at or above 140°F per CDC guidance to prevent *Legionella* growth. See CDC's guidance for reopening buildings for additional information, referenced in the Resources section below.
- **Flush the building's plumbing system regularly.**
 - Flush cold and hot water at all water points of use (faucets, showers, toilets, drinking fountains, and water using devices such as dishwashers and refrigerators/ice makers) to replace the water that has been standing in the pipes. Flushing involves opening taps and letting the water run to remove water that has been standing in the interior pipes and/or outlets. The flushing time can vary by the plumbing configuration and type of outlet being cleared.
 - It is important to flush the service line that runs from the water main to the building before flushing the rest of the building's plumbing system.

For more information, please visit [EPA.GOV/COVID-19](https://www.epa.gov/coronavirus)

Version 2:



Incident Action Checklist – Pandemic Incidents

The actions in this checklist are divided up into three 1/2 hour sections and are examples of activities the water sector (drinking water and wastewater systems) can take to prepare for, respond to and recover from a pandemic. You can also populate the 1/2 hour sections with critical information that your utility may need during a pandemic.

Coronavirus Pandemic and Water Utilities

For general information from EPA about COVID-19 and water, see www.epa.gov/coronavirus. The risk of transmission of COVID-19 via drinking water and wastewater is low. However, there are other impacts to drinking water and wastewater utilities, which may include, but are not limited to:

- Staff shortages due to absenteeism;
- Supply chain disruptions (clean water, materials, personal protective equipment);
- Field operations interruptions (repairs, meter reading, sampling); and
- Inability to maintain all operations.

Many water and wastewater utilities have created pandemic response plans based on best practices and experiences from past global outbreaks such as the outbreak in 2003 and swine flu in 2009. Utilities should review and update those plans and stay in close contact with their local health department and regulatory agency as the COVID-19 situation is dynamic and evolving rapidly. Water and wastewater systems need the most up-to-date information in order to make decisions that are right for their utility based on the pandemic impacts to their specific community.

Sign up for any COVID-19 alerts or notifications available from your regulatory agency and local emergency management agencies and health departments to stay up to date.



General COVID-19 Information

- [U.S. Coronavirus Website](#)
- [U.S. Centers for Disease Control and Prevention](#) Drinking Water and Wastewater COVID-19 (CDC)
- [World Health Organization](#) COVID-19 (WHO)
- [Association of State Drinking Water Administrators](#) COVID-19 (ASDWA)
- [Water Information Sharing and Analysis Center](#) COVID-19 (WISAC)
- [Water Environment Federation](#) COVID-19 (WEF)
- [American Water Works Association](#) COVID-19 (AWWA)
- [Coronavirus Research Update](#) (NRF)

Information on Hygiene and Water Safety

- [OSHA Guidance for Wastewater Workers](#) COVID-19 (OSHA)
- [Water, Sanitation, Hygiene and Waste Management for COVID-19](#) (WHO, UNICEF)
- [Memorandum on Identification of Essential Critical Infrastructure Workers During COVID-19 Response](#) (PHS)

Email

- Providing the most current links to information webinars and resources
- Need to be a member or be forwarded from a member

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All Member Advisory

Who: All AWWA members
What: Free webinar on COVID-19's Financial Impact on Water Utilities
When: Tomorrow - Friday, May 15

AWWA is offering a complimentary webinar tomorrow - Fri., May 15 - from 11 a.m. until 12:30 p.m. MT, entitled "COVID-19's Financial Impact on Water Utilities." While the webinar is free, [registration is required](#).

This webinar will expand on the findings of a recent report prepared by Raftelis for AWWA and the Association of Metropolitan Water Agencies entitled "[The Financial Impact of the COVID-19 Crisis on U.S. Drinking Water Utilities](#)." It will also examine the financial health and sustainability of the water sector both now and when COVID-19-related shutdowns are lifted.

The webinar, which will consist of a moderated panel of experts from the water sector and financial communities, will look at the financial impacts COVID-19 is having on water utility operations, examine various impacts on utility financial management planning and processes, and discuss best practices to successfully meet COVID-19's challenges.

The panel will consist of:

- Helen Cregger, Vice President and Senior Credit Officer - Public Finance, Moody's
- John Mastracchio, Vice President, Raftelis Financial Consultants, Inc.
- Sophia Skoda, Director of Finance, East Bay Municipal Utility District
- David LaFrance, CEO, AWWA

Questions can be directed to AWWA's [Ken Maynard](#).



AWWA Delivers Valuable Member Benefits

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Webinars

- Started in March. Most recent was a week ago
- 8 webinars so far
- 1 hour to 1 hour 40 minutes
- <https://www.gotostage.com/channel/16921d7cb152490e82f25f5163c66f15>
- Recorded Q&A
- Moderator and speakers are from USEPA and utilities
- Learning objectives listed
- Lessons learned



PANEL OF EXPERTS



Joanne Lopez
General Manager,
Modesto Water District



Jim Horne
Sustainable Utilities Program Manager,
U.S. EPA, Office of Wastewater Management



Chad Vukobratovic
Workforce Manager,
AWWA



Ronald Hargrove
Deputy Utility Director,
Charlotte Water



Stacy Thompson
Deputy Director,
City of Saskatoon Water Resource Recovery Facility



Mike Sadonick
Operations Superintendent,
City of Saskatoon Wastewater Treatment Plant

CHANGES TO LICENSE HOLDERS

- Deadline extensions to obtain renewal training and pay fees
- Change in class format
- Change in reciprocity

12,000+ Licenses
8,000+ Individuals
Annual renewal July 1 by law



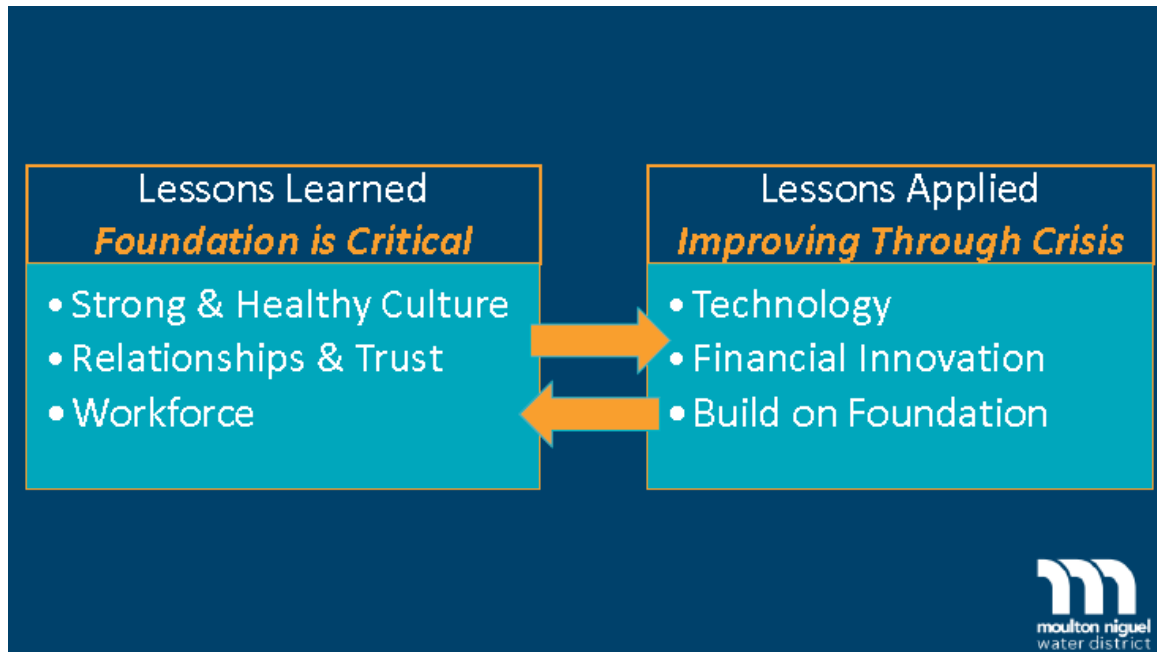
Topics:

- *Returning to Service: Addressing Water Quality in Buildings with Low or No Use*
- *Workforce and COVID-19: Utility Solutions*
- *COVID-19's Financial Impact on Water Utilities²*
- *Facing the New Normal for Credit and Collections*
- *COVID-19 Implications to Operations Compliance*
- *Utility Actions to Sustain Operations During COVID-19*
- *Legal Aspects of COVID-19 for Water Utilities*
- *Be a Trusted Source: How to Handle Communication Challenges During COVID-19*



Handouts

- Slides for each webinar are available as a PDF to download
- Additional resources listed



Some Potential Risks in Building Water Systems



- Some opportunistic pathogens can grow under favorable conditions, which may be present in some building plumbing systems under certain circumstances.
- These Pathogens:
 - Typically affect people with underlying health conditions or those from other sensitive groups
 - Exposures are typically from inhalation of aerosols (e.g., showering, cooling towers)
- They include:
 - *Legionella* bacteria
 - Cause of legionellosis – Legionnaires' Disease (severe pneumonia) and Pontiac Fever (milder, flu-like)
 - *Pseudomonas* – pneumonia and dermal infections
 - *Mycobacterium avium* Complex – pneumonia



Print or On-Line Articles



On-Line Training

- Keeping operators current
 - AWWA - now
 - PNWS – coming soon
 - NWWA – this fall

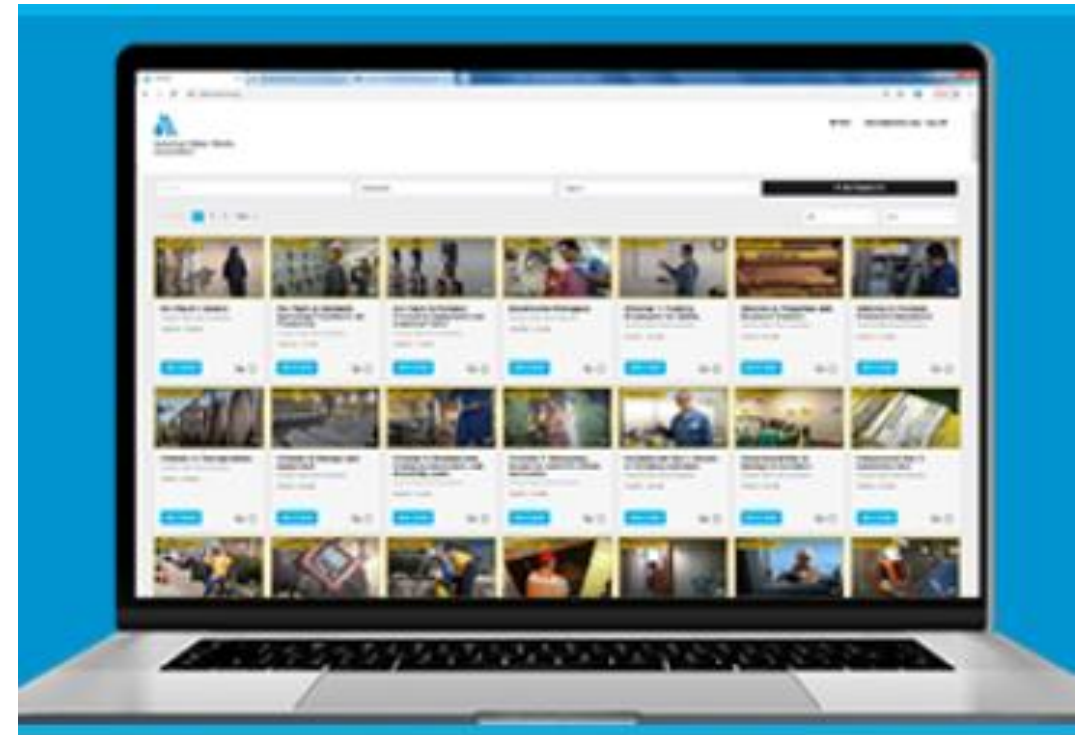


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 - Equipment
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 - Services
- No cost
- No obligation
- 168 participating utilities – WIWSA is member
- www.wawarn.org

