Preparing Your System for the Pandemic

Responding to the COVID-19 threat

Presented by the Ohio RCAP Preparedness & Emergency Response Team
Our Funders
Objectives

- Overview of Pandemics and the Coronavirus
- Understand the Impacts of a Pandemic on a Water and Wastewater Systems
- Learn how Water and Wastewater Systems can prepare for a Pandemic
- Learn how to facilitate a table top exercise
- Find resources to assist in Pandemic Planning
What is a Pandemic?
March 11, 2020

The World Health Organization announces that Coronavirus is now a Pandemic.
What is a coronavirus?
Coronavirus

Are a family of viruses that cause illness:

- 2003  SARS-CoV (Severe Acute Respiratory Syndrome)
- 2012  MERS-CoV (Middle East Respiratory Syndrome)
- 2019  nCoV—a new strain COVID-19
COVID-19

How is COVID-19 transmitted?
Symptoms

www.cdc.gov/covid19
Recommendations to prevent infection from spreading
Are our systems safe?

Water

- As of March 12, 2020 the EPA recommends that Americans continue to use and drink tap water as usual.
- COVID-19 has not been detected in drinking water.
- Water treatment should remove or inactivate the virus

Wastewater

- The CDC is reviewing information as it become available.
- As if today, COVID-19 has been detected in feces.
- The risk of transmission through sewerage is low, but it is possible.
- No additional protection are recommended.
How could a pandemic impact small and rural water and wastewater systems?

• Personnel

• Supply chain disruptions (chemicals, materials, equipment, supplies, uniforms, fuel, labs)

• Reduced revenues

• Stretched resources of outside agencies (State primacy, EMA, public health depts., etc.)
Be ready to manage supply chain interruptions and shortages of chemicals, pipe, available contractors, etc.

Can you temporarily adjust your operations now to conserve critical chemicals and supplies?
Try to be calm and reassure your community that you have a plan in place.

- Create or facilitate your Pandemic Plan
- Inform the Public. Provide updates weekly via website, newspaper, social media, etc.
- Be Transparent.
- Present plans to all system employee’s and oversight officials

“Failing to Plan is planning to fail.” - Alan Lakein
What is my Preparedness Plan?

- Contingency Plan
- Emergency Response Plan
- Standard Operating Procedures (SOP's)
- Cross Training
- Continuity of Operations
- Tabletop Exercises
- Education & Outreach
Your plan needs to address the possible absence of your operator

- Back-Up Operator (and the back-up to the back-ups)
- Cross-training
- Mutual Aid with neighboring systems
- State WARN (Water/Wastewater Agency Response Network)
- Contract Operators
- Check & update phone numbers
- Have the Contingency Plan Accessible
- Contingency plan for your waste water operations.
**WARN** Water/Wastewater Agency Response Network

Find your state’s WARN at

A Water and Wastewater Agency Response Network is a network of utilities helping other utilities to respond to and recover from emergencies.

To become a member of Ohio WARN:
- Pass a Resolution
- Sign a WARN Agreement

www.ohwarn.org
Pandemic Response for Water and Wastewater Systems:

**Find**
- Existing Emergency Response/Contingency Plans
- Mutual aid agreements
- Keys, logins, passwords
- Written SOP’s, O&M Plans, System Maps

**Identify**
- Essential functions and critical resources
- Essential personnel and positions
- Review line of succession, update as necessary

**Communicate**
- Pandemic status
- Employees to stay home when they are ill
- Critical supply vendors

**Prepare**
- To implement necessary pandemic policies (social distancing, sequestering healthy, critical on-site staff, sick leave)
- Cross-train employees
- To review and update Contingency Plan, Manual Operations Procedures, Maintenance and Operations Plans
- Exercise your ERP/Contingency Plan

**Provide**
- Supplies for disinfection and sequestering

**Document**
- Actions and additional expenses
Table Top Exercise
Tabletop Exercises, TTX

A facilitator provides a scenario and event details to your active exercise group

Discussion questions are provided to guide conversation

The scenario can evolve throughout the exercise

The exercise concludes with a hotwash/ after-action review – make sure revision follows your experience
TTX Preparation

Internal Participants

Water department staff from WTP, distribution crew, front office, and management (council/BPA members encouraged)

Emergency services and first responders

Public information officer or those who will be responsible for press releases and speaking to the public

Other inter-related departments
  ◦ Waste water, electric, streets, parks, etc
TTX Preparation

External Participants

County Emergency Management Agencies
  ◦ State EMA usually have services available for exercises as well

Rural / Regional Police and Fire

Medical Facility Staff

Industry Representatives
TTX Procedure

1. Lay out background information, constraints, and unknowns
2. Provide a timeline and pace that the exercise will proceed according to
3. Give chunks of information punctuated by significant time for discussion and collaboration
4. The facilitator should guide the conversation, give ideas, and promote cooperative efforts
5. End with a summary of what happened and a brief discussion of possible recovery efforts in the hotwash
Hotwash/ After-Action Review
Record Keeping

Documentation should be kept of the event, including outcomes and notable needs for improvement/ additions/ revisions.

Some states require this on an ongoing cycle

From Ohio EPA – ‘Documentation of exercise participation shall be maintained at the public water system and made available upon request. Documentation shall include information regarding the topic of the exercise, outcomes of the exercise and a discussion of items that went well and improvements that are needed.’
Develop and Conduct a Water Resilience Tabletop Exercise with Water Utilities

Overview

The Tabletop Exercise Tool for Drinking Water and Wastewater Utilities (TTX Tool) provides users with the resources to plan, conduct and evaluate tabletop exercises that focus on Water Sector-related incidents and challenges.

This 2018 version of the TTX Tool contains 12 all-hazards scenarios (e.g., natural disasters, man-made incidents) related to emergency preparedness and response. Each scenario has:

- Fully-customizable situation manuals and after action reports
- Discussion questions
- PowerPoint presentations

All of these tabletop exercise materials can be modified to meet your specific needs.

Additional Resources

- Prepare for Extreme Weather Events
- Conduct a Community-Based Water Resilience Workshop

https://www.epa.gov/waterresiliencetraining/develop-and-conduct-water-resilience-tabletop-exercise-water-utilities
Ohio RCAP has created a template for smaller systems based on the work of

Phillip Van Atta  Class IV Water Operator
Phil retired from the City of Dayton Public Water System in 2017

- Wright State University
- Master of Public Health Program
- Published Water System Preparedness for Pandemic Influenza following the Avian Influenza virus H5N1 in 2008.
- Developed the Continuity of Operations (COOP) for Influenza Pandemics Template
Continuity of Operations Plan (COOP)
RCAP-Pandemic Planning Guide

Great Lakes RCAP prepared and will continue to improve in the days ahead a Pandemic Plan Template for small water and sewer systems.

This along with other resources and general vulnerability assessment/emergency response templates and planning tools is available on their website.

Visit www.glrcap.org!
RCAP’s Pandemic Toolkit  [www.glrcap.org](http://www.glrcap.org)
Your State Primacy Agency – in Ohio please visit  [www.epa.state.oh.us](http://www.epa.state.oh.us)
The Centers for Disease Control and Prevention  [www.cdc.gov](http://www.cdc.gov)
Water Environment Federation  [www.wef.org](http://www.wef.org)
US EPA’s list of registered antimicrobial products for use against COVID  
World Health Organization  [www.who.int](http://www.who.int)
Review

- Reviewed Pandemics and the Coronavirus
- Described the potential impacts of a pandemic on a water and wastewater systems
- Discussed ways systems can prepare for a pandemic
- Described how to facilitate a table top exercise
- Provided resources to assist in Pandemic Planning, including the RCAP Pandemic Toolkit
Any Questions or Additional Resources to Share?
How can we help you?

www.glrcap.org

www.rcapgis.org