

COVID-19 Planning and Response:
Overview of EPA's Pandemic Incident
Action Checklist for Water Utilities

April 7, 2020



How to Participate

Interactions

- Ask questions in the Questions/Chat box.
- See Handouts.

Troubleshooting

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Tips

- At the end of the webinar, please complete the course survey.
- A PDF of the slides, a webinar recording, and other relevant materials will be sent after the webinar.



Today's Webinar Presenters

Dawn Ison, Geologist

U.S. EPA, Office of Ground Water and Drinking Water, Water Security Division

Todd Brown, Public Works Director

Town of Marbleton, Wyoming







Incident Action Checklist - Pandemic Incidents

The actions in this checklist are divided up into three "rip & run" 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 "My Contact" sections with critical information that your willing 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 (chemicals, 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 resilience plans based on best practices and experiences from past global outbreaks such as the avian flu in 2003 and swine flu in 2009. Utilities should review and update those plans and stay in close contact with

should referred and update under plans and is stay in use of some contact, with their local health department and regulatory agrees 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 (Water ISAC)
- Water Environment Federation COVID-19 (WEF)
- American Water Works Association COVID-19 (AWWA)
- Coronavirus Research Update (WRF)

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 (DHS)



Incident Action Checklist -

Dawn Ison, Water Security Division
Pandemic IAC Webinar



Incident Action Checklists Overview

Drought, Earthquake, Extreme Cold and Winter Storms, Extreme Heat, Flooding, Hurricane, Tornado, Tsunami, Volcanic Activity, Wildfire, Cyber, HABs, Power Outages



Introduction





Incident Action Checklist - Pandemic Incidents

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- Outlines potential impacts of pandemic incidents
- COVID-19 specific resources
- Drinking water and wastewater utilities must evaluate their vulnerabilities to pandemics and minimize impacts



Prepare, Respond, Recover

Actions to Prepare for a Pandemic Actions to Respond to a Pandemic Join your state's Water and Wastewater Agency Response Network (WARN) or other local mutual aid Identify a lead, back-up, and team of individuals to network. In addition, check to see if you are included Initial Actions serve as the Pandemic Response Team. in a statewide mutual aid law WARNs may be able Implement telework for as many staff as is feasible to provide assistance in the form of personnel. · Develop a process for maintaining situational to maintain operations. equipment, materials and technical assistance. awareness of the current and future spread of Activate your Pandemic Response Team the virus, as well as community impacts. . In addition, the Rural Community Assistance Partnership (RCAP), National Rural Water Assess all construction and maintenance activities · Develop strategies for managing the pandemic Association (NRWA), Rural Utilities Service Execute your pandemic COOP and Emergency such as identifying response actions based and limit to only critical projects. (RUS), Indian Health Service (IHS), the Inter on current information and the system's Response Plan Tribal Council of Arizona (ITCA) and the emergency response plan and continuity of United South and Eastern Tribes (USET), operations plan. Maintaining Essential Operations among others, may be able to provide licensed Activate defined emergency roles operators or technical assistance Update your drinking water emergency response and responsibilities plan (ERP) and wastewater ERP to ensure all Assess your system's Information Technology (IT) Implement minimum staffing plans and set up contacts (24/7 availability), system diagrams capability to ensure it can accommodate remote shift rotations. and standard operating procedures for system work arrangements without compromising security. Stay in close contact with your regulatory operations are up to date. agency to coordinate on any issues that arise Work with local law enforcement and healt Develop or update a Continuity anticipate experiencing critical (COOP) that specifically addres es: of a pandemic and plans for sign shortages. Resources to help in of the plan include the Panden egulatory agency up to date on Actions to Recover from a Pandemic Operations Template and Busin Planning for Water Utilities: Gu The COOP should include, at a the following: Assign a utility representative to continue providing Revise budget and asset management plans to updates to customers regarding current mitigation address increased costs from response-related actions, as well as preparation for future incidents. activities and follow-up actions. Work with vendors and internal departments to Identify mitigation measures that can help increase return to normal service. utility resilience for future pandemics. Develop a lessons-learned document and an after-Conduct annual utility-specific pandemic awareness action report (AAR) to document your response training with all employees. activities, including what went well and what did not go well. Create an improvement plan (IP) based on your AAR and use the IP to update your vulnerability assessment, ERP and COOP.

Notes and Resources

Му	Contacts and Resources	*
CONTACT NAME	UTILITY/ORGANIZATION NAME	PHONE NUMBER
	Primacy Agency	
	Local Health Department	
	Local EMA	
	WARN Chair	
	Local Laboratory	
	State EMA	





Resources

Mutual Aid Programs

Water/Wastewater Agency Response Network (EPA)

Emergency Response and Continuity of Operations Planning

- · Drinking Water Emergency Response Plans (EPA)
- Wastewater Emergency Response Plan Template (RCAP)
- Pandemic Continuity of Operations Template (GLCAP)
- Business Continuity Planning for Water Utilities: Guidance Document (WRF, AWWA, EPA)
- Business Continuity Planning in the Event of an. Influenza: A Reference Guide (AMWA, WaterISAC)
- · Tabletop Exercise Tool, Pandemic Scenario (EPA)

Other Tools and Resources

- Water Laboratory Alliance Drinking Water and Wastewater (EPA)
- Crisis Emergency Response and Recovery Access (CERRA) Framework (DHS)
- Water Utility Communication During Emergency Response (EPA)
- · Water Utility Response On-The-Go (EPA)
- Resources for Small Public Water System Operators (EPA)

■ Update your drinking water emergency response plan (ERP) and wastewater ERP to ensure all contacts (24/7 availability), system diagrams and standard operating procedures for system operations are up to date. ■ Develop or update a Continuity of Operations Plan (COOP) that specifically addresses the challenges of a pandemic and plans for significant staff shortages. ■ Join your state's Water and Wastewater Agency Response Network (WARN) or other local mutual aid network. In addition, check to see if you are included in a statewide mutual aid law. WARNs may be able

In addition, the Rural Community Assistance
Partnership (RCAP), National Rural Water
Association (NRWA), Rural Utilities Service
(RUS), Indian Health Service (IHS), the Inter
Tribal Council of Arizona (ITCA) and the
United South and Eastern Tribes (USET),
among others, may be able to provide licensed
operators or technical assistance.

to provide assistance in the form of personnel, equipment, materials and technical assistance.

- Actions to take on COOP or ERP
- Join WARN and reach out to your regulatory agency and technical assistance providers



- Work with local law enforcement and health departments to ensure water sector staff are considered first responders, as specified in the Department of Homeland Security's (DHS) Crisis Emergency Response and Recovery Access (CERRA) Framework, and will have the ability to conduct field work when necessary if quarantines are placed on a community.
 - DHS developed a <u>memorandum</u> that identifies drinking water and wastewater personnel as essential workers during the COVID-19 response
- Share your COOP, and any specific pandemic issues, with your local emergency management agency (EMA) and health departments, regulatory agency, and any consecutive systems.
- Assess your system's Information Technology (IT) capability to ensure it can accommodate remote work arrangements without compromising security.

- Ensure access
- Share your plans with local agencies and any consecutive systems
- Don't be afraid to ask questions and bring up issues
- <u>Secure</u> remote capabilities are a key response action whenever possible



Protecting Employee Health ————		
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	Reinforce good personal hygiene practices with all staff.	
	 Share <u>preventative measures</u> (proper hand washing, covering cough, not touching face, etc.) provided by the <u>CDC</u> to minimize risk. 	
	Ensure availability of adequate proper personal protective equipment (PPE), infection control, and cleaning supplies. The disinfection of electronics may require specific supplies.	
	Set up a policy for screening employees for symptoms, setting up sick leave and telework, keeping critical staff on-site, and social distancing in the office (no meetings, keeping 6 feet apart).	
	Establish pandemic-specific health and safety protocols for field sampling conducted by staff or others providing sampling assistance in the event of staff shortages.	

- Minimize risk of exposure
- Set up policies
- Create health and safety protocols for field staff (sampling, emergency repairs, etc.)



Maintaining Essential Operations

- Identify critical positions (plant operator, sampler, in-house and contract laboratory personnel, etc.) and skills, along with back-ups for each of those positions.
- Identify critical functions (disinfection, pumping, sampling and analysis, aeration, purchasing chemicals and supplies, etc.) and the minimum staff required to keep those functions operating.
- Develop a list of critical customers who need a continuous source of potable drinking water (e.g., hospitals, nursing homes, dialysis clinics, manufacturers).
 - Communicate with the laboratory that does your analytical work to ensure that they have a pandemic plan in place and are available to receive and analyze your samples. Also, make sure they have a back-up laboratory option in place.

- Critical positions
- Critical functions
- Critical customers
- Critical sample analysis





Maintaining Essential Operations

- Assess staffing alternatives:
 - Determine the process to use for your state's WARN to request personnel during a pandemic. Reach out to your state or tribe's assistance providers such as <u>RCAP</u>, <u>NRWA</u>, <u>RUS</u>, <u>IHS</u>, <u>ITCA</u>, and <u>USET</u> to determine their ability to provide personnel if your staff cannot report to work due to illness, caring for an ill family member or being quarantined themselves
 - Cross-train staff to handle multiple positions and critical operations.
 - Ensure redundancy in laboratory personnel and, when possible, have contracts with multiple commercial laboratories as a contingency measure in cases of laboratory staff shortages.
 - Assess your remote operations capabilities (i.e., SCADA).

- WARN
- TA Providers
- Cross-Training
- Laboratory redundancy



4	Maintaining Essential Facilities, —— Equipment, and Supplies		
		Identify critical facilities (booster pump, chlorinator, aerator, etc.) and supplies (chlorine, other treatment chemicals, fuel, electricity, etc.) that must stay operational and available.	
		Create an inventory of all critical materials, chemicals, supplies and equipment.	
		Contact all vendors and manufacturers to ensure they have a pandemic plan in place and can deliver needed supplies.	
		 Stock up on treatment chemicals and critical materials and equipment, as space, costs, and expiration dates allow. 	
		If possible, source materials and chemicals from two or more suppliers from different regions to mitigate supply chain disruptions.	

 Work with your vendors and require them to identify who their second-tier sources are to make sure the vendors you are using are not using the same source (which would equate to

a sole source supply).

- Critical facilities
- Inventory supplies
- Contact all suppliers



Develop communication templates so you can communicate with your customers quickly. Identify appropriate distribution mechanisms such as via the website, social media, local news, reverse 911, etc. Identify emergency contacts with your local health department, regulatory agency, and EMA to communicate throughout the pandemic.

- Develop templates
- Identify communication mechanisms
- Identify emergency contacts





Execute your pandemic COOP and Emergency Response Plan Stay in close contact with your regulatory agency to coordinate on any issues that arise (lack of certified operators, laboratory capacity, or access to sample locations).

- Execute the Plan
- Stay in close contact with your regulatory agency!





Protecting Employee Health ————		
	Inform all staff on the latest CDC recommendations to limit the further transmission of the virus.	
	Close all offices to the public.	
	Temporarily suspend any in-home non-sampling appointments by staff such as water efficiency visits. Compliance sampling activities must continue.	
	Limit or cease all in-person meetings, gathering of people in the same location, and travel.	
	Ensure that workers and those with overlapping expertise are generally separated to minimize the risk of co-transmission.	
	Implement telework for as many staff as is feasible to maintain operations.	
	Assess all construction and maintenance activities and limit to only critical projects.	

- CDC recommendations
- Limit any contact
- Telework
- Assess construction and maintenance



Maintaining Essential Operations

- Implement minimum staffing plans and set up shift rotations.
- If you begin or anticipate experiencing critical staffing shortages:
 - Keep your regulatory agency up to date.
 - Reach out to your <u>WARN</u>. WARN members may be able to assist with personnel, equipment, supplies, and technical assistance.
 - Reach out to neighboring utilities and develop mutual aid agreements, if possible.
 - Reach out to your local assistance providers such as <u>RCAP</u>, <u>NRWA</u>, <u>RUS</u>, <u>IHS</u>, <u>ITCA</u>, and <u>USET</u> about their ability to provide licensed operators or technical assistance.
 - If the above resources are not available, contact your local EMA. Make sure to be specific about the type of personnel you need and for the type of water system.

- Staffing Plans
- Potential Staffing Assistance
- Don't be afraid to bring up issues!



Maintaining Essential Operations

- Communicate often with the laboratory that does your analytical work to ensure that they are available to receive and analyze your samples and make sure they have a back-up laboratory option in place.
- Remind all staff to anticipate cyber threats including social engineering, phishing, and other opportunistic cyber-attack tactics preying on fear and the need for information that could disrupt billing or supervisory control and data acquisition (SCADA) operations.
 - Remind staff not to click on any links that could execute a hostile program.
 - Back-up all critical files and ensure security systems (firewalls, anti-virus) are functioning on all remote equipment.

- Laboratory capacity
- Cyber threats





Maintaining Essential Facilities, Equipment, and Supplies

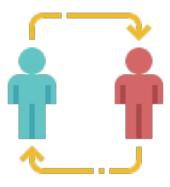
- Secure all facilities in preparation for limited access and surveillance.
 - Stay in close contact with your suppliers of equipment, materials, treatment chemical, and other supplies, especially if you were not able to stockpile chemicals or materials. If you anticipate an impending shortfall of chemicals, contact your WARN to see if other utilities can assist, your assistance providers (RCAP, NRWA, RUS, IHS, ITCA, USET) to see if they have resources, and your local emergency management agency who can request chemicals through state or tribal emergency authorities or make requests to the federal level.

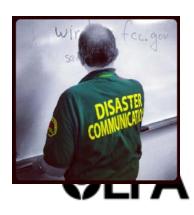
- Secure facilities
- Stay in contact with all suppliers



Drinking Water - Communicate with your customers as soon as possible and often about the safety of their water supply using guidance provided by the EPA and CDC. Wastewater - Communicate with your customers (local news, social media, or webpage) about wet wipes and the consequences of flushing them down the toilet (e.g., sewage backups). Stay in close contact with your regulatory agency, local health department, and local EMA.

- DW Safety
- WW Flushing
- Keep talking to local and state/tribal agencies!





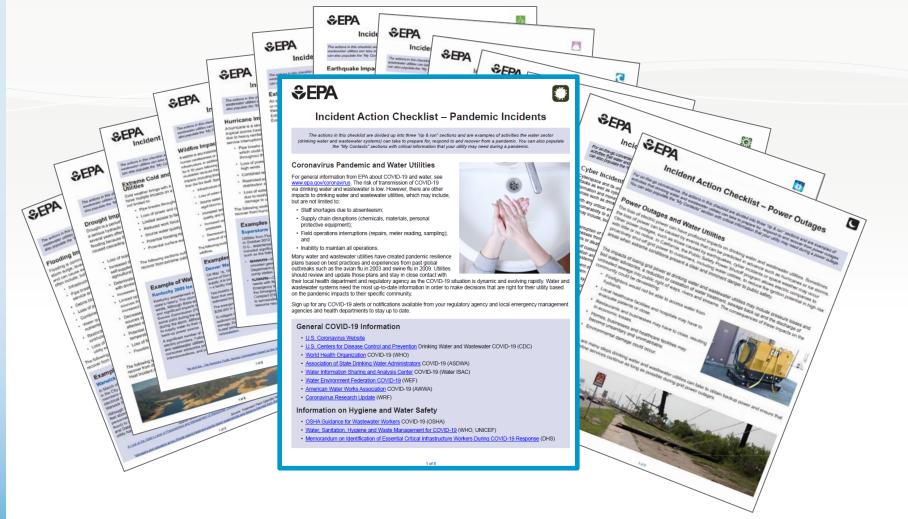
Documentation

- Document all events, timeframes, and resulting impacts, so this information can be used as part of the post-incident investigation.
 - Be sure to document all hours (regular and overtime) and keep invoices for all equipment, supplies, contracts, vendors, etc.

- Document hours
- Document all purchases
- Document any mutual aid agreements or assistance







Download the checklist at: https://www.epa.gov/coronavirus/water-utility-resources-covid-19-pandemic
OR

https://www.epa.gov/waterutilityresponse/incident-action-checklists-water-utilities

Dawn Ison
Ison.dawn@epa.gov



COVID-19 HOW IT HAS AFFECTED MARBLETON, WYOMING

PUBLIC WORKS DIRECTOR
TODD BROWN



We are located in Southwestern Wyoming at 6,869 FT Elevation Population: 1,094

3 elevated water tanks with combined compacity of approx. 700,000 gallons of potable water

7 wells 300 Ft to 1,100 Ft deep

Approx. 380 water services

3 licensed water operators

Marbleton also maintains a 1.2 MGD wastewater plant

WE HAVE A TOWN STAFF OF 6 FULL TIME EMPLOYEES, WE ARE CONSIDERED TO BE A SMALL COMMUNITY.









All 3 licensed operators becoming sick at the same time
Can't get needed fuel and supplies
Maintaining a safe workable schedule for all employees
Being able to supply town with potable water and wastewater services
Maintaining a positive proactive atmosphere





Fueled all vehicles and equipment

Made contact with nearest towns

Practice work place distancing (1 person per vehicle)

Arrange work schedules to keep workforce separated

Contracted out some work to keep utility operators away from each other and the public

Checked all back up generators by starting them and letting them run

Stocked up on cleaning supplies and chemicals

Spoke with all employees about staying home if they were not feeling well

Reminded all employees about hand washing, disinfecting, and sanitizing guidelines

Utilize online and phone meeting platforms for all public and employee meetings



As of April 6, 2020, the State of Wyoming has recorded 212 positive cases, of which 52 have recovered. The State has reported 0 COVID deaths at this time.

Here in Sublette County, we have 1 confirmed positive case of COVID-19 and she now is listed as recovering.

I encourage you to follow CDC recommendations and stay home whenever possible. Stay safe and think of others.





Questions?



Upcoming Water Security Division Webinars

May 2020 AWIA Compliance Lessons Learned

June 10, 2020 AWIA Guidance for Small Systems

July 29, 2020 Building Security and Resilience with EPA in

the Water and Wastewater Sector

August 19, 2020 Resources for Public and Environmental Health Labs



Thank you!

Dawn Ison

USEPA, Water Security Division <u>Ison.Dawn@epa.gov</u>

www.epa.gov/coronavirus

