INCIDENT ACTION CHECKLIST - PANDEMIC INCIDENTS

Source: United States Environmental Protection Agency, Incident Action Checklist, Pandemic Incidents


Summary of relevant information and actions:

- The risk of transmission of COVID-19 via drinking water and wastewater is low and has not been detected in drinking water. Conventional water treatment methods that use filtration and disinfection, such as those used in the most drinking water systems, should remove or inactivate the virus that causes COVID-19.

- Impacts to drinking water and wastewater utilities include:
  - 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.

**ACTIONS TO PREPARE FOR A PANDEMIC**

**Planning**

- Identify a lead, back-up, and team of individuals to serve as the Pandemic Response Team.
- Develop a process for maintaining situational awareness of the current and future spread of the virus, as well as community impacts.
- Develop strategies for managing the pandemic such as:
  - Identifying response actions based on current information and the system’s emergency response plan and continuity of operations plan.
  - 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. Resources to help in the development of the plan include the Pandemic Continuity of Operations Template and Business Continuity Planning for Water Utilities: Guidance Document. The COOP should include, at a minimum, plans for the following:
    - Defining Roles and Responsibilities during the Pandemic
    - Protecting Employee Health
    - Maintaining Essential Operations and Critical Positions
    - Maintaining Essential Equipment, Materials and Supplies
    - Communications
    - Addressing Community Mitigation Impacts
    - Impacts of required social distancing, quarantine, school, and business closures, etc.
    - Identifying Delegations of Authority. Including orders of succession, training, cross-training and pandemic plan training
  - Join your state’s Water and Wastewater Agency Response Network (WARN) or other local mutual aid network.
  - Check to see if you are included in a statewide mutual aid law.
  - WARNs may be able to provide assistance in the form of personnel, equipment, materials and technical assistance.
  - 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.
  - Assess your system’s Information Technology (IT) capability to ensure it can accommodate remote work arrangements without compromising security.
  - 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 Will have the ability to conduct field work when necessary if quarantines are placed on a community.
DHS developed a memorandum 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.
- Conduct internal and external (e.g. EMA, health department, regulatory agency) pandemic specific tabletop exercises regularly.
- Be sure to conduct remote exercises to ensure capability during a pandemic.

**Protecting Employee Health**

- Reinforce good personal hygiene practices with all staff.
- Post proper hand washing techniques, with pictures, at all sinks.
- Share preventative measures (washing hands, covering cough, not touching face, etc.) provided by the CDC to minimize risk.
- Ensure availability of adequate personal protective equipment (PPE), infection control (hand sanitizer, tissues, disinfecting wipes, electronic cleaners), and cleaning supplies. The disinfection of electronics may require specific supplies.
- Set up a pandemic policy for screening employees for symptoms, setting up extended sick leave and telework, keeping critical staff on-site for an extended period of time (with access to beds, food, water, medical supplies, communications), and social distancing in the office (no meetings, keeping 6 feet apart, etc.).
- Establish pandemic-specific health and safety protocols for field sampling conducted by staff or others providing sampling assistance in the event of staff shortages.
- Work with staff to develop their own family response plans so their families are taken care of during a pandemic while they are working.

**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).
- 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 RCAP, NRWA, RUS, IHS, ITCA, and USET 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).
- 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.
- The Water Laboratory Alliance (WLA) is a nationwide network of laboratories that serves the water sector. The WLA is part of the national Environmental Response Laboratory Network. Encourage your laboratory to become a member of the WLA to ensure national capabilities during a pandemic.

**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).

**Communication**

- 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.
Initial Actions

- Activate your Pandemic Response Team
- Execute your pandemic COOP and Emergency Response Plan
- Activate defined emergency roles and responsibilities
- 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).

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.
- Communicate with customers via phone, email, social media, and websites.
- Offer payment options online, via mail, or through drop boxes.
- Temporarily suspend any in-home non-sampling appointments by staff such as water efficiency visits. Compliance sampling activities must continue. Work with homeowners concerning any health and safety issues with compliance sampling and follow established pandemic-specific health and safety protocols.
- Consider temporarily suspending drinking water shut-offs due to non-payment in order to protect staff and maintain essential water services to individuals.
- 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.
- Increase the frequency of cleaning and disinfecting all surfaces and equipment, including control rooms, vehicles, computers, phones, tablets, break rooms, and conference rooms.
- Implement telework for as many staff as is feasible to maintain operations.
- Assess all construction and maintenance activities and limit to only critical projects.

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 on your situation.
  - Reach out to your WARN. WARN members may be able to assist with personnel, equipment, supplies, and technical assistance.
  - If you are not a WARN member or your WARN is unable to assist, reach out to neighboring utilities and develop mutual aid agreements, if possible.
  - Reach out to your local assistance providers such as RCAP, NRWA, RUS, IHS, ITCA, and USET 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 (license level, plant rating, treatment, drinking water, wastewater, etc.).
  - Make immediate preparations to house critical staff on-site (with access to beds, food, water, medical supplies, communications, etc.).
  - 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.

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.

Communication

- 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.
- If there is a temporary loss of water (line break, pump failure), remind customers to use the CDC-recommended alternative to hand washing, which is hand sanitizer with at least 60 percent alcohol content.
- 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.

**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.

**Actions to Recover from the Pandemic**

• Assign a utility representative to continue providing updates to customers regarding current mitigation actions, as well as preparation for future incidents.

• Work with vendors and internal departments to return to normal service.

• Develop a lessons-learned document and an afteraction report (AAR) to document your response 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.

• Revise budget and asset management plans to address increased costs from response-related activities and follow-up actions. Identify mitigation measures that can help increase utility resilience for future pandemics.

• Conduct annual utility-specific pandemic awareness training with all employees.

For further information contact either of the undersigned. Please feel free to distribute at your discretion.

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