Questions & Answers

Responding to a pressure-loss event

What is a pressure-loss event and what causes it?
A pressure-loss event occurs when pressure in the water distribution system drops significantly below normal. These events may be planned or unplanned and they can happen at any time—day or night. For example, system operators may intentionally reduce pressure in the distribution system when they install, replace, or repair water lines. Broken water mains, failed pumping systems, power outages, leaking storage reservoirs, and high demand, such as fire flow, can cause unplanned pressure loss within parts of the distribution system, or throughout the system.

Should water system operators be concerned about pressure-loss events?
Yes. Pressure loss events can pose a serious threat to public health. A significant reduction or complete loss of pressure in a part of the distribution system may allow contaminants from an end-user or the environment to enter the distribution system. Microbial, chemical, or physical contaminants that enter the distribution system through unprotected cross connections, or through openings in the underground piping system, may cause widespread illness, injury, or worse.

What should water system operators do if a pressure-loss event occurs?
- **Identify** who is in charge.
- **Find** the cause of the pressure-loss problem. Call us if you need help (see page 2).
- **Identify** the affected area and work to restore pressure as soon as possible.
- **Call** our regional office (working hours) or our after-hours number (see page 2). We’ll help you decide which customers you need to contact and whether to issue a health advisory. Your first priority is to protect your customers’ health.
- **Communicate** with affected customers about what happened. Tell them what they should do to protect their health, and what system operators are doing to correct the situation.
- **Flush** affected parts of the distribution system to remove any contaminants. Your flushing plan should effectively move any known contaminants to the nearest point of discharge without unnecessarily spreading contamination through the distribution system.
- **Disinfect** affected parts of the system to reduce the risk of waterborne disease. If you don’t normally disinfect, you should notify your customers before adding a disinfectant.
- **Sample** the distribution system after you restore normal operating pressure, including coliform samples and possibly certain chemical samples, to confirm your system meets drinking water standards.
Should operators prepare customers for unexpected pressure loss?
Yes. Educate your customers beforehand so they are prepared for a water system emergency. Let your customers know that:

- **Customers** who experience a loss of water pressure should first determine whether the cause is a failure in their building plumbing system. If so, they should contact a plumber. If not, they should contact you to report where and when the pressure loss occurred.
- **You** will keep them informed of the situation, make necessary repairs, and sample following an unexpected pressure-loss event. In the absence of immediate information from you, customers should plan to use bottled water in place of tap water.
- **Everyone** should prepare for a water system emergency by planning to use bottled water in place of tap water for at least 72 hours. The American Red Cross recommends storing at least one gallon of water per person per day.

Should water system operators provide public notification?
Yes. If your system experiences a loss of pressure, or you plan a water outage associated with repairing a water main, you should promptly notify affected customers to describe:

1. The cause of the pressure loss.
2. The affected area.
3. What the water system is doing to solve the pressure-loss problem.
4. What consumers should do as their system begins to re-pressurize, before they use the water for drinking, making ice, brushing teeth, washing dishes, and food preparation.
5. How consumers will know when the water is safe to use.

If the pressure loss is system-wide, contact all customers. If the pressure loss is localized, notify only affected customers.

If you are certain the risk is limited to microbial contamination, use the *Drinking Water Warning: Loss of Pressure* public notice referenced below. If the risk assessment points to possible chemical contamination due to backflow, use the *Drinking Water Warning: Backflow Incident* public notice referenced below.

For more information
The following publications are online at https://fortress.wa.gov/doh/eh/dw/publications/publications.cfm

- *Coliform Public Health Advisory Packet* (331-260)
- *Emergency Disinfection of Small Systems* (331-242)
- *Responding to a Backflow Incident* (331-494)
- *Drinking Water Warning: Loss of Pressure* (331-493F)
- *Drinking Water Warning: Backflow Incident* (331-495F)

Call our regional office:

- Eastern Region 509-329-2100
- North West Region 253-395-6750
- Southwest Region 360-236-3030
- After-hours emergency number: 1-877-481-4901

For people with disabilities, this document is available on request in other formats. To submit a request, please call 1-800-525-0127 (TDD/TTY call 711).