

Water Main Breaks



What to expect if a water main breaks nearby

Main breaks can cause a loss of water pressure, or even temporary loss of service, as the main is shut down to isolate the emergency.

Affected customers are notified as soon as possible by either direct notice by Authority personnel, or by our Emergency Notification System. Notifications will also be posted on the Authority website and other media platforms.

Most interruptions to water service are fixed within six to eight hours. In some cases, such as water main breaks that occur in the middle of the night, water is usually restored by the following day.



DON'T WORRY!

Unless you're told otherwise by a representative of Muhlenberg Township Authority, your water is safe to drink.

How will Muhlenberg Township Authority respond?

- **IDENTIFY:** What type of leak is happening? How urgent is the situation? Is it from a main or a customer water pipe? We may shut down the water to isolate the emergency. Specialized crews assist with the shutdown of large water main breaks.

- **CONTAIN:** An emergency crew shuts down the main if it is causing damage or flooding, and repair crew is assigned. A Muhlenberg Township Authority spokesperson may provide updates to news media, while a Field Supervisor on site keeps affected property owners informed. Generally, this occurs when there are multiple properties without water, significant damage and traffic disruptions.
- **PINPOINT:** If we need to dig, a call is made to PA One Call, and other utilities are marked, including gas, electric, telephone, cable, or others with underground facilities. If the leak is on a Muhlenberg Township Authority main, we will arrange to have utilities marked and take steps to protect the public's safety.
- **REPAIR:** If it's our main, the repair crew digs, repairs or replaces the damaged pipe, and coordinates arrangements for traffic. Typical time is 8-12 hours from the time our crew begins working. This estimate may be shorter or longer depending on the situation.
- **RESTORE:** Repair crews flush the line, disinfect the main if needed, and patch the road.

What to do after Muhlenberg Township Authority crews finish working?

Pipe replacement or repairs to water service near your home can allow sediment and debris to enter your pipes. Here are some tips for clearing debris from your pipes after street repairs have been made:

- **Flush your home plumbing for 30 minutes to clear debris from your pipes.** Use your outdoor garden hose, a utility sink, or bathtub if possible. These generally have a larger capacity and do not have faucet aerator screens, which can trap debris. **You only need to flush your pipes once.**
- Clear faucet screens to remove debris that might cause clogs.

Why do water mains break?

Water mains fail when the stresses placed upon them are greater than the strength of the pipe. Water mains don't get stronger with time - in fact, they generally get weaker, due to internal or external corrosion.

External forces on a water main include:

- Traffic loading
- Temperature changes
- Underground work that leads to direct or indirect impact to the pipe

The imbalance of stresses to the strength of a pipe may show itself in various ways, such as:

- Joint leaks
- Pipe breaks
- Service line detached from a main

Types of Mains

There are three different categories of pipe transport water from our wells to a customer's property:

- **Transmission Mains:** large mains with a diameter of 12 inches or greater, used to move large amounts of water across the Township between pump stations and reservoirs.
- **Distribution Mains:** smaller mains used to deliver water from transmission mains to customer service lines.
- **Service Connections:** individual connections from the distribution main to the curblineline of each property. This section of the service connection is owned and maintained by Muhlenberg Township Authority. The service connection from the curblineline to the building or home is owned and maintained by the property owner.

How is Muhlenberg Township Authority attempting to reduce water main breaks?

Muhlenberg Township Authority has several ongoing programs to prevent main breaks and other pipe failures. We continually monitor our infrastructure to minimize disruptions while continuing to provide safe and efficient service.

Main Replacement

The goal of this program is to maintain a high level of water service and system reliability, while still achieving a full, useful life for every water main. The program uses several key items to prioritize replacement and provide a systematic approach to management of assets. Generally, the items used to determine when to replace a main are:

- Frequency of breaks in the area
- Age of the main
- Type of main
- Condition of main found during repairs

Leak Detection

Leak detection analysis focuses on non-visible leaks on both transmission and distribution mains. Acoustic devices are used to analyze the system on a regular basis to find non-visible leaks.