

Flushing your household plumbing after a water service restoration

In response to the COVID-19 pandemic, many water utilities are restoring water service to homes where service was previously shut off due to non-payment. Water utilities are trying to respond quickly to this urgent need and should provide instructions on how to flush household plumbing to restore water quality in the home after extended water shutoffs. The flushing instructions that follow are one example of the steps you can take in your home to reduce risk of exposure to potential contamination in household plumbing due to extended shutoffs.

Long-term shutoffs cause water quality problems in household plumbing. Water sitting for long periods in pipes and hot water tanks grows bacteria. Stagnant water and air in unused plumbing corrode the pipe surfaces, allowing lead and other metals to dissolve and flake into the water.

Each house will have different flushing needs based on the materials in the plumbing, age of the home and plumbing, plumbing condition, and the duration of shutoff. The following set of flushing instructions is recommended for use after a water restoration to reduce your risk of exposure to lead, other metals, and bacteria that may be present. These steps are general guidance intended to reduce your risk, but it is not going to address all scenarios or conditions. Consider the condition of your plumbing and duration of shutoff as you implement these steps and contact your water utility or plumber if you have concerns about your home.

The longer the shutoff, the more important each of these steps are. These steps are designed to reduce risk in older homes with lead service lines and galvanized plumbing, where shutoffs may have lasted months and sometimes years.

Once you have completed the flushing steps in the infographic, you may also want to look at this additional information sheet for water using appliances you may have in your home:

[EGLE guidance on appliances that use water for consumption](#)



IS YOUR WATER BEING TURNED BACK ON?



Take these steps to protect your family from lead and other contamination.

STEP A

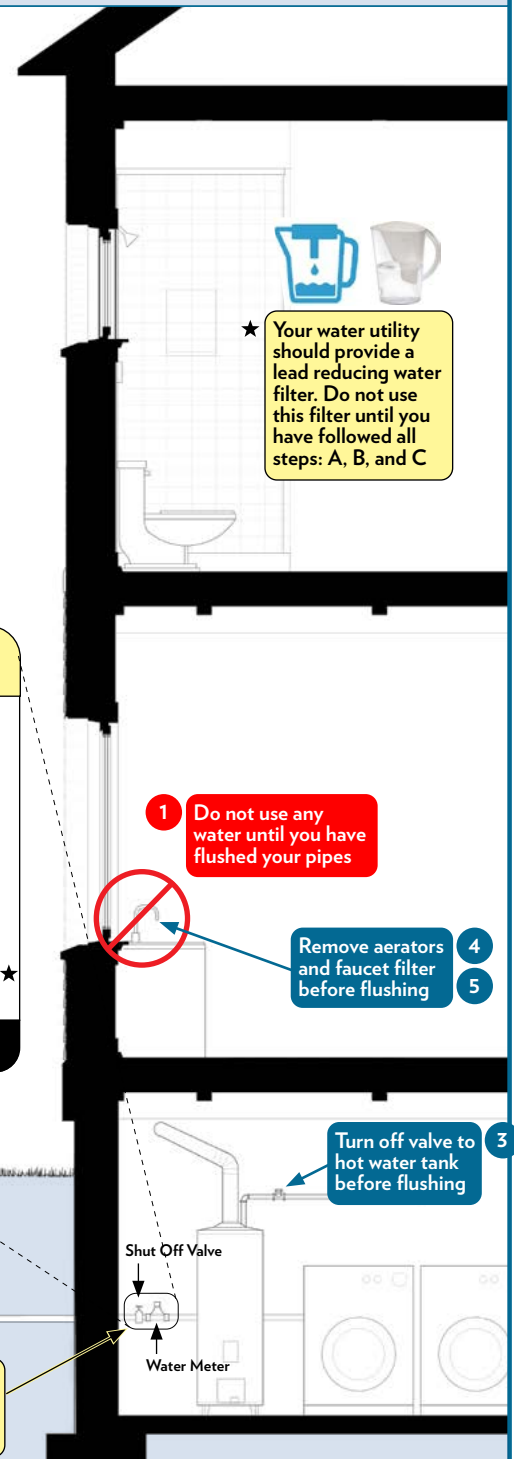
WHEN YOUR WATER UTILITY IS AT YOUR HOUSE TO TURN ON WATER:

YOUR WATER UTILITY SHOULD:

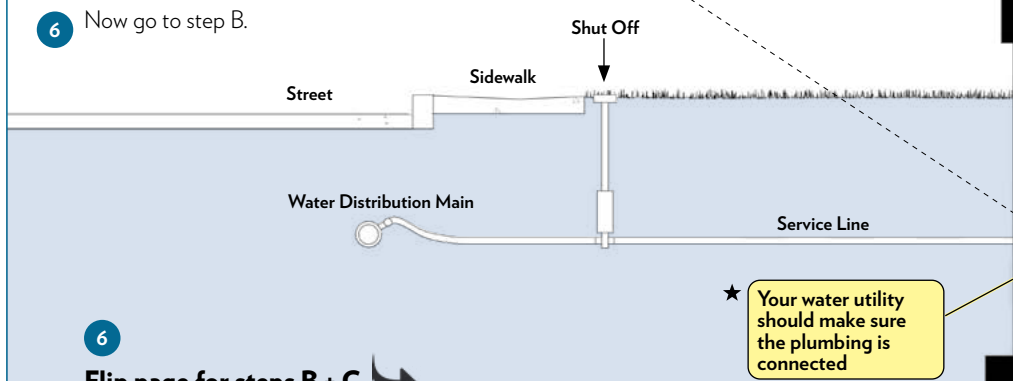
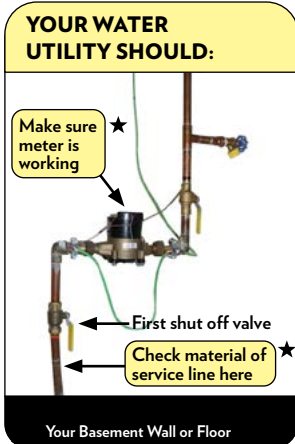
- ★ Make sure the plumbing is connected (both water lines and drain lines).
- ★ Make sure the water meter is working.
- ★ Check your service line and tell you what it is made of. **If it is a lead pipe, you should take extra precautions for drinking and cooking water in your home.**
- ★ Provide a lead reducing water filter.
- ★ Provide instructions on how to flush your service line (flip page for step B).

NOW, PREPARE TO FLUSH YOUR PIPES:

- 1 DO NOT** drink tap water, open your hot water faucets, use your icemaker or filtered water dispenser until all flushing steps are complete. When water is not moving in your house, the pipes start to corrode and harmful bacteria can grow. Flushing your pipes with fresh water after your water is turned back on reduces bacterial growth and reduces your risk of exposure to lead, metals, and bacteria.
- 2 Follow all steps (A, B, and C)** to flush your service line AND your household plumbing.
- 3 Turn off the water to your hot water tank**, disconnect hoses and close valves to outdoor plumbing before flushing.
- 4 Remove aerators from all water faucets** in your home by turning clockwise to loosen. **This step is very important!** Flushing with the aerator on will make your water quality worse. If aerators are difficult to remove, try using rubber gloves, a wrench, or pliers, or ask for help.
- 5 Do not use a filter when you are flushing.** If you have a filter on your faucet, remove or bypass the filter.
- 6** Now go to step B.



★ Your water utility should provide a lead reducing water filter. Do not use this filter until you have followed all steps: A, B, and C



6 Flip page for steps B + C →

STEP B FLUSH YOUR SERVICE LINE

- 7 **Beginning in the lowest level of your home**, open all the cold water faucets in the house, including sinks, showers and bathtubs.
- 8 **Let the water run for 30 minutes** at the last faucet you opened on the top floor.
- 9 **Turn off each faucet** starting with the first one you opened (bottom floor).

STEP C FLUSH YOUR PLUMBING

- 10 Once you have completed step B, with the aerators still off, start again from the bottom floor and **turn on each kitchen and bathroom tap, one at a time**. Run each tap for 10 minutes or more. Make sure only one tap is running at a time. This will push out stagnant water and fill household pipes with fresh water.
- 11 **Your hot water tank should be drained** before using any hot water in your house. If your water heater is working, open the valve to the tank and turn the water temperature up to 140 degrees F, or to the high setting. Wait for the tank to come to temperature, about 45-90 minutes. Find the hot water tap closest to the tank, typically a laundry tub, and run the water until the hot water tank is drained and cold water runs from the tap. Turn off the tap. Wait another 45-90 minutes until the water is hot again and flush each hot-water tap in the house, one at a time, for 10 minutes or more at each tap with the aerators still off. When you finish flushing, turn the water temperature down to 120 degrees, or to a medium hot setting, to prevent burns.
- 12 **Leave the water heater off and the valve closed if you are unable to complete step 2.**
- 13 **Clean the aerators** with an old toothbrush, rinse, and reinstall them, turning counterclockwise.

ONGOING WATER USE IN YOUR HOME

1. After you have flushed your pipes, the plumbing may still not be clean enough for drinking or showering. You can use the water for handwashing, toilet flushing, cleaning, and laundry.

Use the water every day to keep the water moving and improve water quality in your house.

2. **Keep a supply of bulk water for drinking and cooking until water is ready to drink.**

3. Never drink or cook with hot water from the tap. Always use cold water.

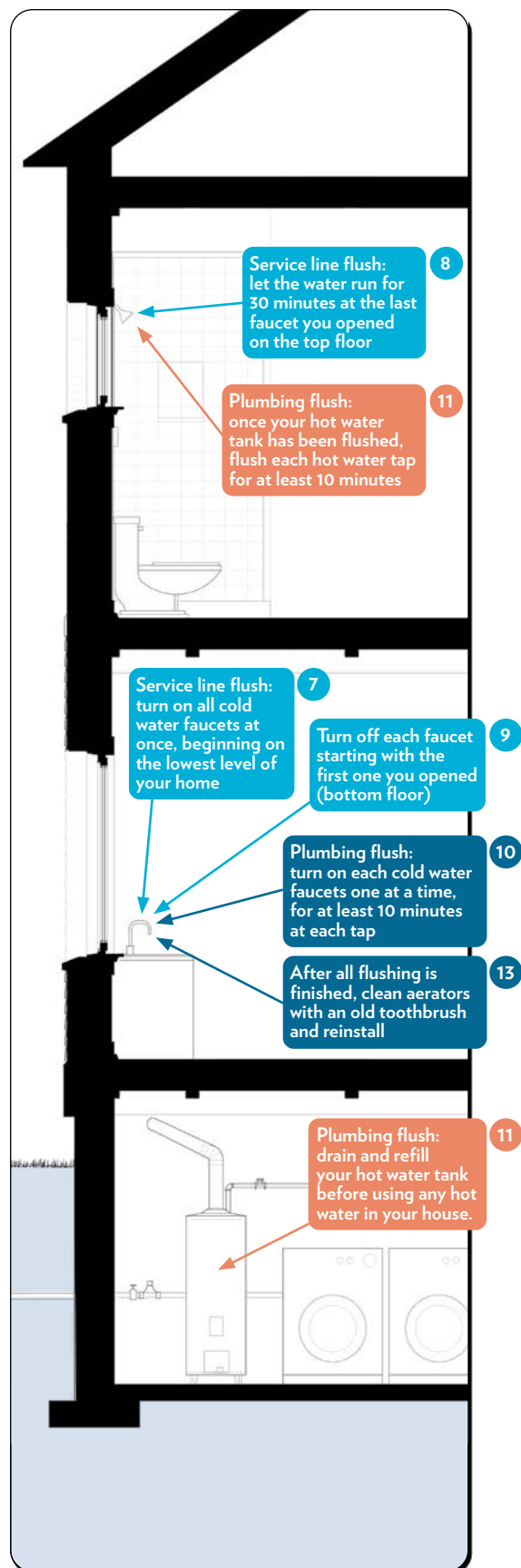
4. **Remove and clean the aerators regularly**, even if you are not drinking the water. This will help to clear sediment and biofilms from your plumbing.

5. **Use a water filter** that meets ANSI/NSF standard 53 for lead reduction when you are ready to use the water for drinking and cooking. If you already had a filter installed on a faucet, replace the cartridge before using.

6. For pitcher and faucet mount filters, **change the filter cartridges** according to the manufacturer's instructions or they will not work.



Scan this QR code to watch a video that demonstrates how to remove your aerators and flush your service line



Sources: [Detroit Water and Sewerage Department](#) Flushing video; [Michigan Department of Environment, Great Lakes and Energy](#) Flushing your house plumbing system when water services are restored; [American Water Works Association](#) Notice on returning homes to service; Safe Water Engineering LLC.
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