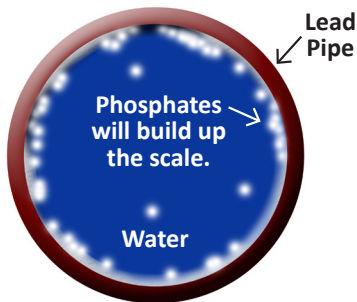
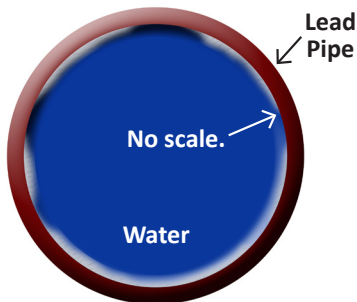


# Adding Phosphate to Flint Water

## Why is there lead in some homes' water?

- Lead pipes, solder, and faucets used to be common. We now know that lead can harm our health.
- Homes built before 1987 are more likely to have lead service lines and pipes. Some faucets and certain kinds of solder could also have lead in them, even those installed recently.
- The lead found in tap water in homes around Michigan is likely from these older pipes, solder, and faucets.
- Replacing old pipes, service lines, and faucets is the only sure way to limit the lead in your tap water.
- New pipes, solder, and faucets should meet EPA lead-free standards.

## Why are we putting phosphate in the water?



- Over the years, minerals in our water have built up inside our water pipes.
- This mineral build-up is called scale.
- This scale helps to keep a lot of lead from the pipes out of our water.
- If something happens to the scale and the water can touch the pipes, lead can get into the water.
- Adding phosphate to the water helps build and maintain scale by collecting on the sides of the pipes and sticking to the metal.

## What is Phosphoric Acid?

Although there is already some phosphate in the water we get from Detroit, Flint plans to add more to help build up and maintain the scale faster. To get the phosphate needed for this to work, the City of Flint Water Plant will be adding something called *phosphoric acid* to the city's water. Phosphoric acid is a common food ingredient in things like cola or juice.

The phosphoric acid will quickly dissolve in the water and break down into two parts - hydrogen and phosphate. Hydrogen will become a part of the water and the leftover phosphate will settle out and stick to the walls of the pipes - building up scale like in the picture above.

## Learn About Phosphate

- Phosphorus is a natural mineral that your body needs. It works with calcium to keep your bones strong and healthy.
- Phosphate is a type of salt that has phosphorus in it.
- Although there already is phosphate in the Detroit drinking water, extra phosphate is being added to the water in the City of Flint to help put more scale in the pipes.
- The City of Flint, MDEQ, and the EPA worked together to find how much more phosphate is needed in the water going to Flint homes.
- Most people likely already eat and drink more phosphate in everyday food than the very small amount that will be found in the tap water.
- Continue to use water filters that remove lead until the Genesee County Health Department's Public Health Emergency Declaration is removed.

If you have questions about the phosphate being added to City of Flint water, please call the City of Flint Water Plant at 810-787-6537.

If you have questions about phosphate and your health, please call MDHHS at 1-800-648-6942.