WislerB041-178 Rewrite – Suggested Title: **Determining if Your Home’s Drinking Water is Safe and Healthy**

When it comes to what’s in our water, how can homeowners figure out what’s safe and healthy to consume? This is a very interesting topic to talk about, especially because of events like the Flint water crisis that are going on around the country. The reality is, we take it for granted that our water is suitable to drink. That may or may not be true, and it’s important that homeowners are educated about the different things that should (or shouldn’t) be in the water, especially if they rely on a community to provide water or they use a municipal water system. Drinking water regulation *does* exist, and the standards apply to any public water source. A public water source is defined as a system that provides potable water to five or more homes.

First, let’s cover a few things that are in the primary regulated standards. (There are lots of other things that technically cannot be in the water, but we’ll go over the main ones for the sake of simplicity.) There are no bacteria or microorganisms allowed in a regulated drinking water system. These are things that would be harmful to someone if ingested, potentially resulting in stomach issues and/or sickness. If you have a private water system, you should get a lab test for verification. It’s the responsibility of the system’s owner to take a sample to a lab and have it tested for bacteria.

Lead is another thing that’s regulated, which can be harmful to infants or pregnant women. In rural areas where fertilizer is spread, nitrates from the fertilizers can get into the water source. Chlorine is put into water to remove bacteria and make it safe to consume. Four parts per million is the limit allowable in a public water source. To put that into perspective, the recommended level of chlorine in a swimming pool is *half that amount*, at two parts per million. If you’re drinking water that falls well within the accepted level, you’re practically drinking swimming pool water. That’s a tremendous amount of chlorine.

Next, let’s take a look at the secondary standards. These are things that aren’t necessarily harmful to you, but they can potentially be harmful to your plumbing system, fixtures, or appliances. Hardness in the form of calcium can cause scale buildup, and it’s a non-regulated item. PH is a regulated item, and it should be 6.5 or higher (7 is perfect). Iron is a regulated item. It isn’t harmful, but it will stain and clog up fixtures. Knowing the differences between primary vs. secondary standards goes a long way towards understanding your water.

All municipal systems are required to either send out a letter or at least publish a public letter annually, which shows what’s in the water. If you haven’t received a letter, you’ll have to go online to find the published version that shows the content that was tested for in the municipal system. As far as what we can do at Wisler Plumbing, right now we’re running a special where we perform a comprehensive water test for things like lead, chlorine, nitrates, hardness, pH, and iron for $21.95. It doesn’t test for bacteria, however. This comprehensive test will allow you to find out if these things are in your water and whether or not it meets the national primary drinking water standards.

Great water is water in its purest form, with very little contaminants or materials in it. If you have a lot of stuff in your water, it’s probably not *great* water. Your best bet is to drink water that hasn’t picked up any contaminants or other things during the hydrologic cycle. If you have any questions about our comprehensive test for $21.95, [contact us online](http://www.wislerplumbing.com/contact-wisler-plumbing/) or give us a call at 540-483-9382.

WislerB041-178 Transcription

**Shayla:** Thank you for joining us today for the Wisler Plumbing Podcast. I am talking with James Wisler. James, when we’re talking about what’s in our water, what is supposed to be there and what’s not and how do we figure that out?

**James:** This is a very interesting topic just simply because, you know, it’s definitely a topic of conversation with some of the things that are going on around the country with like the Flint water crisis and those type of things and the reality is is that we just take for granted that our water is safe and that our water is good water and that may or may not be true and so therefore, it’s important for those individuals that own a home to be educated, especially if they have a community that is providing water for them or a municipal system it’s very important for that homeowner to be educated on, you know, the different things that are in the water, can be in the water, and should or should not be in the water. One of the things that I’ll start off by saying is is that there’s definitely, there’s such a thing as drinking water regulation and that basically is any public water source has to be regulated by those standards and a public water source is defined by a system that provides potable water for five or more homes. So if that is the case, there’s definitely really no bacteria or microorganisms that are allowed in the water. Those are things that would be harmful to someone to ingest and they would make them not necessarily really sick, depending on their health, but it definitely would make someone sick so there cannot be any bacteria or microorganisms in a regulated drinking water system. And that’s definitely something that if you have a private water system, you should test that. That is the responsibility of the system’s owner to, you know, take a lab sample and to take it to a lab and have it tested for bacteria. Stomach issues and just sickness can be derived from bacteria in the water. Another thing that is regulated is lead and lead can definitely be harmful to infants, those that are, you know, women that are pregnant, those type of things are very susceptible to lead content and it is regulated and it should be monitored and then next chlorine and nitrates. Chlorine is put in the water to make it safe, to remove any type of bacteria. Four parts per million would be the limit of what that would be. Just to put that into perspective, a swimming pool recommended level would be two parts per million. So the accepted standard in drinking water is four parts per million so the reality is there is an accepted level that you could be drinking swimming pool water and that’s obviously if you think of a swimming pool, there’s a lot of chlorine in it so four parts per million is a tremendous amount of chlorine and then nitrates come from fertilizers and in rural areas that a fertilizer is spread, that’s a byproduct of fertilizer is it gets into the water source so those are things that are primary standards. Now, there’s a lot of other technical things that cannot be in the water, but just for simplicity, those are a few things that are in the primary regulated standards. Next, there’s secondary standards and these are things that aren’t necessarily harmful to you, however, they can be harmful to a plumbing system or they can be harmful to appliances and definitely stain plumbing fixtures, that kind of thing and those are like hardness which is calcium. That’s gonna cause scale buildup. That is a non-regulated item. PH is a regulated item, it should be 6.5 or higher. 7 would be perfect and then iron is a regulated item but it’s not going to be harmful. It’s just a nuisance type thing. It’s going to stain and clog up fixtures and that type of thing so just knowing your primary standards versus your secondary standard can be a good start to understanding your water. The next thing that I’ll say is most all municipal systems are required to send out a letter or to at least publish a public letter of what is in the water on an annual basis and so if you’re not sure, if you haven’t got that, go online and see if you can find the published version of the content that has been tested in the municipal system. As far as what we can do, we right now are running a special that we will do a comprehensive water test and it would test for things like lead, chlorine, nitrates, hardness, pH, iron, those type of things. It does not test for bacteria, however, those tests can be done. But our $21.95 comprehensive water test is going to allow you to know if those things are in your water and if your water does meet the national primary drinking water standards. I will say this, that great water has very little in it. Water in its purest form is free of any contaminants and if you have a lot of stuff in your water, then it’s probably not very great water and so the best water that you can have is that water that is just free from any contaminants or things that it has picked up in the hydrocycle.

**Shayla:** All right, so don’t take for granted that your water is great. You want to make sure that it is by doing that comprehensive test with Wisler Plumbing. If you have any more questions about anything James talked about today or want to schedule that test, give them a call at 540-483-9382.