City of Phoenix
WATER SERVICES DEPARTMENT
Quality Reliability Value

Statement from Phoenix Water Services Director Kathryn Sorensen

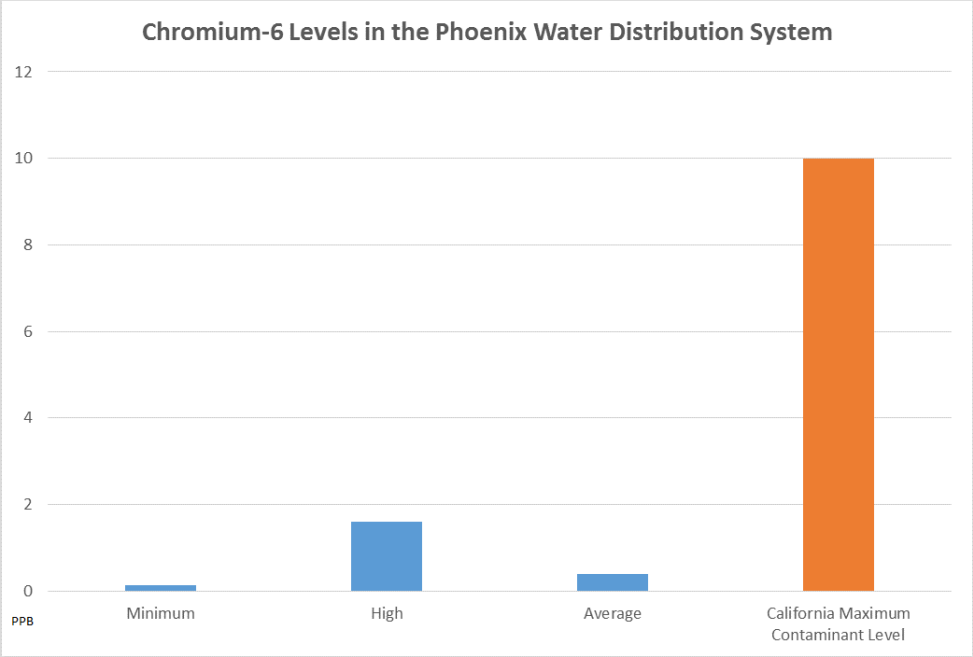
"When it comes to the safety of Phoenix drinking water, facts matter.

Here are the facts:

- A recent report claimed that the average level of chromium-6 in the city of Phoenix drinking water supply is 7.853 parts per billion. *This number is misleading because it doesn't take into consideration that chromium-6 comes mainly from groundwater and groundwater makes up only approximately 2% of Phoenix's water supply.*

- The report was based on the state of California's maximum contaminant level of 10 parts per billion. *Based on the latest round of sampling, chromium-6 levels in Phoenix drinking water delivered to customers ranges from a low of .13 parts per billion to a high of 1.6 parts per billion and average .39 parts per billion. These numbers are well below California's maximum contaminant level of 10 parts per billion.*

- ***Phoenix tap water is safe to drink. More than five million tests and measurements are performed each year in Phoenix's water treatment and distribution systems. Tap water is heavily regulated and Phoenix water is closely monitored by the Environmental Protection Agency and the Arizona Department of Environmental Quality."***



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Frequently Asked Questions About Chromium-6

Phoenix Water meets or exceeds *ALL* Environmental Protection Agency standards for drinking water.

Tap water quality includes complex issues related to testing, chemistry, and engineering. This document is intended to explain the quality and testing of Phoenix's tap water and some of the water-related topics that are featured in the news from time-to-time.

Is Phoenix tap water safe to drink?

Yes. The city of Phoenix works 24/7, 365 days of the year to provide high quality tap water to our customers. Phoenix tap water meets or surpasses all federal and state requirements for health and safety.

How does the city test the water?

More than five million tests and measurements are performed each year in Phoenix's water treatment and distribution systems. That means every day the city performs *thousands* of tests using state of the art equipment and laboratories to test for more than 100 substances. Be assured that if water quality is ever an issue in Phoenix, customers will be notified.

What is chromium-6 and how does it get into water supplies?

Chromium is an element of our earth and is found naturally in rocks, plants, soil and volcanic dust. According to the American Water Works Association, chromium is the 21st most abundant element in the Earth's crust, and the major source of hexavalent chromium (known as 'chromium-6') in drinking water is from naturally occurring chromium present in volcanic geologic formations. It can also be discharged from industries including facilities making steel and other alloys, chrome-plating, dyes and pigments, leather-tanning and wood preservation.

Does Phoenix monitor and test for chromium-6 in its water supply?

Yes. Phoenix Water monitors for total chromium as required by the Environmental Protection Agency (EPA) under the Safe Drinking Water Act. Total chromium includes chromium-6 and all tests for total chromium have been within standards. Currently, the EPA, which creates standards for tap water, does not have a separate standard for chromium-6; however Phoenix Water has tested for chromium-6 through the EPA's Unregulated Contaminant Monitoring Rule (UCMR).

Below is what was found during the latest round of UCMR testing. Phoenix Water supplies around 98% surface water and 2% groundwater to its customers, all of which is blended in our distribution system; the distribution data represents the water our customers receive in their homes.

City of Phoenix UCMR 3 Chromium-6 Monitoring Results				
Chromium-6	parts per billion (ppb)	Lowest Level	Highest Level	Average
		Surface Water – 98 % of Phoenix Water Supply		
		<0.03	1.6	0.35
		Ground Water – 2% of Phoenix Water Supply		
		<0.03	54.0	16.5
		Distribution Sites – **The Water Delivered to Customers**		
		0.13	1.6	0.39

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What is the difference between total chromium and chromium-6?
Total chromium includes chromium-6 and chromium-3. Both are covered under the total chromium drinking water standard because these forms of chromium can convert back and forth in water and in the human body, depending on environmental conditions. Chromium-3 is a required nutrient and has very low toxicity. Chromium-6 is more toxic and has been known to cause cancer when inhaled. In order to ensure that the greatest potential risk is addressed, EPA's regulation assumes that a measurement of total chromium is 100 percent chromium-6, the more toxic form.

Does Phoenix meet the total chromium standard set forth by the EPA?
Phoenix Water's total chromium levels are well below the EPA standard of 100 parts per billion. The highest level detected in the Phoenix Water distribution system was 1.7 parts per billion.

The September 2016 report by the Environmental Working Group said that Phoenix had a chromium 6 level of 7.853 parts per billion. Is that number accurate?
The Environmental Working Group appears to have taken all of the samples for chromium-6 that Phoenix Water provided the EPA for the Unregulated Contaminant Monitoring Rule and averaged them to come up with this number. *This number is misleading because it doesn't take into consideration that chromium-6 comes mainly from groundwater and groundwater makes up only 2% of Phoenix's water supply. A*veraging samples from all sources with equal weight skews the results.

The samples that are most representative of the level of chromium-6 that reaches customers come from the city's water distribution system. The highest level of chromium-6 detected in the Phoenix Water distribution system during UCMR was 1.6 parts per billion.

Does Phoenix water meet California's maximum contaminant level for chromium-6?
Phoenix Water's chromium-6 levels measured in the water lines leading to your tap are well below California's maximum contaminant level of 10 parts per billion. The highest level of chromium-6 detected in the Phoenix Water distribution system during UCMR was 1.6 parts per billion.

What health effects are there from chromium-6?
The EPA and medical experts are evaluating the health effects of chromium-6. Research is being performed to determine exactly at what level chromium-6 may be dangerous; an acceptable level of chromium-6 in tap water has not yet been determined. EPA considers various factors in setting water quality standards, including recommendations from the National Science Foundation, an independent group of scientists who review available research and make recommendations to EPA on setting environmental standards. Currently, EPA regulates total chromium based on allergic dermatitis. Research indicates a possible link to stomach cancers.

Where is chromium-6 normally found in water?
Higher chromium 6 levels are typically found in groundwater (well water). On average, only two percent of all Phoenix drinking water comes from groundwater.

Who makes sure Phoenix water meets standards?
Tap water is one of the most heavily regulated industries in the nation. Phoenix Water submits hundreds of reports each year to the EPA, the Arizona Department of Environmental Quality and the Maricopa County Environmental Services Department.

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Do I need to use water filters at home?

Since Phoenix water meets or surpasses standards, water filters are typically not necessary unless advised by your physician or desired as a personal choice. If you choose to use filters be sure to change filters according to manufacturer's instructions. More information about home treatment systems is available from the Arizona Water Quality Association, at azwqa.org or at 480-947-9850.

Where else can I get information about water?

Detailed information about the quality of Phoenix's water is available online at https://www.phoenix.gov/waterservices/waterquality where you'll find a copy of our annual Water Quality Report and other water quality information. Residents can also utilize the EPA's Safe Drinking Water Hotline for information about the Safe Drinking Water Act or the EPA's other drinking water programs at 800-426-4791.

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