

ARSENIC



WHAT IS ARSENIC?

Arsenic is a highly toxic metalloid found in the Earth's crust. Concentrations can be increased in volcanic areas such as NV or due to human activities like mining and agriculture.

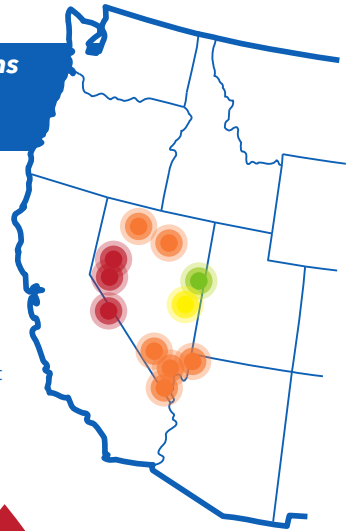
OVER TIME, ARSENIC INGESTED AT MINIMAL LEVELS ACCUMULATES TO HIGH LEVELS VIA BIOACCUMULATION.

YOU CAN'T SEE, TASTE OR SMELL ARSENIC



Arsenic concentrations in at least 25% of samples exceed:

- 50µg/L
- 10
- 5
- 3
- 1
- Insufficient data



Northern NV well water has the HIGHEST ARSENIC LEVELS in the US and there are no laws requiring private well owners to test for it.

3
ppb

Arsenic levels in drinking Water at or above this level are known to cause cancer of lungs, bladder, skin & kidneys.

10
ppb

EPA limit for arsenic in water as municipalities lack resources to meet stricter limits.

1500 to 2100
ppb

In Northern Nevada, we see levels as high as **1,500 to 2100 ppb.**

The arsenic levels we routinely see in Reno city water are 4 to 14 ppb.

ARSENIC TYPES

There are over a dozen different forms of arsenic.

Organic arsenic is found in many food items like rice, apples, and wine. Organic arsenic isn't nearly as dangerous, and has not been linked to the same health issues as inorganic arsenic. Inorganic arsenic is found in groundwater, and is known to have much more severe health effects. The inorganic arsenic in groundwater is most commonly found in 2 forms: trivalent or As(III) and pentavalent or As(V). As(III) is much harder to remove, so we typically convert it to As(V) first by oxidizing it.

ARSENIC LEVELS WE ROUTINELY SEE

Verdi	0 to 150 ppb
Washoe Valley	2 to 25 ppb
Pleasant Valley	0 to 90 ppb
Palomino Valley	2 to 110 ppb
Fernley	9 to 150 ppb
Fallon well water	8 to 2100 ppb
Reno City Water	4 to 14 ppb
Topaz/Yerington / Smith Valley	5 to 120 ppb
Minden/Gardnerville	0 to 50 ppb
Truckee	4 to 110 ppb

ST AVG

1 NV	56.47
2 MT	25.30
3 ND	20.29
4 OR	14.49
5 AZ	13.39
UT	13.12
MA	12.97
CA	11.49
AK	11.40

Odds of Getting Cancer*

Arsenic level	Odd of getting Cancer
5 ppb	1 in 1,000
10 ppb	1 in 500 EPA LIMIT
20 ppb	1 in 250
50 ppb	1 in 100

*National Academy of Sciences, 2001

STEPS TO EFFECTIVELY REMOVE ARSENIC:

A drinking water system is a must, but we also install whole house systems to limit exposure from inhalation while showering & concerns about young children using unfiltered taps.

- 1 Obtain a water test from a certified laboratory.
- 2 Determine what type of arsenic you have & what other contaminants may be present in your water, as they may interfere with the arsenic removal process and should be removed first.
- 3 Determine your water demands, water pressure and flow rates to properly size a system to fit your needs.
- 4 Find a suitable location in your home to install the equipment.
- 5 Install the appropriate system for your household.
- 6 Test water every 3-12 months to insure system in working properly.

Depending on your unique water chemistry & demands, we can effectively design a treatment system to suit your needs.



Guaranteed results from a locally-owned company with a proven track record in arsenic remediation since 1993.

Featured Systems

AdvantEdge Arsenic Removal Cartridge

Perfect for polishing the water after a reverse osmosis system, this cartridge removes 99% of As(III) and As(V) for healthy drinking water on the highest arsenic applications.



UltROWater by Evolve

NSF Certified to remove 97% of As(V). The slim profile of the unit allows you to enjoy all of the benefits without giving up your cabinet space.

Backed by a 10 YEAR warranty!



FerriX Media

This whole house media traps and retains up to 99% of As(III) and As(V) without dumping. A no salt, no backwash, no electricity solution that is great for low level applications and as a polishing tank after our A400 system.



AdvantEdge Whole House Systems

Utilizing the same technology as our Ad Edge cartridge, this whole house filtration tank removes 99% of As(III) and As(V) for maximum arsenic reduction to every tap in the home.



A400E Regenerable Arsenic System

This unit removes 95% of As(V) and cleans itself with salt. It is our workhorse in high arsenic wells that removes a bulk of the arsenic without costing the homeowners a fortune in replacement media.



Whole-home Custom Reverse Osmosis Systems

For the toughest of water problems, we offer whole house reverse osmosis systems. By using low energy membranes, concentrate recirc, and an advanced controller, we are able to achieve higher efficiencies and lower electricity use than other systems on the market. Our technicians have also completed the David H Paul Co.'s Advanced Commercial RO Training.

When it comes to whole home reverse osmosis, we are by far your best option!

