

Project Conducted by Independent Researchers from:



### **Key Terms**



- Maximum Contaminant Level Goal (MCLG) The MCLG is the maximum level of a contaminant in drinking water at which no known or anticipated adverse effect on the health of persons would occur, allowing an adequate margin of safety.
- Maximum Contaminant Level (MCL) The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to MCLGs as feasible using the best available treatment technology and taking cost into consideration. MCLs are enforceable standards.
- Non-detect (ND) Data This means the concentration was lower than the analytical instrument's detection limit and are treated as a result of zero.



### Project Purpose

- To collect available occurrence data for a select list of drinking water contaminants and water quality parameters from available sources from the time period of January 2009 to December 2018
- Data collected from:
  - State regulatory agencies (46 states provided data)
  - USEPA's 4<sup>th</sup> Unregulated Contaminant Monitoring Rule
  - USEPA's Federal Safe Drinking Water Information System
- Data was collected for 57 water quality contaminants (regulated contaminants for health effects as well as aesthetic contaminants that cause taste, odor and smell issues)
  - Not all states had data for all 57 contaminants in the project

### Go to www.wqrf.org/map

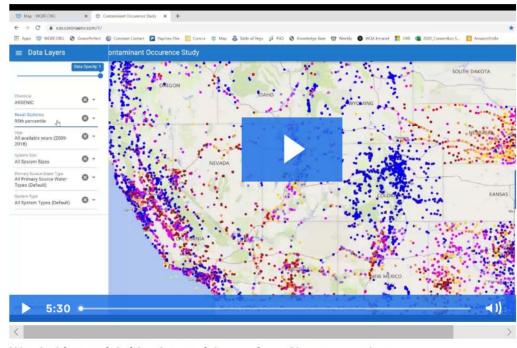
### **WQRF Contaminant Occurrence Map**

### **Data Looks at 57 Different Contaminants**

#### CLICK HERE TO ACCESS THE MAP

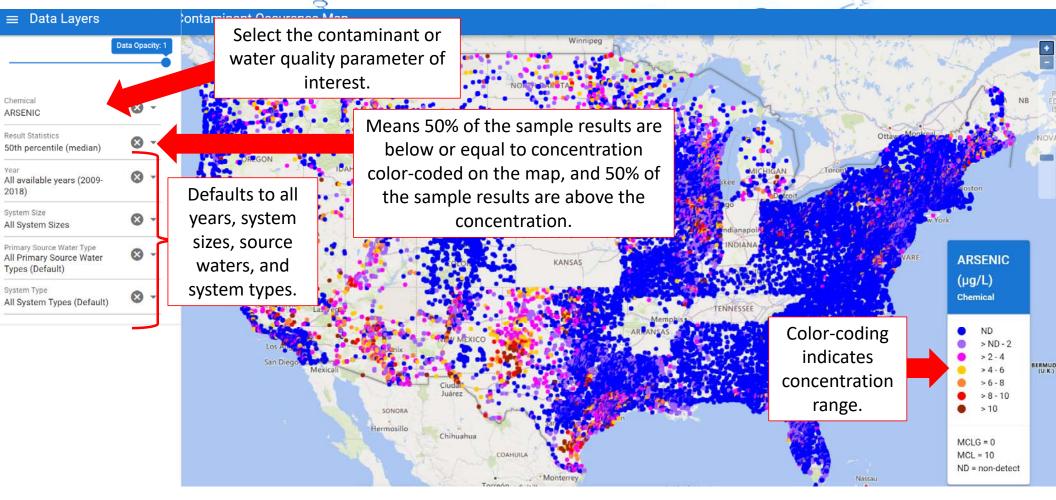
The new Contaminant Occurrence Map displays data in the United States for regulated drinking water contaminants that have an enforceable level (MCL or Action Level) above the health-based goal level (MCLG) and also aesthetic contaminants that can cause taste, odor and color or staining issues.

- The Contaminant Occurrence data collection effort
  gathered water quality data over the last 10 years for 57 different
  drinking water contaminants in the United States.
- The mapping tool provides a visual illustration of this occurrence data provided by the states and through US EPA UCMR4.
- Occurrence data below the MCL or Action Level is compliant with the Safe Drinking Water Act standards.
- This map shows statistical summaries of all data, not regulatory compliance.

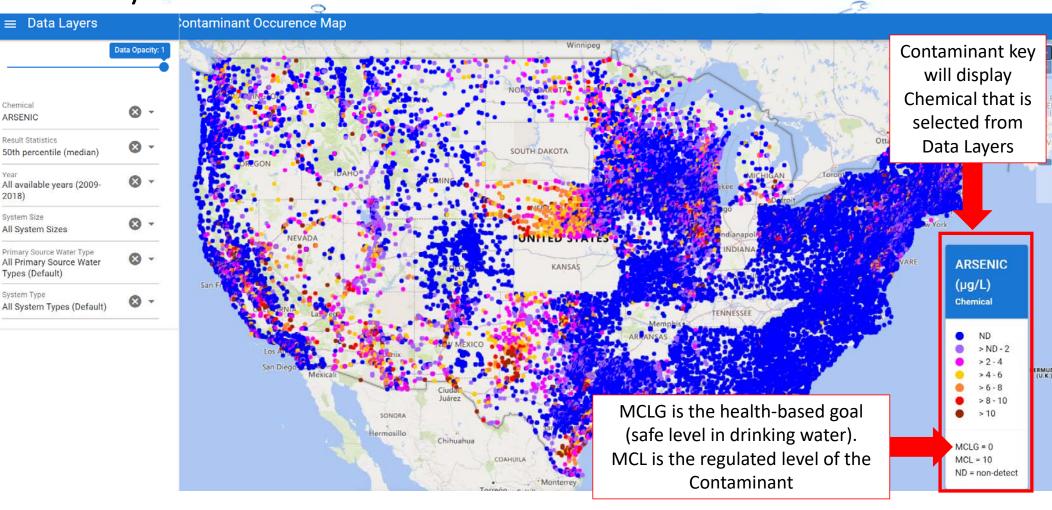


Watch this tutorial video for a quick overview of how to use the map.

### Data Layers



## Key: Contaminant and Concentration



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- Even if a data point on the map might be over the MCL, it does not indicate a Safe Drinking Water Act (SDWA) violation.
- The Occurrence Map shows statistical summaries for all sample results to illustrate occurrence and not intended to be used for regulatory compliance.

## National Data Summary Examples (2009-2018)



	Analyte	Units	MCLG	MCL	Median	75 <sup>th</sup> Percentile	95 <sup>th</sup> Percentile
MCLG < MCL	Arsenic	μg/L	0	10	ND	5.2	17
	Lead	μg/L	0	15 (Action Level)	ND	1.4	7.8
	TTHM	μg/L	-	80	24	46.1	83.6
	HAA5	μg/L	-	60	14.7	28	53
Aesthetics	Chlorine/Chloramine	mg/L	4 (MRDLG)	4 (MRDL)	1.0	1.4	2.0
	рН	-	-	-	7.6	7.9	8.6
	Iron	mg/L	-	-	ND	0.2	1.6
	Manganese	μg/L	-	-	ND	34	336
	Hardness	mg/L	-	-	131	268	490

MRDLG = maximum residual disinfectant level goal MRDL = maximum residual disinfectant level ND = non-detect



## What can I do if there are detectable concentrations of contaminants in my region?

## There are 3 simple steps to making sure the water in your home is safe and healthy to drink:

01 CONSULT



02 TEST  $\checkmark$ 



Find a listing of EPA accredited labs in your state.

03 TREAT



Find a certified product.

Find a water professional in your area to consult with.

### Resources



- RESEARCH Use the USEPA Drinking Water Regulations website to learn more about regulated contaminants
  - <u>www.epa.gov/ground-water-and-drinking-water/national-primary-drinking-water-regulations</u>
- TEST Obtain a water analysis from a state certified lab
  - Find state certified labs here: <a href="https://www.epa.gov/dwlabcert/contact-">https://www.epa.gov/dwlabcert/contact-</a> <a href="information-certification-programs-and-certified-laboratories-drinking-water">information-certification-programs-and-certified-laboratories-drinking-water</a>



### Resources



- CONSULT Find water professionals in your area and certified professionals on www.WQA.org
- TREAT Find certified water treatment products from the following ANSIaccredited certification organizations:
  - Water Quality Association <a href="https://www.wqa.org/find-products#/">https://www.wqa.org/find-products#/</a>
  - NSF International <a href="https://www.nsf.org/certified-products-systems">https://www.nsf.org/certified-products-systems</a>
  - CSA Group <a href="https://www.csagroup.org/testing-certification/product-listing/">https://www.csagroup.org/testing-certification/product-listing/</a>
  - IAPMO <a href="https://www.iapmort.org/certification-services/drinking-water-systems-certification/">https://www.iapmort.org/certification-services/drinking-water-systems-certification/</a>



# Questions?

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