

# Unsafe Drinking Water: It's a public health crisis that's long overdue for action.



Arsenic can harm health for a lifetime. It causes cancer and lowers intelligence.

Yet, tens of thousands of Mainers are ingesting unsafe amounts of arsenic that come from the bedrock where wells are drilled.

In a state where half our population drinks and cooks with well water, one in eight wells is estimated to be unsafe, leaving more than 100,000 children and adults at risk.<sup>1</sup>

Maine must end this public health crisis. All families have the right to drinking water that's safe and affordable.

## Tests, Treatment of Arsenic in Wells a State Problem

*Kennebec Journal/Morning Sentinel, 4.25.2015*

## Maine's Arsenic Problem Merits Robust Public Response

*Portland Press Herald, 3.8.2016*

## Maine Health and Education Organizations Press LePage for Action on Arsenic in Water

*Kennebec Journal, 3.2.2016*

## Health Organizations Call for Expanded Arsenic Testing in Well Water

*Maine Public Broadcasting Network radio news, 3.02.2016*

## 'Arsenic Belt' in Eastern New England Means High Rate of the Poison in Well Water

*Bangor Daily News, 6.26.12*

**"I've got more cancer than anybody I've known . . ."**

*Richard Minoty was a tenant for over 10 years in a housing complex in Belgrade, a hot spot area for elevated arsenic levels in drinking water. He developed pervasive skin cancer, one of three cancers that arsenic causes.*

*"I've got more skin cancer than anybody I've ever known," Minoty says. "I've had, probably, over 100 stitches in my back where they've cut it open and removed it."*

*His doctor advised him to test his drinking water, and bring in the results. "The arsenic level was so high, my doctor told me, "You move, today."*

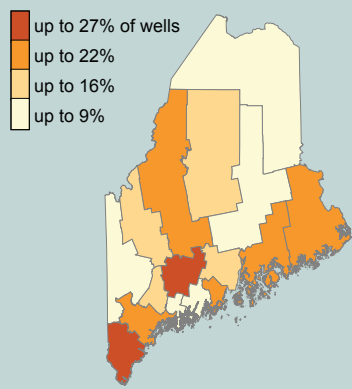
# “Arsenic is the biggest public-health problem for water in the United States—it’s the most toxic thing we drink.”

–Yan Zheng, *geochemist and senior research scientist, Lamont-Doherty Earth Observatory, Columbia University*

## Unsafe Well Water

This map shows the percent of household wells tested in each county that have arsenic levels that exceed the current federal health standard, based on water testing results by the State of Maine lab through 2013.

### Percent Above Guideline



### Arsenic Hot Spots

In each of 110 different Maine towns and cities, more than 15 percent of household wells tested exceed the federal health standard for arsenic. A snapshot of the most recent data shows the top ten:

- 1) Manchester, 59% of wells tested
- 2) Gorham, 50%
- 3) Columbia, 50%
- 4) Monmouth, 50%
- 5) Eliot, 49%
- 6) Columbia Falls, 48%
- 7) Winthrop, 45%
- 8) Hallowell, 45%
- 9) Buxton, 43%
- 10) Blue Hill, 43%

Source: Maine CDC, Public Health Data Portal  
<https://data.mainepublichealth.gov/tracking/home>

## Maine Study Suggests Arsenic in Drinking Water Lowers Intelligence in Children

Portland Press Herald, 4.3.2014

## ARSENIC HARMS HEALTH FOR A LIFETIME

**You can't see, smell, or taste arsenic in drinking water.** Without testing, no one can tell if it's there. Yet most Maine families drinking and cooking with well water have not had their drinking water tested to check levels of arsenic and other contaminants.

**Beginning with prenatal exposure, arsenic can harm health for a lifetime.**<sup>2</sup>

Many pregnant women drinking well water have no idea of the health threats they and their children may face.

**Arsenic in drinking water causes bladder, skin, and lung cancers.** In Maine and other northern New England states, bladder cancer rates are 20 percent higher than in the rest of the nation. A comprehensive National Institutes of Health study reported that those who drank the most well water had almost twice the risk of bladder cancer than those who drank the least.<sup>3</sup> The International Agency for Research on Cancer concluded that arsenic causes cancer of the lung, urinary bladder, and skin.<sup>4</sup>

**Arsenic in drinking water harms children's brain development.** A 2014 study of Maine school children with elevated levels of arsenic in their water showed a decline of average IQ scores five to six points lower than their peers.<sup>5</sup> Across the state, that means higher numbers of students are likely to require special education services, and may face lifelong challenges to their success.

**Every Maine family has the right to safe and affordable drinking water.** The State of Maine enforces the federal health standards of the Safe Drinking Water Act for public water systems, but residents with household wells get no such protection. The costs of installing and maintaining drinking-water treatment systems can exceed a family's ability to pay. These costs pose an impossible burden for the families of the 20 percent of Maine children living in poverty.

## Study Links Arsenic in Well Water to Higher Risk of Bladder Cancer in Northern New England

Portland Press Herald, 5.2.2016

- 2) Laine, *et al.* Maternal Arsenic Exposure, Arsenic Methylation Efficiency, and Birth Outcomes in the Biomarkers of Exposure to Arsenic (BEAR) Pregnancy Cohort. February 2015. *Environmental Health Perspectives* 123:186–192. <http://dx.doi.org/10.1289/ehp.1307476>.
- 3) Silverman, *et al.* Elevated Bladder Cancer in Northern New England: The Role of Drinking Water and Arsenic. 5.2.2016. *JNCI*. <http://www.ncbi.nlm.nih.gov/pubmed/27140955>
- 4) IARC Monograph Vol. 100C, Arsenic and Arsenic Compounds, p.85, <http://monographs.iarc.fr/ENG/Monographs/vol100C/mono100C-6.pdf>
- 5) Wasserman, *et al.* A Cross-sectional Study of Well Water Arsenic and Child IQ in Maine Schoolchildren. *Environmental Health* 2014, 13:23. <https://ehjournal.biomedcentral.com/articles/10.1186/1476-069X-13-23>

# State Inaction on Arsenic Tests Puts Mainers at Risk

Portland Press Herald, 7.14.2015

## MAINE LEADERS NEED TO TAKE ACTION

To protect Maine children and families, our state needs to:

### 1) Expand testing of household wells for arsenic.

Maine health officials have seen that when people learn about the health risks linked to arsenic contamination, they become more likely to test their well water.

#### The Maine Legislature should pass a new law to:

- Direct outreach and education resources to the Maine Center for Disease Control, to boost the number of Mainers testing their well water.
- Require that the State recommend a standard water test that includes arsenic, manganese, uranium, radon, and fluoride to ensure safe drinking water from household wells.
- Make sure families who are renting have access to information about the safety of their water.

### 2) Provide financial assistance for water treatment.

Many families cannot afford the costly treatment systems needed to combat arsenic in their well water. Making safe water affordable to all must be a priority of elected officials and other Maine leaders. The Maine Legislature should expand funding for the Maine Home Repair Program to provide financial assistance to low-income families for well water treatment.

### 3) Develop a statewide action plan for safe drinking water.

Getting to the day when everyone has safe drinking water will take different stakeholders, working together, to create strategies for success. With more than 100,000 Maine people facing arsenic contamination of their water, Maine needs a comprehensive plan, timeline, and benchmarks for progress.



## Overwhelming Support

Who wants Maine's elected officials to ensure all of us have access to safe drinking water?

- Health-affected and other concerned citizens
- Scientists
- Health professionals
- Maine businesses
- Maine Public Health Association
- American Academy of Pediatrics, Maine Chapter
- Maine Children's Alliance
- Learning Disabilities Association of Maine
- Physicians for Social Responsibility, Maine Chapter



**Together, we can make sure all Mainers have access to safe and affordable drinking water.**

# UNSAFE DRINKING WATER IN MAINE HAS MADE HEADLINES FOR TOO LONG. IT'S TIME FOR SOLUTIONS.

We hope you find this guide useful.

Please share it with others--Maine legislators and other officials, media, community leaders, educators, businesses, organizations, and anyone else who is concerned about safe drinking water.

You can request printed copies from our office. The guide is also posted at [ourhealthyfuture.org](http://ourhealthyfuture.org).

You are welcome to call the Strategy Center for information, or to share your story of well-water testing or how your family may be affected by potentially unsafe drinking water.

**Drinking Water of Maine Families Too Often Contaminated by Arsenic**

*Portland Press Herald, 6.29.2015*

**"It's our responsibility to protect children's brains."**



Retired after 30 years as a special education teacher at Leonard Middle School in Old Town, Regina Creeley became well-informed about arsenic exposure associated with reduced IQ among Maine schoolchildren.

"Learning challenges impact families, teachers' daily responsibilities, discipline situations, and the allocation of resources, including school budgets," she says.

"Preventing them is the responsibility of all public officials."

## Resources for Action

### How do I test my well?

Visit [www.wellwater.maine.gov](http://www.wellwater.maine.gov) for answers and more information. To find a lab that will provide you with a water test kit, visit [www.informe.org/hetl](http://www.informe.org/hetl). A comprehensive test typically costs \$70 to \$100. The state lab will waive testing fees for low-income households. For a fee waiver form: 1 (866) 522-4385.



### What if my test results show unsafe water?

For information on home water treatment systems, visit [www.nsf.org/consumer-resources/what-is-nsf-certification/water-filters-treatment-certification](http://www.nsf.org/consumer-resources/what-is-nsf-certification/water-filters-treatment-certification). Financial help for low-income households may be available through the Maine Home Repair Program. Call (207) 626-4602 or visit [www.mainehousing.org/programs-services/HomelImprovement/homeimprovementdetail/HomeRepair](http://www.mainehousing.org/programs-services/HomelImprovement/homeimprovementdetail/HomeRepair) or contact the community action agency that serves your county.

### How can I help ensure safe water for all?

Contact Emily Postman at (207) 699-5791 to volunteer, and sign up for email alerts at [www.ourhealthyfuture.org](http://www.ourhealthyfuture.org).

ENVIRONMENTAL  
**HEALTH**  
STRATEGY CENTER

[ourhealthyfuture.org](http://ourhealthyfuture.org)  
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As a public health organization, the **Environmental Health Strategy Center** works to ensure that all people are healthy and thriving in a fair and healthy economy by reducing exposure to toxic chemicals in our food, water, and homes, and promoting products that are safe for people and the planet. In state and national campaigns, we use research and education to reform policies, change the marketplace, and advance science-based solutions that are socially just.

**Portland:** 565 Congress Street, Suite 204 | Portland, ME 04101  
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## Protect Our Children's Brains



For an excellent seven-minute video on how toxic chemicals harm the developing brain of children, and what we should do about it, watch "Little Things Matter: The Impact of Toxins on the Developing Brain."

View it at [www.youtube.com](http://www.youtube.com).