

THE NEXT STEP Toward a Healthier Future

A BI-MONTHLY NEWSLETTER OF THE SEBASTOPOL TOXICS EDUCATION PROGRAM



Arsenic in the Water?

A number of folks have asked me for more information about the arsenic notice that was enclosed last year in City water bills. So I did some research and talked with Rich Emig, Sebastopol Public Works Superintendent. Here's what I found:

- All U.S. water systems are required to give customers notice when an arsenic test goes over safe levels. (Folks with private wells can hire an expert to test for such contaminants.)
- The arsenic that Sebastopol found last year was just slightly over the U.S. EPA maximum contaminant level (MCL) of .01 milligrams per liter (also called 10 parts per billion, or 10 ppb).
- As soon as this test result occurred, the City stopped using that well. City water went back under the MCL. Rich says, "We're within the standards, so people shouldn't be concerned."
- So that notice was reporting on a past event. If it had been considered an urgent problem, people would've been notified in more active ways.
- The City has been trying various methods to further trim the amount of arsenic in our water since 2008, but has had limited success.
- The City is currently seeking funding to install a filter system to better manage the arsenic, and is testing different system types to see what works best. This process will take about one to three years.
- Arsenic has become a problem here not because of any

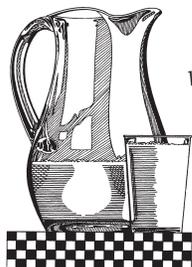
increase in arsenic levels, but because the EPA lowered the MCL from its prior standard of 50 ppb, based on studies that provided more information about appropriate levels.

So what's the problem with arsenic? The concern is primarily long-term exposure, which has been linked to bladder, lung, and skin cancer, plus harm to the nervous system, heart and blood vessels, and skin. It might also cause birth defects, reproductive problems, and kidney and liver cancer. The MCL is set with the intention of avoiding these outcomes.

What is the source of our water's arsenic? A consultant to the City said that it's from natural rock formations. Arsenic in water can also come from mining, coal burning, factories, and agricultural use of pesticides.

I asked Rich if the reduced use of the impacted wells has caused a shortage in our water supply. He said that it is more difficult in the summer, but "the community has done an excellent job of conserving water over the past several years." This has helped minimize the challenge of managing the wells (and our impact on the local environment).

For more about the overall issue of arsenic in drinking water, see www.nrdc.org/water/drinking/qarsenic.asp and <http://water.epa.gov/lawsregs/rulesregs/sdwa/arsenic>. The notice enclosed in your bill is at http://ci.sebastopol.ca.us/sites/default/files/suekelly/nov_-_well_7_arsenic_92712_web_site.pdf. For water conservation tips and rebates, see www.ci.sebastopol.ca.us/page/water-conservation-incentives.



STEP Updates

■ **Thanks to everyone who sent in your yellow STEP Feedback cards.** Your comments really do help us serve your needs. As usual, we'll report the survey results in the next issue.

■ **If you can't find your card, you can get a substitute one** at www.healthyworld.org/STEPsurvey.html. You can also contact us any time via the methods in the "About STEP" box on the other side.

■ **Thank you also to this year's fabulous and much-appreciated STEP Stuffers.** Twice a year, we invite folks to help us stuff the yellow Feedback cards into the water bills. These have actually turned into fun little social events, as we playfully gab together while feeling happily productive in community service. This year's STEP Stuffers were Judy Wismer*, Marilyn Madrone, Ellen Swenson, Quiana Grace Frost, Eric Kritz, Sharron Joyce, and Colin Ramsay. (*Judy is a *Special* STEP Stuffer, because she helped at both sessions!)

Oppose Sonoma County Water Fluoridation

Over the past few years, the Sonoma County Board of Supervisors has explored adding fluoride to most of the county's water supply. It'll soon be discussing the feasibility study and recommendations.

So you might be thinking, "But isn't fluoride a good thing?" And the well-meaning proponents do make appealing claims of public dental health benefits, especially for lower-income people.

Unfortunately, though, these claims just don't match the facts. Yes, fluoride can promote dental health — when it's (1) pharmaceutical-grade, (2) applied topically to tooth surfaces via toothpaste or a dentist, (3) in small controlled doses, and (4) in ways that match a person's needs and choices.

However, putting fluoride in our public water fails on all four of these counts. Specifically:

See Fluoridation, over

Yale Study Links Osteoarthritis to Common Chemicals

A new Yale study has linked exposure to two common perfluorinated chemicals (PFCs) with osteoarthritis. PFCs are used in over 200 industrial processes and consumer products including cookware, stain- and water-resistant fabrics, greaseproof paper food containers, personal care products, and more. Their frequent use has led them to commonly contaminate humans and wildlife.

This study, published in *Environmental Health Perspectives*, is the first to look at the associations between osteoarthritis and perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS).

The authors analyzed data from six years of the National Health and Nutrition Examination Survey (NHANES, 2003-2008), which allowed them to account for factors such as age, income, and race/ethnicity. The

study population was representative of the United States.

Report co-author Sarah Uhl says, "We found that PFOA and PFOS exposures are associated with higher prevalence of osteoarthritis, particularly in women, a group that is disproportionately impacted by this chronic disease." For instance, women with the highest 25% of PFOA exposure had about twice the odds of having osteoarthritis compared to those in the lowest 25%. Uhl wrote the study with Yale Professor Michelle L. Bell and Tamarra James-Todd, an epidemiologist at the Harvard Medical School and Brigham and Women's Hospital.

Although PFOA and PFOS are being used less because of consumer safety concerns, exposure to these chemicals remains widespread. For more about PFCs and how to avoid them, see www.healthyworld.org/STEPIndex.html, under PFCs.

SOURCE: www.environment.yale.edu/news/article/yale-study-links-common-chemicals-to-osteoarthritis

Fluoridation, continued

- 1) The fluoride used in municipal fluoridation is not the medical compound or pharmaceutical grade.
- 2) Fluoride in water is not applied topically but systemically (in the whole body). It's like drinking sunscreen to try to prevent sunburn!
- 3) Fluoridation doesn't offer small controlled doses, easily pushing people over safe exposure levels.
- 4) Many "non-target" people would be consuming fluoride against their will, including those medically advised to avoid it.

Even more importantly, fluoridating water is actually not proven to improve dental outcomes. The Fluoride Action Network says that there's "never been a single randomized clinical trial to demonstrate fluoridation's effectiveness or safety."

Fluoridated water also ends up in the environment, where it can harm crops, livestock, trees, and plants.

Many medical experts have come out against fluoridation, including Sebastopol dentist Dr. Silvano Senn,

who says, "I'm totally opposed to fluoridation of water, because it's scientifically proven to cause a whole host of health problems."

In short, fluoride can be useful as medicine, but shouldn't be broadcast in our shared water. That's why most developed countries don't fluoridate their water, including Japan and nearly all of western Europe.

What you can do

- 1) Sign, forward, and Facebook this petition against Sonoma County fluoridation. Although the City of Sebastopol has a separate (non-fluoridated) water supply, we (and people we care about) are still potentially impacted through our local schools, businesses, restaurants, and environment. www.change.org/petitions/sonoma-county-board-of-supervisors-stop-planning-for-fluoridation-of-public-water-supply
- 2) Tell your Supervisor that you're opposed to fluoridation, speaking in respectful fact-based ways to show that this is a credible issue. <http://supervisors.sonoma-county.org>.

Essential Resources

■ **To learn more about what's toxic, and where to discard items**, see www.recyclenow.org or the Yellow Pages Recycling Guide. Or call 565-3375.

■ **You can also look up previous newsletters by topic using the TNS Online Index.** In past editions, we've discussed everyday toxics and the effective alternatives in a wide range of arenas. For instance, here are some of the topics we've explored. (To learn more about each one, look under the **bolded** word at www.healthyworld.org/STEPIndex.html.)

- Nontoxic **gardening**
- Safer **pet care**
- Less-toxic approaches to **ants, snails, mold, rodents, earwigs, and weeds**
- Healthier **housecleaning**
- The specific issues with toxics such as **Roundup** and **2,4-D**
- Evidence of toxics links to **health and environmental harm**
- **Government** and community-level actions we can support.

3) Watch for and participate in the upcoming Supervisors meeting.

4) Read more about this topic at www.patriciadines.info/EcoGirl6h.html. I hope that this helps us reject fluoridation and pursue more sensible solutions.

~ Patricia Dines

ABOUT STEP

The Next STEP (TNS) is published six times a year by the **Sebastopol Toxics Education Program (STEP)**. **STEP is a project of the City of Sebastopol**, implemented by local citizen volunteers. **STEP's mission** is to support city residents in reducing their toxic use and exposure, creating a healthier and safer Sebastopol for everyone.

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