



# THE NEXT STEP Toward a Healthier Future

A BI-MONTHLY NEWSLETTER OF THE SEBASTOPOL TOXICS EDUCATION PROGRAM

## Pharms in the Water

Each year, Americans spend hundreds of billions of dollars on pharmaceuticals that powerfully alter our body's functioning.

Unfortunately the effect of these drugs doesn't stop there. Most of these ingredients find their way (through excretion and disposal) into our ecosystems, potentially impacting both wildlife (including fish) and water supplies. This risk is amplified by the many other toxic materials we already put into the environment.

How much of a problem is this? Information on the scope of this issue is still sketchy, but study results so far are causing concern among scientists and government officials. For instance, a key 2002 study by the U.S. Geological Survey found that 80% of the 139 waterways it tested had measurable concentrations of pharmaceuticals, including hormones, steroids, acetaminophen, and codeine. The EPA says that most sewage treatment systems are not designed to process these materials.

Studies have linked exposures such as these to disturbing mutations and behavioral problems in fish, amphibians, and birds. For example, male fish have been found with mixed gender characteristics (e.g., growing female eggs), making them unable to reproduce. The EPA is also concerned about drugs that can change spawning and other behaviors (for

instance, antidepressants), decrease sperm activity (such as calcium-channel blockers), and increase antibiotic resistance. Even low levels of these materials are troublesome, as they can accumulate in the environment and food, synergize with other chemicals, and impact organisms at critical points in their development.

Could these contaminants be in our drinking water too? Unfortunately little is known about what's in there, what's considered safe, and for what populations (for instance, pregnant mothers). It's a huge scientific task to determine these answers for each of the many different substances individually, let alone in combination. Some communities are upgrading their water treatment facilities to address these materials.

### A First Step Forward

One key area that we can act on right away, however, is ensuring proper disposal of leftover pharmaceuticals, so they don't get into our environment through sewer plants or landfills. While this addresses only part of the problem, it's a good start.

Locally, the Sonoma County Water Agency has started a six-month pilot program that allows folks to dispose of leftover drugs (pills and tablets only) at select pharmacies and law enforcement offices in Guerneville and the town of Sonoma. Success with this program will hopefully lead to implementation across the county. Get more information and dropoff locations at <[www.scwasafe.meds.org](http://www.scwasafe.meds.org)> or call 547-1900.

Action is also being taken to develop statewide programs.



## It's Our Birthday!!

With this issue, we're celebrating *seven years* publishing *The Next STEP (TNS)*! The goal of this innovative City project is to nurture a healthier Sebastopol for everyone. **To reduce exposure to toxics, we encourage voluntary reductions** in their use in all areas of our lives — including our homes, schools, businesses, parks, food, and water.

TNS is produced by a small team of local citizens, working on a volunteer basis (which keeps costs very low) because we support this goal! We're grateful to the City Council and staff for acting in the community's best interest with this project.

**Please fill out the enclosed survey card to give us your feedback about our efforts. Also let us know how we can best support your toxics reduction in the upcoming year**, including any questions, tips, story ideas, or success stories. Your support is what makes this project possible. Thank you!



"Thank you so much for *The Next STEP* newsletter. It is always useful and enlightening. It reminds me of why I wanted to live here, all the forward looking folks like you. Happy Trails." — Chris B.

### What We Can Do

■ **Dispose of leftover pharmaceuticals responsibly.** Don't put them in the trash or drain. If there's not yet an official disposal program in your area, bring them to the Household Toxics Facility or a Community Toxics Collection Day. For more information, see <[www.recycle.now.org](http://www.recycle.now.org)> or call 565-3375.

See *Pharms*, over



## BOOK REVIEW

**“Exposed: The Toxic Chemistry of Everyday Products and What’s at Stake for American Power,”** by Mark Schapiro, 2007, 216 pages.

Mark Schapiro’s book, *Exposed*, offers a new take on the tale of toxics in our daily lives.

Sure, reading this book will help you better understand the ways that common everyday materials and products are harming the health of ourselves, our families, and our ecosystems.

But Schapiro also informs us about how Europe is taking a whole new level of action to prevent that harm — and is demonstrating that this is good for business and economic growth as well.

Schapiro makes this information engaging by telling the stories of the key players in this drama — those whose health is being harmed, whose businesses are at stake, and whose better ideas are being implemented.

His most intriguing argument is that the U.S. chemical industry’s resistance to healthier products is rapidly putting them at a competitive disadvantage in the global marketplace, making our products increasingly unwelcome, and threatening our claims of economic supremacy. Worldwide, governments and industry are increasingly looking to Europe, not the U.S., to see how products of the twenty-first century should be invented, designed, produced, and marketed. The longer our companies delay embracing this path, he says, the farther they will fall behind and into disfavor with consumers.

While making a strong economic argument for changing “business as usual,” the book also shows consumers that we don’t have to wait for government and industry to protect us. Armed with information about Europe’s inspiring example, we can also insist that our representatives and businesses serve the true well-being of us all.

~ Patricia Dines

## Winter Earth Savers

Is one of your New Year’s goals to live a healthier life? The STEP Online Index of past issues can help! It offers a veritable cornucopia of useful tips for identifying and reducing the toxics in all areas of your life. Just look at <[www.healthyworld.org/STEPIndex.html](http://www.healthyworld.org/STEPIndex.html)> and either browse or search for your area of interest. Here are a few examples:

**Managing Slugs & Snails**

In past issues (*TNS I/2* and *VI/2*), we’ve covered less-toxic remedies for the snails and slugs that love to come out in the dampness and munch our greenery.

Unfortunately, some slug baits can include metaldehyde, which is toxic to the nervous system. Other baits, such as Sluggo, have a high amount of so-called “inert” ingredients, which can actually be toxic but are hidden from consumer view.

Our articles have discussed a variety of safer solutions, including creating barriers around your plants, removing places where snails can hide, trapping them, and encouraging their natural predators.

**Cutting Back Blackberries**

If you have troublesome blackberries or ivy, cut them down now to ground level (on a dry day). Then put a teaspoon of vinegar on the stump to halt regrowth (instead of using a toxic material). You might want to add some more after strong rains. More about this homemade remedy is in *TNS IV/3*.

**And More!**

Other Index topics that might be of special interest this time of year include:

Air fresheners • Ants • Electronic e-waste (for those now supplanted e-toys) • Gardening (by the seasons) • Mildew & Mold

That’s just a sample of what awaits you, with just a few clicks of your mouse.

**Pharms, continued**

■ **Explore non-pharmaceutical approaches to maintaining your health and addressing problems.**

Discuss options (such as herbs, acupuncture, and lifestyle changes) with a health care professional experienced with these options.

■ **If you’re prescribed a new drug, consider getting a second opinion** before filling the prescription. Purchase any drugs in small quantities, to limit leftovers.

■ **Don’t pressure your doctor for medications they’re not recommending**, such as antibiotics or mood drugs.

■ **Doctors can help too**, by only prescribing the amount needed and learning which drugs have the highest eco-toxicity.

■ **Educate yourself and encourage meaningful action about the larger issues.**

**For more information**, see this EPA site <[www.epa.gov/ppcp](http://www.epa.gov/ppcp)>. Also the Teleosis Institute’s Green Pharmacy Program is working towards zero pharmaceutical waste in the environment. See <[www.teleosis.org](http://www.teleosis.org)> or call (510) 558-7285.

~ Patricia Dines

Thank you to Rebecca Dwan for her input into this article.

**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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