



THE NEXT STEP Toward a Healthier Future

A BI-MONTHLY NEWSLETTER OF THE SEBASTOPOL TOXICS EDUCATION PROGRAM

Protecting Our Health From Toxics

Health Care Costs For Children's Toxic Exposure Estimated At \$76.6 Billion A Year

According to research by scientists at New York's Mount Sinai School of Medicine, it cost a "staggering" \$76.6 billion in 2008 to cover the health care expenses of American children made ill from exposure to toxic chemicals and air pollutants.

Reporting in the journal *Health Affairs*, the costs they identified include those related to: lead poisoning (\$51 billion a year), autism (\$8 billion), intellectual disabilities (\$5 billion), exposure to mercury pollution (\$5 billion), attention deficit hyperactivity disorder (\$5 billion), asthma (\$2 billion), and cancer (\$95 million). These amounts reflect both direct medical costs and indirect costs, such as parents' lost work days and decreased economic productivity while caring for their children.

The study's leader, Dr. Trasande, says, "Our findings show that, despite previous efforts to curb their use, toxic chemicals have a major impact on health care costs and childhood morbidity."

He's also concerned that these conditions and costs could keep

rising. To avoid that, he advises implementing "new policy mandates ... to reduce the burden of disease associated with environmental toxins," especially to curb mercury emissions from coal-fired power plants and to reduce the chemicals being found in food, the environment, and consumer products.

A related article in this periodical offered two prominent doctors' recommendations for trimming toxics' harm, including: better testing of current chemicals, a tiered approach to evaluating new ones, and health monitoring of exposed populations. They concluded that, "Implementing these proposals would have a significant impact in preventing childhood disease and reducing health costs."

SOURCE: "Environmental Illness in U.S. Kids Cost \$76.6 Billion in One Year," May 4, 2011, www.ens-newswire.com/ens/may2011/2011-05-04-02.html

Supporting Much-Needed TSCA Reform

Some of these doctors' suggestions are included in the proposed "Safe Chemicals Act of 2011," which seeks to better protect Americans' health by overhauling the barely functioning Toxic Substances Control Act (TSCA). For more information about supporting this vital bill, see www.saferchemicals.org and <http://healthreport.saferchemicals.org>.

A recent *New York Times* article also discussed this bill, as well as 87-year-old Sen. Frank Lautenberg's personal reasons for so passionately wanting to repair TSCA. www.nytimes.com/gwire/2011/06/27/27greenwire-for-sen-lautenberg-crusade-to-reform-chemical-99680.html

Detoxing Your Life

■ **The next Toxics Collection Day** in Sebastopol is Dec. 13; in Forestville, it's Nov. 13. Make an appointment at 795-2025, at least 24 hours in advance. You can also drop items at the Household Toxics Facility, Thurs. through Sat. It's at the central dump near Petaluma.

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

■ **Look up past issues of TNS in the TNS Online Index.** Here you'll find out what's toxic and the alternatives in everything from housecleaning to pest control. Timely topics include: Schools and pesticide exposure, Protecting and educating children, Household cleaners, Air fresheners, Pet care, Snails and slugs, Mold, and Sheet mulching (to naturally prepare your spring garden). www.healthyworld.org/STEPIndex.html

Fixing The System

A few years ago, McKay Jenkins found a tumor the size of a baseball in his abdomen. When researchers asked him about his exposure to toxic chemicals, he started investigating the topic, which resulted in his new book, *What's Gotten Into Us? Staying Healthy in a Toxic World*.

He says that there are a wide range of "smart personal choices" we can make to reduce our toxic exposure, but that that's not enough to protect ourselves because our culture's toxics enter our lives in so many unpredictable ways. He feels that toxics are actually a public health issue, and thus the solution requires us to look at our overall industrial systems.

Jenkins sees some positive signs, such as the moves to reform TSCA. "Perhaps one day," he muses, "consumer protection laws will be commonsensical enough that, when my daughter asks me about the dangers of toxic chemicals, I can give her a satisfying answer."

SOURCE: "Can We Stay Healthy in a Toxic World?," McKay Jenkins, Aug. 9, 2011, www.orionmagazine.org/index.php/newsfrom187/entry/6438



What Are the Health Care Costs of Toxics?

According to the nonprofit Kaiser Family Foundation, U.S. health care costs in 2008 were \$2.3 trillion, "more than three times the \$714 billion spent in 1990, and over eight times the \$253 billion spent in 1980." This amount equals 16% of our country's Gross Domestic Product (GDP), among the highest of all industrialized nations, and averages \$7,681 per person.

Many Americans are deeply concerned about these high costs, which are increasingly pushing folks into bankruptcy and threatening the budgets of individuals, businesses, and governments.

The remedies offered usually focus on how to pay the bill. But what if we recognized instead how many of these illnesses are caused by toxics, and chose to cut everyone's

costs and suffering by reducing our exposure to these materials?

To help make this connection in policy-making, public health folks have sought various ways to quantify toxics' health care costs. Their hope is that this will help us understand the scale of harm, overcome economic arguments used to justify toxics' continued use, and show how inaction allows the status quo to continue costing us all so much.

One overall estimate is that environment-related diseases cost Americans between \$132 and \$165 billion a year, in both direct health care costs and indirect costs such as lost productivity. It's also been conservatively estimated that toxic chemicals are responsible for 1% of all diseases; 5% of childhood cancer; 10% of diabetes, Parkinson's disease, and neurodevelopmental deficits; and 30% of childhood asthma.

Kate Davies of Antioch University/Seattle writes that the costs of

"The superior doctor prevents sickness."
Chinese proverb



these environmentally-caused diseases are highly significant and largely preventable. She concludes that, "By taking action to reduce or eliminate exposures to toxic chemicals, the U.S. could save billions of dollars a year in health and related costs and significantly improve public health."

Just imagine what would it mean to this country (and our current debates) if we could save billions of dollars a year in health care costs!

SOURCES: "The Economic Costs of Environmental Diseases and Disabilities," Rachel's Democracy & Health News, January 5, 2006, www.precaution.org/lib/06/costs_of_enviro_diseases.051201.htm • U.S. Health Care Costs, www.kaiseredu.org/Issue-Modules/US-Health-Care-Costs/Background-Brief.aspx

Scientists Shed New Light on Toxics' Link to Parkinson's Disease

In Feb. 2011, the National Institutes of Health (NIH) released research that again demonstrates the links being found between pesticides and Parkinson's disease (PD).

In this study, people who used either of two pesticides (paraquat or rotenone) were approximately 2.5 times more likely to develop PD than people who hadn't used them.

Dr. Caroline Tanner, lead author of the researchers' article in the journal *Environmental Health Perspectives*, says that "these findings help us to understand the biologic changes underlying Parkinson's disease," which can then help in its treatment and ultimately its prevention.

In another recent study, described in the journal *Molecular Neurodegeneration*, scientists at the University of Missouri School of Medicine reported what they've learned about the mechanism by which toxics can contribute to PD. Researcher Zezong Gu says that this work can help "find ways to correct, prevent, and reduce the incidence of this disease."

PD is the second most-common neurodegenerative disorder in the U.S., after Alzheimer's disease, and affects around one million Americans (including actor Michael J. Fox). It impacts the brain's ability to coordinate muscle movements, resulting in slowness, stiffness, and shaking, as well as an increased risk of

dementia. There's currently no cure, although drugs and physiotherapy can treat symptoms. Fewer than 5% of cases are attributed to genetics.

Scientists have long suspected a link between pesticides and PD because of the high rates of the disease among farmworkers and farmers who use pesticides. Many studies have confirmed this link, including one which found that even low levels of household pesticide exposure can increase the risk of developing PD.

SOURCES: "NIH study finds two pesticides associated with Parkinson's disease," February 11, 2011, www.nih.gov/news/health/feb2011/nihs-11.htm • "Discovery Offers Insights Into Link Between Parkinson's and Pesticides," http://medicine.missouri.edu/news/0130.php • Breakthrough could [help] Parkinson's prevention, Kristin Schafer, Pesticide Action Network, July 7, 2011, www.panna.org/blog/breakthrough-could-parkinsons-prevention • "Pesticides could cause Parkinson's 'by stopping brain protein from cleaning up toxic molecules'," Daily Mail Reporter, June 27, 2011, www.dailymail.co.uk/health/article-2008732/Pesticides-cause-Parkinsons-stopping-key-protein-cleaning-cell-damage.html

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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"I appreciate reading your newsletter, since it's short and simple. I am a busy mom of little ones, and don't have much time to stay abreast of toxics topics. We do a great deal to eliminate toxics in our home, but I like that each newsletter offers one more topic to think about or act on. Thank you," ~ Jaime Jean Klocek