



# THE NEXT STEP Toward a Healthier Future

A BI-MONTHLY NEWSLETTER OF THE SEBASTOPOL TOXICS EDUCATION PROGRAM

## Toxics and Disasters

Toxics might not be the first thing we consider when faced with fires, floods, hurricanes, and other natural disasters. Certainly, there are often more urgent matters at the moment of crisis. Still, even afterwards, it's a much less-common conversation.

But the reality is that enormous amounts of toxics are often released by these events. Materials that had previously been applied broadly and tucked into countless homes, businesses, and industrial sites are suddenly opened, burned, and released into our shared air, water, and land.

The resulting cumulative toxic levels can be much higher than we experience in ordinary life — harming everyone from first responders to people miles away — even hindering emergency responses. Plus these materials can cause life-threatening and lifelong impacts on people, animals, and ecosystems.

This point was made all too real in the North Bay wildfires, which are still burning as we go to press.

As a friend posted on Facebook, while encouraging mask use, "We don't know what's in the smoke or the water. That's the problem. Toxics regulation is based on the premise that we can control exposure and dosage, which I question in regular times.

But then we have this huge exposure.



To protect ourselves we need to look at the huge one."

### How to Reduce Exposure

#### 1) Protect yourself and others from a disaster's toxic risks.

Evaluate each situation and your needs to determine your approach. Options might include protective gear, avoidance, and more. Consider toxics in both these phases:

- During the event (toxics in smoke, flood water, etc.)
- After the event (safe cleanup, proper waste disposal, etc.)

#### 2) Reduce your overall toxic load.

When we have involuntary exposures, it's even more vital to reduce the voluntary ones. So nurture your body. Eat fresh organic food. Do cleansing activities such as saunas. Support others in doing the same.

#### 3) Act for strong systemic community toxics reduction.

It is predictable that toxics will be released during disasters large and small. And, once a disaster strikes, it's usually too late to prevent release.

So let's add "reducing disaster harm" to the reasons that it's smart to proactively and drastically reduce our individual and shared use of toxics.

For instance, you can:

- **Avoid buying or using toxics in your home, business, community groups, etc.** Before buying or using a toxic product, consider its full lifecycle of potential harm. (See my article about this, over.) Ask if all that harm is necessary. Feel better when you find and choose safer options!

## Creating Happier Holidays

This year, many of us will likely find our winter holidays disrupted, shifted, and changed.

Still, I hope that we'll also recognize them as an opportunity to nurture ourselves and connect meaningfully with others. Perhaps we'll even see new ways to extend our circles and respond to our community's challenges.

And, in times of stress, it's even more important that we care for the physical well-being of ourselves and others. Part of how we can do that is by creating safe and healthy shared spaces and experiences.

So, as you shape your plans, I encourage you to include reduced toxics among your criteria. Fresh healthy organic food is a simple way to support bodies challenged by smoke, trauma, and loss. And less-toxic homes create a healthy base for all that we do in the world and in our communities.

You can find more detoxing ideas and tips in our STEP Index, under **Holidays, Winter**.

I hope that we find wonderful way to care for ourselves and each other as the days unfold.

Blessings to all —

*Patricia Dines*  
Editor, *The Next STEP*

- **Support businesses that avoid using toxics**, such as organic farms and producers.

- **Take action for better community-level control of toxics**, and support the groups and agencies that are encouraging positive change.

We've gathered lots of information to help you with these steps, conveniently organized in our STEP Index (see over). We've also put this article plus added information at [www.healthworld.org/NBFires.html](http://www.healthworld.org/NBFires.html).

Thankfully, there are positive actions we can take to protect ourselves, our loved ones, and our world. Let's do that!

## Evaluating the Lifecycle Harm of a Toxic Product

When we consider using a toxic product — in our personal or work lives, or in our communities — it can be easy to focus just on our current goals, the product's price, and maybe its immediate health risk.

However, in that decision, I encourage us to also consider the product's full harm during its lifecycle — to the health of humans, animals, and ecosystems far beyond our job site.

These costs aren't reflected in the product price or label. But they're still very real, impacting real people, real pocketbooks, and real lives.

In fact, it's likely that we're among those being harmed throughout our days by other people's toxics — such as those released by our current fires and the pesticides sprayed on our local non-organic farms.

I also believe that we're all paying the cost financially, as part of this country's staggering health care costs. Studies have shown that notable amounts of illness are caused by toxics. These illness levels can go down as toxic exposures do.

## How Do We Manage Cumulative Toxic Risk?

We're exposed to toxics from so many sources — including our food, house cleansers, parks, and more. So why is it up to us as individuals to evaluate and control our risk? Are we really able to even do that?

These are the types of questions Sanne Knudsen asked in her journey as a student then a parent. She's now a law professor specializing in environmental regulations and natural resource law at the University of Washington School of Law. Her article "Regulating Cumulative Risk" was recently published in the University of Minnesota Law Review.

She says, "There are so many individual decisions we make on a daily basis when it comes to risks from chemicals and pesticides." We can try to understand some of the risks individually. Yet it's really be-

## The Five Phases of Harm

Here's a model I developed to help us understand how toxic products dramatically harm people, animals, and ecosystems throughout their lifecycles. Harm happens during:

**I. Production** (regular and accidental discharges injuring factory workers and neighbors)

**II. Transportation** (spills and accidents along the travel route)

**III. Application** (materials drifting up to hundreds of miles, during and after use)

**IV. Storage and Disposal** (from improper actions and leakage)

**V. Extraordinary Events** (such as natural disasters and accidents).

The bottom line is that these toxics commonly spread by leaks, spills, accidents, and drift. It's a predictable consequence of having them in our communities. I hope that, by seeing the full price of these products, we can also see the broader benefits of seeking less-toxic alternatives, paying a bit more for them, or adjusting our goals.

I've previously explored the reality of these phases, with examples. See **Lifecycle costs** in the Index.

yond the knowledge and skills of the average person to try to manage the overall cumulative and synergistic risk. Plus, she adds, we can't always identify or opt out of exposures.

She concludes, "[T]he individual consumer is simply not the proper locus of responsibility. Greater public health protection from government is needed." Weak government regulations, she says, have created a public health gap, leaving individual consumers to fend for ourselves.

She recommends changes at the federal level, and encourages the public to "push for a more coordinated response to these public health issues."

I agree! Let's work for that, to help protect everyone's well-being.

*SOURCE: "Sanne Knudsen: Consumers need more protection from chemicals and pesticides," [www.washington.edu/news/2017/09/07/qa-sanne-knudsen-consumers-need-more-protection-from-chemicals-and-pesticides](http://www.washington.edu/news/2017/09/07/qa-sanne-knudsen-consumers-need-more-protection-from-chemicals-and-pesticides)*

## Local Toxics Disposal

■ **The next Sebastopol Toxics Collections Day is December 12**, from 4 to 8pm. To make an appointment, call 707/795-2025 or 877/747-1870 at least 24 hours before the event. You can also drop items at the Household Toxics Facility.

■ **For more about local toxics disposal**, see [www.recyclenow.org](http://www.recyclenow.org) or call 707/565-3375.

## Don't Just Toss That Cigarette Stub!

Casually tossing that cigarette stub might seem easy (and even cool). But these tiny remnants add up fast. An estimated 4.5 trillion are discarded each year worldwide! Each of them can contain multiple toxics that then enter our ecosystems and pollute water supplies. They can also be eaten by pets and wildlife, potentially causing illness and death.

Plus these tossed butts can quickly start fires that destroy homes and wild areas, kill people and creatures, add to our shared firefighting costs, and cost millions in property damage. Oh, and their litter just looks ugly, and we're paying for their cleanup in all sorts of ways.

Read the full story, with more information and solutions, by going to **Cigarettes** in the STEP Index.

## 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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