



THE NEXT STEP Toward a Healthier Future

A BI-MONTHLY NEWSLETTER OF THE SEBASTOPOL TOXICS EDUCATION PROGRAM

Art Smart

As with so many everyday products, we can simply assume that any art material for sale (or in our homes or schools) is safe.

However, the reality is that paints, glues, glazes, markers, and other products can contain dangerous solvents, heavy metals, phthalates, parabens, formaldehyde, and more. These in turn can cause headaches, nausea, breathing problems, lung and kidney damage, and even cancer.

So how can we protect ourselves and those under our care? Well, it's a vast topic, but here are some key steps to get you started.

How to Choose Safer Supplies

1) Identify the products you want to evaluate. These might be materials you're considering buying, or ones you already have. Check your cleanup supplies too. (Note that your older products might contain now-disallowed ingredients and lack current warning language.)

2) Understand the two overall levels of art supply standards.

• **Children's standards.** These are stronger to reflect children's greater

vulnerability to toxics. That's because of their smaller size, developing body systems, lower ability with directions, and habit of putting things in their mouths. Products meeting these standards can also work for folks who are physically ill, limited in their ability to follow safety instructions — or just want something safer!

• **Professional standards.** These allow additional ingredients that professionals might want to use.

3) Consider the expected amount of use. The more a product is used, the higher the exposure risk. So it's even more important that an artist, art teacher, or frequent user look for less-toxic products — or at least limit their exposure to more toxic items.

4) Read the product packaging, to learn about its safety and risks.

• **Check that the product says "Conforms to ASTM D-4236."** This label (and underlying evaluation process) is legally required on all art and craft materials sold in the U.S.

• **Look for ACMI certification logos.** They're optional but handy.

- **ACMI's "AP" (Approved Product) logo** indicates that the product is assessed as nontoxic to both children and adults. (Older products might have a CP (Certified Product) or "nontoxic" seal instead.)

- **ACMI's "CL" (Cautionary Label) logo** indicates that the product contains potentially harmful ingredients and is not appropriate for children. (Older products might have a "Cautions Required" label instead.)

• **Avoid products marked "Danger," "Caution," "Warning," or**

STEP Updates

■ **Thank you to everyone who has 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 Feedback card, you can get a substitute** at www.healthyworld.org/STEPSurvey.html. Please send it in as soon as possible. If you're a Sebastopol resident, please write that on the printout, plus your name and address, so that it'll be counted in the official tally.

■ **We'd also love your input on a little gathering we're planning.** Our goals are to celebrate the 15th anniversary of *The Next STEP* newsletter, appreciate everyone who's contributed to it, and offer folks a chance to connect with others who care about these issues. You can fill out our easy and quick survey at www.surveymonkey.com/r/NWW88GY. Or email me at STEP@healthyworld.org with the subject line "STEP Party" to request the questions or an invitation.

■ **We're honored that the City Council acknowledged our 15th anniversary with a Proclamation at its Feb. 16 meeting.** As always, we appreciate the support of the City and the community for this innovative project for a healthier world.

"Poison." Or at least be sure that they're worth the risk. Don't allow children 12 or under to use them.

• **Take seriously any hazard and usage statements, to understand and address the risks.** They're listed because of serious concerns.

5) Recognize the limits of labeling. For instance:

• **A product with ACMI's "nontoxic" AP rating isn't necessarily completely free of toxics.** It's just assessed to contain none "in sufficient quantities to be toxic or injurious to humans" when used as labeled. Thus it might still cause harmful effects if used contrary to

See *Art*, over



Art, continued

labeling, at higher rates, or in combination with other exposures.

• **There is debate about the AP on some products.** For example, Healthy Child Healthy World (HCHW) disagrees with it on polymer clays. That's because these are made of PVC softened with phthalates, which are linked to reproductive and organ damage. ACMI says the amounts are too small to cause harm; HCHW says users have cumulative exposures from multiple sources.

6) Find out more about a product's ingredients and hazards. Start with its Materials Safety Data Sheet (MSDS), which you can get online or from the manufacturer.

7) Look for less-toxic options to more-toxic products. See the box (to right) for some ideas.

Following Safe Use Practices

1) Read and follow package directions, and share with other users. As needed, cover surfaces, and wear gloves, smocks, and goggles. Cover any cuts. Don't transfer materials to other containers. (Or,

if needed, transfer the label safety information too.)

2) Don't eat, drink, or smoke when using art materials, to avoid ingestion. Don't put your brush or pen in your mouth. Don't use products on the skin or in food that aren't labelled for it. Avoid inhaling solvent vapors or dusts from mixing and sanding dry paints and clays.

3) Use sufficient ventilation. But also be sure to avoid air disturbance when using powders.

4) Keep children away from risky processes. These include: spray painting, spraying fixatives, airbrushing, soldering, etching with acid, and certain steps in making ceramics. They also include activities with hazardous materials that produce vapors, fumes, suspended particles, spattering, or splashing.

5) If products have cautionary labels, keep them out of the reach of children.

6) If a product has a flammability warning, don't store or use it near heat, sparks, or flame.

This is just starting information. For more important specifics on your

Roughing Out the Risks

Here are some of the riskier and safer options. These lists are approximate because there are a wide range of brands and products. Even within a paint line, toxicity can vary, depending on the specific pigments used.

- **Generally riskier products include:** Oil paints, turpentine, spray adhesives, aerosol sprays, solvent-based markers, rubber cement, polymer (baking) clays, and powdered paints, pigments, clay, and glazes.
- **Generally better options include:** Colored pencils, glue sticks, liquid non-aerosol products, flour-based clays, plant-based dyes, and water-based paints, glues, and markers.

products, see the resources below. In the next issue, I'll talk about safe cleanup and disposal. Please feel free to email me any questions!

SOURCES: "Top 10 Tips: Choosing Art Materials," www.watoxics.org/toxicwatch/top-10-tips-choosing-art-materials • www.greenamerica.org/livinggreen/toxicart.cfm • www.cpsc.gov/PageFiles/112284/5015.pdf • www.oehha.ca.gov/education/art

Toxic-Tinged Fog

Fog is such a lovely part of our local natural eco-cycles — gently rolling over our hills, beautifully filtering the light, pulling in fresh marine air, and bringing tender cool refreshment to the ground below.

But could there be toxics inside? UC Santa Cruz professor and environmental toxicologist Peter Weiss-Penzias wondered exactly that. So he and other researchers (including Kenneth Coale of the Moss Landing Marine Laboratories) formed the FogNet project, and started sampling various California coastal spots.

Unfortunately, they found the neurotoxic mercury in the fog — at concentrations 19 times higher than in rain. The researchers consider these amounts still relatively low for direct human exposure. Coale says, "walking around in it and breathing it in doesn't seem to be a health risk."

However, Weiss-Penzias says that this hasn't been previously reported in scientific literature, so this reveals another way that mercury moves in coastal environments.

The real concern is that this adds to the mercury already bioaccumulating up the food chain, concentrating exposures from a wide range of sources. This process leads to increasingly potent doses in humans, animals, and our food supply. Mercury is known to cause neurological and reproductive harm.

The researchers note that humans introduce mercury into our environment through coal burning, mining, and metals processing.

Coale suggests that "perhaps we should be considering limiting [mercury] emissions, particularly from coal-fired power plants — not just from a climate change perspective, but from an ecosystem health perspective as well."

SOURCES: "Toxic chemical discovered in San Francisco's fog," by Kevin Schultz, Jan. 4, 2016, www.sfgate.com/bayarea/article/The-toxic-chemical-in-San-Francisco-s-fog-6734283.php • "Mercury-Laden Fog Swirls Over California Coastal Cities," by Cole Mellino, Jan. 6, 2016, www.ecowatch.com/2016/01/06/california-fog-mercury

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.

Newsletter Editor, Lead Writer & Layout: Patricia Dines, Email STEP@healthyworld.org

Newsletter Editorial Team: Patricia Dines and Jim Gleaves

Newsletter Design Concept & Logo Design: Lyn Dillin (né Bouguereau)

STEP Founders: Michael Black, Patricia Dines, Rebecca Dwan, Jeff Edelheit, Nan Fuchs, Craig Litwin, and Larry Robinson.

STEP, P. O. Box 1776, Sebastopol CA 95473
www.healthyworld.org/STEPindex.html

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