# **School Pesticide Monitor**

A Bi-monthly Bulletin on Pesticides and Alternatives

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# Three New Reports Reveal Children's Chemical Exposure

Evidence Continues to Mount for School Pesticide Reform

U.S. EPA released their second edi-tion of America's Children and the Environment: Measures of Contaminants, Body Burdens, and Illnesses (www.epa.gov/envirohealth/children) in February. Included in the report are the results of a Minnesota study of pesticides in schools, which found that some pesticides have been detected at indoor concentrations potentially hazardous to children weeks and months after application.

Forty percent of the responding custodians reported that their schools provided no notification of pesticide use, such as notices in fumigated areas or pre- and post-application letters to students and teachers.

The Centers for Disease Control and Prevention (CDC) released the second National Report on Human Exposure to Environmental Chemicals (www.cdc.gov/exposurereport), which measured blood and urine samples for 116 chemicals that found their way into the human population through pollution or consumer products.

The report found positive results for 89 chemicals in the volunteers tested, including selected organophosphate pesticides, her-

bicides, pest repellents and disinfectants. The Environmental Working Group (EWG), in partnership with Mt. Sinai School of Community Medicine and Commonweal, released a similar study, Body Burden: The Pollution In People (www.ewg.org/reports/bodyburden/index.php). Published in the peer-reviewed journal Public Health Reports, the study offers an up-close and personal look at nine individuals whose bodies were tested for 210 chemicals. Subjects contained an average of 91 compounds, most of which did not exist 75 years ago.

## Two California Bills Guard Children From Toxic Pesticides

Bills Would Ban Hazardous School Pesticides and Wood Preservatives

California lawmakers are taking steps to reduce pesticide poisoning of children by introducing bills that would ban the most toxic pesticides from being used at schools and from pressure-treated wood structures.

AB 1006, sponsored by Judy Chu, would prohibit all public schools from using pesticide products: (1) with the highest acute toxicity as defined by EPA Toxicity Categories I and II; (2) containing N-methyl-carbamate, neurotoxic organophosophorus compounds, or pyrethoids; (3) containing active ingredients rated by EPA as known, probable or possible human carcingen or listed on the state's Proposition 65 known carcingen list; (4) containing active ingredients that cause birth defects, reproductive harm, or developmental harm as identified by EPA or listed pursuant to Proposition 65; and (5) applied by fogging, bombing, tenting, broadcasting, or baseboard spraying.

California already has a policy requiring no-

tification of pesticide use to school staff, parents and student. While this right-to-know legislation is extremely important, a policy that actual reduces toxic pesticide use goes even further.

Groundbreaking legislation to ban the use of the three most toxic wood preservatives, pentachlorophenol (penta), chromated copper arsenate (CCA) and creosote, has been introduced in California by State Senator Gloria Romero. According to EPA, 800 million pounds of the wood preservatives are used annually, representing nearly one third of all pesticides used in the U.S. each year. Children exposed to soil tainted with penta face a cancer risk that is 220 times greater than EPA's acceptable level. CCA is a toxic preservative widely used in the manufacture of playground equipment.

Although beginning in January 2004, CCAtreated wood can no longer be manufactured for residential purposes like playgrounds, yet existing stocks can still be sold off and used. Scientific studies prove that the three chemicals that make up CCA, namely arsenic, hexavalent chromium (chromium VI) and copper, are leaching out of CCA-treated wood into the soil around structures and onto the surface of the treated wood, which put children's health at risk.

Beyond Pesticides recently released *Poison Playgrounds: CCA Risks and Alternatives*, a resource kit to assist in organizing against the use of wood preservatives in children's playgrounds. Contact Beyond Pesticides or visit www.beyondpesticides.org/wood.

For more information on California's bill, AB 1006 sponsored by Chu, contact Environment California at (213) 251-3688 or at environment california.org. For information regarding the Romero wood preservative bill, contact Beyond Pesticides.

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The 21st National Pesticide Forum, *Toxics in the Age of Globalization*, is almost here! Join us in Austin, TX, April 25-27 to learn more about pesticides and alternatives for your community. Workshop topics include **pesticides and children**, **school organizing**, **and indoor and outdoor IPM strategies**. Register today at www.beyondpesticides.org or by contacting Beyond Pesticides!

### **Weeding Out Toxic Pesticides**

As spring approaches and pesky weeds begin appearing on school lawn and landscapes, be sure your school implements a least-toxic weed management program. Some programs involve parent volunteers to help implement an Integrated Pest Management (IPM) program. These programs are successfully being implemented at Carl Sandburg Elementary School in Kirkland, Washington and at the Triadelphia Ridge Elementary School in Ellicott City, Maryland. For more information, contact Beyond Pesticides.

#### Prevention

The first step is to prevent weed infestations by maintaining a healthy lawn.

- **Develop healthy soil.** Using a soil probe, cut or dig a small hole about 10" deep and with one side that is straight and smooth. The lawn should have between 5"-6" of topsoil, which is the darkest soil layer. If needed, add topdressings of organic matter.
- Plant well-adapted, pest-resistant grass varieties. Find out which grass is most suitable to your climate from your local cooperative extension. A mix of two or more grass varieties is preferable. Over seeding can also reduce weed problems in some cases.
- Aerate the lawn regularly. Aerating loosens the soil, allowing air, water, and nutrients to reach the grass roots. Most lawns should be aerated twice a year.
- **De-thatch.** Thatch is a dense layer of grass stems and roots on the surface of the soil. When it becomes thick, roots will grow within the layer of thatch instead of establishing themselves deeply in the soil, which can lead to insect and disease problems, and increase susceptibility to cold, heat and drought. Thatch is reduced by aeration, topdressing with organic matter, or by vertical mowing.
- Maintain proper pH. Test the soil and adjust the pH if necessary. Low pH means high acid content add lime to lower the acidity to 6.7-7 for most grass varieties. High pH means high alkaline add sulfur to lower the pH, taking care not to add too much and burn the lawn.
- Fertilize the lawn at least once a year, preferably in the fall, using a slow-release, urea based product. Fertilizer should not be water-soluble.
- Water properly. Too much or too little water can induce pest outbreaks. Enough water should be used each time to wet the soil to the depth of the grass root zone. Soil should be allowed to become nearly dry between watering. Avoid frequent, shallow watering, which promote shallow root systems and reduce the ability of the lawn to resist stress.
- Mow correctly and frequently to ensure that weeds are unable to build energy reserves and become well established. Use sharp blades set as high as possible to minimize adverse effects. Never cut off more than 30-40% of the grass blades in a single mowing. Rotate mowing patterns to reduce lawn compaction. Leave a light layer of grass clippings on the grass, as they can provide up to half the lawn's nitrogen requirement.

#### Least-toxic Control Strategies

When weeds appear, you don't have to resort to toxic chemicals to get rid of them.

- If you feel that an herbicide is necessary, **corn gluten meal** is an excellent pre-emergent. Because of its high nitrogen content, it can be applied to turf grass as a fertilizer and top dressing, and it suppresses growth of annual weeds such as crabgrass.
- Fatty acid soaps, which rapidly biodegrade in soil, provide a least-toxic post-emergent weed control option. Over use of soaps, like chemical pesticides, can lead to pest resistance. Carefully read the label of fatty-acid soap pesticide products to identify the active ingredient and make sure that they do not also contain toxic pesticides or synergists. A fatty-acid soap product called Sharpshooter™ is an effective broad-spectrum herbicide.
- Vinegar in at least a 20% solution can be used to spot treat weeds.

For more information on weed control or for any other pest problem, contact Beyond Pesticides.

# Is Your School Implementing A Pest Management Program That Doesn't Harm Students and Staff?

Beyond Pesticides' recent report *Are Schools Making the Grade?* shows that 59% of 17,000 school districts nationwide are affected by one or more components of a safer least-hazardous pest management policy. Policy components include Integrated Pest Management (IPM), restrictions on certain pesticide uses, and pesticide use notification requirements.

Although the report identifies state and local policies, it does not address whether these policies are being implemented. Beyond Pesticides received several responses to the report that their school was not abiding by their state and/or local policy. This reinforces the need for individuals to contact school officials to identify current pest management practices and let them know about pesticide use concerns. School administrators are more conscious of their pest management practices if they know parents are concerned and traking their program.

Find out what policies affect your school by contacting Beyond Pesticides or see the report at www.beyondpesticides.org/schools. The next step is to work with school personnel to see that the policies are implemented. Beyond Pesticides and a network of local and state school pesticide reform activists can help you throughout the process.