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PLAYGROUND PESTICIDES

Limiting toxic exposures in educational settings can prevent many adverse health outcomes...

BY DEIRDRE IMUS

As parents, we rely on our children's schools to provide more than just an education. Whether in a mainstream classroom or not, school is where our kids go to learn social skills, time management, sharing, independence, and other intangibles. More than anything, we count on schools to keep kids safe. Whether by preventing them from darting into the street or by breaking up a scuffle between students, teachers and administrators bear responsibility for the well-being of their students, for a considerable time frame in their lives.

The job of protecting students from harm should extend beyond the classroom walls. Kids carry with them forever many of the lessons learned and friendships formed at school. Unfortunately, they also take other, less desirable things, and often without even knowing it: pesticide residue from a soccer field's gorgeously green grass, or chemicals used to grow the fruits and vegetables consumed at lunch.

Schools unintentionally expose people to toxins over the course of a day; ditto office buildings, airports, even hospitals. While none of us should inhale or ingest harmful substances in our midst, the potential negative health consequences of doing so are particularly potent in kids. Studies have linked chemical exposures in childhood to autism, cancer, learning



disabilities, and asthma, to name just a few chronic conditions.

THE PRICE OF BEAUTY

Sadly, there are so many (too many!) roads leading to danger, that it can feel overwhelming to cover all the toxic bases. There's enough to worry about as your child boards the bus to school each morning. If school districts can be proactive about some of the less obvious—but no less hazardous—chemical exposures in their students' midst,

it might make it just that much easier for parents to sleep at night.

One of the first adages children learn in school is not to judge a book by its cover. What's on the inside, they're told, is more important than what is on the outside. And yet, countless hours and dollars are spent creating and maintaining the grounds of a school. Like with a house, curb appeal is important. A school should look alluring from the outside, if for no other reason than to encourage kids to show up each day motivated to learn, eager to run through the doors.

Such beauty can come at a price, and sometimes that price is our children's health. Pesticide use is common on school grounds to keep fields, tracks, playgrounds, and other areas sanitary and visually attractive. According to the Fall 2009 issue of *Pesticides and You*,

DEIRDRE IMUS...



...National Leader for Children's Health and the Environment Deirdre Imus, founder of the site devoted to environmental health, www.imusenvironmentalhealth.org, is President and Founder of The DeirdreImus Environmental Health Center® at Hackensack University Medical Center and Co-Founder/Co-Director of the [Imus Cattle Ranch for Kids with Cancer](http://www.imus.com). She is a *New York Times* best-selling author and a frequent contributor to FoxNewsHealth.com, and Fox Business Channel. In her quest to clean up the environment for our kids, Deirdre developed the award-winning Greening The Cleaning® program and product line, which replaces the hazardous ingredients commonly found in cleaning agents with environmentally-responsible, less toxic products wherever possible. The program and products are used throughout the country in schools, healthcare facilities, and businesses. ◀

► **LOOK FOR PESTICIDE-FREE PRODUCE**—See www.ewg.org/foodnews for an easy-to-follow Shoppers guide to Pesticides in Produce™



a quarterly publication of the nonprofit environmental health organization Beyond Pesticides, of the 40 pesticides most commonly used in schools, 28 are probable or possible carcinogens, 26 have been shown to cause reproductive effects, 26 damage the nervous system, and 13 can cause birth defects.

INTEGRATED PEST MANAGEMENT

The U.S. Centers for Disease Control and Prevention has recommended schools practice integrated pest management (IPM) rather than pesticides, insecticides, herbicides, fungicides, and other chemicals known to harm human health. IPM uses common sense strategies to reduce sources of food, water and shelter for pests and, according to the U.S. Environmental Protection Agency, it is usually a less costly option for effective pest management in a school community.

Many school districts nationwide have successfully implemented IPM, but more still need to take action. A recent study published in the journal *Environmental Health Perspectives* found that children whose mothers are exposed to agricultural pesticides during pregnancy might be at an increased risk for autism spectrum disorders. In the study, pesticide-treated areas were not just limited to farms, but also included parks, golf courses, and roadsides.

According to Pesticide Action Network North America (PANNA), a nonprofit organization working to replace the use of hazardous pesticides with ecologically sound and socially just alternatives, 36 states now have school pesticide regulations. Connecticut banned the use of synthetic weed killers around schools and daycare centers in grades K-8; New York forbade the cosmetic use of pesticides on playgrounds and sports fields at schools and daycare centers; and California mandates parental notification when pesticides are to be applied, and several counties have enacted buffer zones that limit the aerial spraying of pesticides around schools, daycares, and other sensitive sites.

None of these laws are perfect (why only grades K-8, Connecticut?), but they are much, much better than nothing. And even if laws are in place, one of the wonderfully frightening facts about pesticides is that they travel all too well through the air, and can land on surfaces nowhere near where they are initially sprayed.

AN OUNCE OF PREVENTION

Simple hand washing with plain soap and water, especially before meals, is essential. All kids use their hands to explore their world (and often to eat!), and kids with autism are especially prone to engage manually with their environment. In fact, sensory integration therapy, which uses play activities



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to change how the brain reacts to touch and other senses, has been shown to improve daily function in children with autism. The desire or need to touch certain things should not be deprived of this population, and yet doing so at a playground or park treated with pesticides stands to make them sick, or to worsen already challenging health conditions.

Implementing IPM is only one route through which schools can reduce pesticide exposures for its students and staff. Another is by carefully selecting the produce served at meals. According to the EPA, infants and children are especially sensitive to pesticide residues

found in food and water. On its website, the EPA notes that pesticides may block nutrient absorption, or permanently alter the way an individual's biological system operates. What's more, children's bodies are less efficient at removing pesticides if the excretory system is not fully developed.

Simply put, pesticides are bad for all of us. They are *really* bad for kids.

PANNA notes that pound for pound of body weight, kids drink 2.5 times more water and eat 3-4 times more food than adults do. There has been a strong push from the federal government to make school lunches healthier by including more fruits, vegetables, and other healthy options. These foods are most healthy when not treated with pesticides.

Go to the source: find out where your school district gets its produce. No amount of pesticide usage is acceptable. If you choose to serve pesticide-free or organic produce in your home, for health reasons or any other, you shouldn't have to worry that your children's diet is comparatively sub-par in the cafeteria.

Urge your school district to link with a pesticide-free farm-to-school program, which benefits bodily health and can also give your local economy a boost. The National Farm to School Network (www.farmtoschool.org) is a good place to start: it is an information, advocacy and networking hub for communities working to bring local food sourcing and food and agriculture education into school systems and preschools.

The bad news is pesticides are ubiquitous. The good news is that the health dangers these chemicals pose are only becoming more obvious, and as a result, formerly "alternative" practices like organic farming and IPM are becoming more mainstream. Our kids—and their health—only stand to benefit. ◀

Note: Information provided herein is not intended to treat or diagnose any health condition. As always, consult your healthcare provider with any questions or health concerns.