



## Parents Approach School Health Staff Toxic Pesticide-Free “For My Child’s Health”

By Jay Feldman and Michele Roberts

The month of September is always a busy month for many especially those preparing for the return to school and a month that should never pass without school officials having a discussion about managing their buildings and grounds without toxic materials. This summer while children and school staff recessed, two landmark studies were released confirming the need for immediate action to protect children. The *Journal of the American Medical Association* in July published a study<sup>1</sup> that documents student and school employee poisoning by pesticide use at schools. While the study focuses on acute, or immediate, effects, the study authors note that, “Repeated pesticide applications on school grounds raise concerns about persistent low level exposures to pesticides at schools...The chronic long-term impacts of pesticide exposures have not been comprehensively evaluated; therefore, the potential for chronic health effects from pesticide exposures at schools should not be dismissed.” The study results show that the incident rates among children increased significantly from 1998 to 2002.

Most illness is associated with insecticides (35%), disinfectants (32%), repellents (13%), and herbicides (11%). The study’s authors also point to a lack of protection for school children and employees under federal law, noting that state laws provide some protection but are varied, leaving large gaps.

Prior to the release of the study in the *Journal of American Medical Association*, the Centers for Disease Control’s (CDC) *Third National Report on Human Exposure to Environmental Chemicals*, was also released in July. The report contains striking new data showing widespread exposure to commonly used synthetic pyrethroid pesticides, with residues carried by over 50 percent of the population. In addition to endocrine disrupting effects, all the pyrethroids are closely associated with respiratory illness and asthma, an illness of increasing concern affecting growing numbers of people, especially children.

Beyond Pesticides has identified 48 commonly used pesticides in schools, of which 24 are probable or possible carcinogens, 25 are linked with reproductive effects, 33 with liver or

## For my child's health, please do not spray pesticides in school.



### Did you know...

- ⇒ Asthma is the leading cause of school absenteeism due to chronic illness. <sup>i</sup>
- ⇒ 1 in 6 children in the U.S. has a developmental disability, ranging from a learning disability to a behavioral or emotional disorder. <sup>ii</sup>
- ⇒ Research shows that pesticides are both a trigger for asthma attacks and a root cause of asthma. <sup>iii</sup>
- ⇒ Government testing found residues of pesticides commonly used in schools at highest concentrations in children ages 6-11. <sup>iv</sup>

<sup>i</sup> Centers for Disease Control and Prevention 2005. Asthma's Impact on Children and Adolescents. <http://www.cdc.gov/asthma/children.htm>.

<sup>ii</sup> Boyle, C. A., et al. 1994. "Prevalence and health impact of developmental disabilities in US children." *Pediatrics* 93: 399-403.

<sup>iii</sup> Salam, MT, YF Li, B Langholz, and FD Gilliland. May 2004. Early-life environmental risk factors for asthma: findings from the children's health study. *Environmental Health Perspectives* 112(6): 760-765.

<sup>iv</sup> Centers for Disease Control and Prevention. 2003 Jan. Second National Report on Human Exposure to Environmental Chemicals.

Dear school health staff:

*I am looking forward to a safe and healthy school year and appreciate your efforts in this regard. With safety in mind, please ensure that my child is not exposed to toxic pesticides. Pesticide use is increasingly being recognized by the medical community as a health threat to children. They can cause neurological problems, learning disabilities, asthma, cancer and other chemical-induced illnesses. Pesticides can exacerbate existing health problems and initiate new ones.*

*In fact, a new study recently published in the Journal of the American Medical Association finds that children and school staff nationwide are being poisoned by pesticide use at schools, with more incidents going undiagnosed and unrecorded. It has been documented that pesticides are not adequately regulated by EPA, especially concerning children's exposure. Please let me know how my child is being protected from this toxic chemical hazard.*

*To ensure the safety of all children and school staff, I suggest that the school adopt non-toxic integrated pest management strategies. This will ensure a safe and healthy learning environment. I would be happy to put you in touch with those who are successfully managing the school environment without toxic chemicals.*

*Thank you and sincerely,*

### Making the Transition to a Healthy, Pest-Free Learning Environment

- ⇒ Integrated pest management (IPM) is a program of prevention, education, monitoring and control that eliminate toxic pesticide use. One school IPM expert says, "You don't have to kill pests when you can prevent pests."
- ⇒ Information to help your school go pesticide-free is available online at [www.toxicfreeschools.org](http://www.toxicfreeschools.org).
- ⇒ For more information on starting an IPM program, contact Beyond Pesticides at [www.beyondpesticides.org](http://www.beyondpesticides.org) or 202-543-5450, or:

For the sake of your child's health please send a copy of this card to your child's school.



kidney damage, 33 with neurotoxicity, and 39 are sensitizers and/or irritants.

## Back-to-School Campaign Launched

In an effort to address the findings of these very important studies as well as continue on-going public awareness regarding the use of toxic pesticides in and around schools, Beyond Pesticides and local and state organizations along with parents from 30 states and the District Columbia launched a back-to-school call to action. A card addressed to the school health staff was used by the parents to urge school districts across the country to adopt non-toxic management strategies and to end the use of pesticides that can cause cancer, neurological problems, learning disabilities, asthma and other chemical-induced illnesses.

In response to the rising asthma rates and new information on the triggers and causality of toxic pesticides, Beyond Pesticides released its latest publication, *Asthma, Children and Pesticides: What you should know to protect your family,*

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in September 2005. The goal of the publication is to alert the public and officials to the scientific studies linking pesticide exposure and asthma, a disease that strikes one in eight school-aged children and is the leading cause of school absenteeism due to chronic illness. According to the CDC, the estimated cost of treating asthma in those younger than 18 years is \$3.2 billion per year.

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## School Pesticide Bill Reintroduced in Congress

Senator Frank Lautenberg (D-NJ) took action on September 7, 2005 by introducing the *School Environment Protection Act* in the Senate (S.1619). Representative Rush Holt (D-NJ) introduced the same bill in the U.S. House of Representatives (H.R. 110) earlier this year. The purpose of this federal legislation is to improve the protection of the nation's school children from pesticide use. Although there are 33 state laws and over 400 school districts that are known to have policies or programs regarding integrated pest management, pesticide bans, and/or right-to-know, passing federal legislation is critical to providing a safer and healthier environment for all children to learn across the nation.

### School Environment Protection Act of 2005

The *School Environment Protection Act* (SEPA) provides basic levels of protection for children and school staff from the use of pesticides in public school buildings and on school grounds.

**Children need better protection from toxic chemical exposure while at school.** According to the National Academy of Sciences report, *Pesticides in the Diets of Infants and Children*, children are among the least protected population group when it comes to pesticide exposure. The report finds that EPA generally lacks data on children necessary to protect them. Due to their small size, greater intake of air and

food relative to body weight, developing organ systems and other unique characteristics, children are at higher risk than adults to pesticide exposure. Thirty-three states have taken some action to step in and provide protective action to address pesticide use in, around or near their schools. These include a mixture of pesticide restrictions and parental notification and posting of signs before certain pesticides are used. However, state protection is uneven across the country and children in 17 states are provided no protection at all.

**Safer practices.** The legislation requires that the safest methods of pest management are used in school buildings and on school grounds to protect children. As a first step, it requires public schools to use an Integrated Pest Management Plan (IPMP) for pest management that only uses lowest toxicity pesticides. IPMP relies on a combination of methods that address pest prevention, sanitation, structural repair, mechanical measures, biological controls and other non-chemical methods inside buildings and additional approaches for turf and ornamental plan management that build healthy soil and natural resistance to pests.

**General notification.** At the beginning of the school year, schools must distribute information to parents on their integrated pest management program, any pesticide that may be used during the school year, and the name of a contact person who will have hazard information on chemicals to be used.

**Least toxic pesticides.** The legislation generally excludes from use in schools pesticides that are determined by

## Demographics of Asthma

The levels of asthma prevalence vary across regions of the U.S. On average, 12.5% of U.S. children have experienced asthma, and 7% have been diagnosed by a doctor or nurse. In Harlem, New York City, 28.5% have been diagnosed.<sup>2</sup> Trends show that people, especially children, living in urban, inner-city neighborhoods, are affected the most by asthma.

A 1998 study found that in New York the heaviest use of pesticides is in the most urban counties—Manhattan and Brooklyn.<sup>3</sup>

Urban areas have higher asthma rates for a number of reasons, including higher levels of air pollution, both indoor and outdoor, heavy traffic dust and fumes, indoor pests, and higher levels of pesticide use.

Children who live in poverty in inner-cities at the highest risk, as they often live in crowded, inadequate housing where poor conditions lead to high risk of both exposure to cockroaches and other pests, as well as to toxic pesticides.<sup>4</sup> Additionally, most housing projects are routinely sprayed with insecticides.<sup>5</sup>

In addition to being elevated in urban areas, asthma rates are also disproportionately high among people-of-color, especially in African-American and Latino communities.<sup>6</sup> Studies show that African-American asthma-related hospitalization rates are four times higher and asthma death rates are double that of whites.<sup>7</sup>

Geography also accounts for variations in asthma rates. In 2004, the Allergy and Asthma Foundation of America developed a list of top “asthma capitals” based on prevalence, mortality rates, air quality, smoking laws, and asthma medical care. Knoxville, Tennessee, was number one, followed by Little Rock, AR and St. Louis, MO.



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the Environmental Protection Agency (EPA) to cause cancer, mutations, birth defects, reproductive dysfunction, neurological and immune system effects, endocrine system disruption, and those pesticides rated as acutely and moderately toxic. Space spraying for discharging pesticides into the air throughout the school is prohibited. Specific pesticides are identified as acceptable under the definition, including boric acid, silica gels, diatomaceous earth, nonvolatile insect and rodent baits in tamper resistant containers, microbe-based insecticides, botanical insecticides (not including synthetic pyrethroids) without toxic synergists, and biological controls.

**Pesticide use.** A school may use a conventional pesticide, as long as the area of application is unoccupied during the treatment. For applications of pesticides via baseboard spraying, broadcast spraying, tenting or fogging, the treatment area

must remain unoccupied for the following 24 hours, unless the pesticide product label states a specific reentry interval. Specific notification requirements must be provided if a pesticide, other than those exempted from notification, is applied at a school.

**Notification of pesticide use.** If a school, after utilizing integrated pest management (IPM) and least toxic pesticides, determines that a pest cannot be controlled, the school may use conventional pesticides, provided that the school staff and parents of children in the school are notified 72 hours prior to the use of the pesticide. Notification must include the common and trade name, a description of potential adverse effects, a description of the location and reason for application.

**Information on pesticide use.** Each local educational agency is required to designate a contact person. The contact person maintains information about pesticide applications, acts as a contact for inquires, makes pesticide material safety data sheets, labels, EPA fact sheets, and any final official EPA information related to the pesticide available to the public.

**Posting of notification signs.** In addition, the legislation requires that signs are posted 72 hours in advance of the pesticide application and remain in place for 72 hours after the pesticide application. In the case of notification and posting for outdoor pesticide use, three application dates in chronological order must be provided and the application may take place on subsequent dates if the preceding date is canceled



due to weather. Signs are required to be posted at a central location noticeable to individuals entering the building and at the proposed site of application.

**Emergency use provision.** The legislation allows for the emergency use of pesticides when the immediate health and safety of children are being threatened. In this case, pre-notification requirements of the legislation are waived and schools are to provide notice of the application to the individuals listed on the registry within 24 hours of pesticide use and post notification signs immediately following the application. The notice must include information required under the regular notice, as well as a description of the reasons requiring the application to be an emergency.

**Legislation does not preempt states or localities.** A state or locality can exceed the provisions of this act. States

or localities that already have policies that meet or exceed this act can continue with their implementation.

**Integrated Pest Management Trust Fund.** The legislation establishes an Integrated Pest Management Trust Fund to support education, training and development of IPM systems in schools where there is noncompliance.

**EPA requirements.** SEPA requires the Administrator of EPA to appoint an official for school pest management within the Office of Pesticide Programs at the EPA to coordinate the development and implementation of IPMPs in schools. The Administrator is required to make a list of least toxic pesticides, and submit to a regulatory review a list of restricted pesticides. After two years, the Administrator is required to make a finding about whether use of registered pesticides in schools may endanger the health of children.

## Endnotes

- <sup>1</sup> Alarcon, W.A., et al. 2005. Acute Illness Associated with Pesticide Exposure in Schools. *JAMA* 294 (4): 455-465.
- <sup>2</sup> Nicholas, SW, B Jean-Louis, B Ortiz, et al. 2005. Addressing the Childhood Asthma Crisis in Harlem: The Harlem Children's Zone Asthma Initiative. *American Journal of Public Health* 95 (2): 245-249.
- <sup>3</sup> Thier A, J Enck, and C Klossner. 1998. *Plagued by Pesticides: An Analysis of New York State's 1997 Pesticide Use and Sales Data*. Albany, NY: Envi-

ronmental Advocates. <http://www.eany.org/reports/pesticides/plague.html> (Accessed August 2005).

- <sup>4</sup> Landrigan, 1999. (Ref. #16).
- <sup>5</sup> Ibid. (Landrigan).
- <sup>6</sup> Perera, FP, SM Illman, PL Kinney, et al. 2002. The challenge of preventing environmentally related disease in young children: Community-based research in New York City. *Environmental Health Perspectives* 110 (2): 197-204.
- <sup>7</sup> Solomon, 2004. (Ref. #21).