



**EARTHJUSTICE**

*Because the earth needs a good lawyer*

## PESTICIDES IN THE AIR—KIDS AT RISK

PETITION TO EPA TO PROTECT CHILDREN  
FROM PESTICIDES DRIFT



**E**PA Has Failed to Protect Children from Pesticide Drift, and now farmworker, public health, and child advocates have joined forces and submitted a formal petition calling for the United States Environmental Protection Agency to protect children from the harmful effects of “pesticide drift.”

The term “pesticide drift” refers to the airborne movement of pesticide droplets and/or vapors from application sites into homes, schools, parks, daycare centers, and other sensitive areas. The petition seeks protections for children, who face greater risks from pesticides than adults. Their small bodies are more vulnerable to chemicals and they spend more time than adults playing outdoors.

For those reasons, in 1996, Congress required EPA to set standards by 2006 to protect children from pesticides. Three years have passed since that deadline, and EPA’s job is only partially complete—the agency has failed to ensure that children are protected from pesticide drift.

### EPA’S DOUBLE STANDARD

While EPA has acknowledged that pesticide drift poses risks to children in agricultural communities, it has failed to set standards to protect these forgotten children. For example, even though EPA has determined that certain pesticides are too dangerous to children to be used in homes and urban areas, EPA still allows those same pesticides to drift into agricultural communities and contaminate the air in homes, schools, and parks.

From pesticide poisoning reports to scientific studies, the available information is unsettling: pesticides are ending up in the air and in people’s bodies at unsafe levels. Surrounded by poisonous pesticide clouds and abandoned by EPA protections, rural families have nowhere to turn.

### NERVE TOXIN PESTICIDE: A TRAGIC EXAMPLE

After studying the risks posed to children by chlorpyrifos, a widely used nerve toxin pesticide, EPA banned use of the pesticide in homes. But the agency went ahead and approved the pesticide for dozens of farm uses without assessing or guarding against the risks posed to the children who live, play, and go to school near the fields where this poison is sprayed.

EPA’s decision carries real consequences for children. Even very small doses of chlorpyrifos, derived from chemicals developed for warfare during World War II, can be toxic to humans. The effects of this pesticide have been likened to a chemically-induced flu: chest tightness, blurred vision, headaches, coughing, weakness, nausea and vomiting, coma, seizures, and death.<sup>1</sup> Exposure to this pesticide is also associated with chronic health impacts like asthma, developmental brain impairments during pregnancy, low birth weights, and interference with normal hormone function.<sup>2</sup>



*Pesticide spraying from sources such as cropdusters can pose health risks to children in agricultural communities.*

## A SIMPLE SOLUTION

Fortunately, the solution sought by the petition is straightforward: EPA must fully evaluate the risks for all pesticides that have the potential to drift from agricultural sites and must limit pesticide uses that result in children being exposed to unsafe levels of pesticides. It's not just the right thing to do, it's the law.

And, to protect children while it conducts the necessary studies and develops pesticide-specific protections, EPA should immediately impose no-spray buffers around any places where children are regularly present including homes, schools, parks, and day care centers. These no-spray buffers would, for example, protect children from two groups of widely used nerve toxins (organophosphates and carbamates) that cause acute poisonings when people are exposed to small amounts through drift. EPA has found that young children are already exposed to these pesticides at levels that possibly exceed unsafe levels, without having considered the additional exposures from drift.

We can't let another growing season go by. Rural children deserve to be protected from poisonous pesticides. EPA needs to act.

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<sup>1</sup> See Agency for Toxic Substances and Disease Registry, *Cholinesterase Inhibitors Including Insecticides and Chemical Warfare Nerve Agents*, available at [http://www.atsdr.cdc.gov/csem/cholinesterase/signs\\_symptoms.html](http://www.atsdr.cdc.gov/csem/cholinesterase/signs_symptoms.html) (last viewed Sept. 2, 2009).

<sup>2</sup> Pesticide Action Network North America, *Chlorpyrifos Fact-sheet (2006)*, available at <http://www.panna.org/docsOPs/cpffactsheetoct06%5B1%5D.pdf> (last viewed Sept. 2, 2009).

<sup>3</sup> *Los Angeles Times*, *Who Will Protect the Children at School?* (Nov. 19, 2000), available at <http://articles.latimes.com/2000/nov/19/local/me-54512> (last viewed Sept. 2, 2009).

<sup>4</sup> Environmental Working Group, *Every Breath You Take: Airborne Pesticides in the San Joaquin Valley (Jan. 2001)*, available at <http://www.ewg.org/files/everybreath.pdf> (last viewed Sept. 2, 2009).

<sup>5</sup> Pesticide Action Network North America, *Air Monitoring in Hastings, Florida: October 1–December 6, 2007 (Sept. 2008)*, available at <http://www.panna.org/files/hastingsFLTech092308.pdf> (last viewed Sept. 3, 2009).

<sup>6</sup> Pesticide Action Network North America, *Pesticides and Air Pollution in Minnesota: The Frequency of Detection of Chlorothalonil, a Fungicide Used on Potatoes, at 11 Sites in 2006-07*, available at <http://www.panna.org/docsDrift/minnesotaDriftMap20071019.pdf> (last viewed Sept. 3, 2009).

## Pesticide Drift Puts Kids at Risk

Dangerous pesticides are regularly detected in air monitoring studies at levels that may have serious health consequences for children. Pesticide drift is also implicated in serious poisoning incidents.

- In 2000, the deadly nerve toxin chlorpyrifos was applied to a lemon orchard in Ventura, California, and drifted into a nearby elementary school. Dozens of students and staff suffered symptoms of pesticide poisoning, and two children were removed because of poisoning symptoms.<sup>3</sup> That same year, California Air Resources Board monitoring in the San Joaquin Valley detected chlorpyrifos in one-third of all ambient air samples, sometimes at levels that may pose serious health risks to young children.<sup>4</sup>

- Recent air monitoring conducted near the Southwoods Elementary School in Hastings, Florida, detected four pesticides—endosulfan, diazinon, trifluralin, and chlorothalonil—in every sample, and found at least three of the pesticides in 56% of samples, sometimes at levels that may pose serious health risks to young children. Exposure to these chemicals is associated with a wide range of adverse health effects—endosulfan interferes with hormones and may cause autism, diazinon is neurotoxic, and trifluralin and chlorothalonil are suspected to cause cancer.<sup>5</sup>

- Air monitoring at homes and an elementary school in rural Minnesota in 2006 and 2007 detected chlorothalonil—a fungicide EPA has classified as a “probable” carcinogen—in 123 of the 186 samples analyzed.<sup>6</sup>