Nearly 70 million servings of drinking water consumed daily, by people under 20, contain 4 or more pesticides and/or metabolites.

HIGHLIGHTS of a CRITICAL ISSUE REPORT (CRI 2006.1)

The Organic Center

Progress in Reducing Children's Exposure to Pesticides

Organic Center Sponsors AAAS Symposium

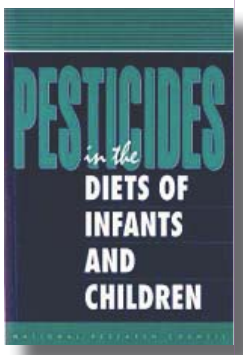
A symposium was held in February at the 2006 annual meeting of the American Association for the Advancement of Science (AAAS) addressing progress made in the last decade in reducing the risks of pesticides to infants and children. The presentations at the AAAS compared and contrasted the impacts of new reduced-risk pesticides, Integrated Pest Management (IPM), ecolabel programs, including organic farming, and regulation on reducing pesticide risks to children. The four scientists making presentations issued a "Joint Statement" that begins:

> *"We believe that the scientific case supporting the need to significantly reduce prenatal and childhood exposures to pesticides has greatly strengthened over the last decade since the passage of the Food Quality Protection Act (FQPA) in 1996."*

The Organic Center's first "Critical Issue Report" (CIR) entitled *"Successes and Lost Opportunities to Reduce Children's Exposure to Pesticides Since the Mid-1990s"* is authored by the four scientists making presentations at the AAAS symposium: Dr. Alan Greene, Dr. Chensheng (Alex) Lu, Dr. Charles Benbrook, and Dr. Philip J. Landrigan. The full CIR is available free of charge at http: /www.organic-center.org/ science.pest.php

President Bill Clinton signs the Food Quality Protection Act (FQPA) into law August1996.

Two Milestones



In 1993 the National Academy of Sciences released the report *Pesticides in the Diets of Infants and Children.* This seminal report states that low-level pesticide exposure can cause serious, developmental risks to infants and children, some with serious lifelong consequences.

This milestone led to a second in 1996, the passage of the Food Quality Protection Act (FQPA). This legislation imposed historic changes in the basic standards governing pesticides in food and directed the EPA to assure a "reasonable certainty of no harm" from all pesticide exposures. The FQPA:

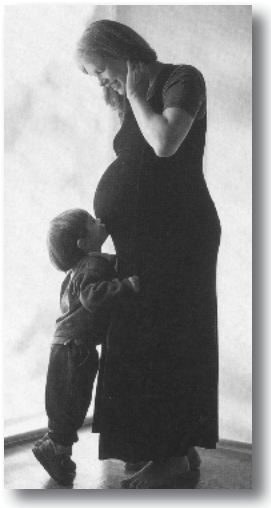
- Established a stricter, health-based standard (as opposed to the previous cost-benefit-balancing standard) for pesticide regulation, with special emphasis on risks facing infants and children, plus pregnant women and the elderly.
- Gave the Environmental Protection Agency (EPA) 10 years to develop new risk assessment methods, and to review and update some 9,600 tolerances covering pesticide residues in food. Deadline for all tolerances to be reviewed and adjusted as needed: August 3, 2006.
- Provided the EPA important new regulatory tools designed to help the Agency more quickly and decisively reduce pesticide risks to vulnerable population groups.

Exposures All Too Common

The average young American is exposed to more than five servings of food and water daily that contain pesticide residues. In most cases, but not all, the levels are very low and pose little if any risks to healthy young people.

Long-term monitoring data on pesticide levels in blood and urine shows that only modest progress overall has been made since passage of the FQPA in reducing exposures to pesticides. The EPA has used the strong new provisions of the FQPA effectively in reducing most residential and non-farm uses of high-risk organophosphate (OP) insecticides, but has moved timidly to minimize dietary exposures to the same insecticides.

The OP class of insecticides has been the major focus of the EPA in implementing the FQPA because of the widely shared consensus in the scientific community that these pesticides pose the most serious developmental risks to children.



While overall dietary risks posed to children by pesticides have gone down by about one-third since passage of the FQPA, risks stemming from pesticide residues in imported fruit and vegetable products have risen dramatically. Moreover, risks from residues in imported foods could rise appreciably without any direct regulatory consequences, since the EPA has chosen to not lower pesticide tolerances for the vast majority of current commercial uses of OP insecticides.

Over the last decade pesticide dietary risks have declined significantly in many crops because of the discovery, registration, and use of safer, reduced risk pesticides. Still, farmers in America rely predominantly on pesticides to manage weeds, insects, and plant diseases on most crops.

WHAT IS A TOLERANCE?

Tolerances are legally binding limits for pesticide residues in food set by the EPA in response to petitions from pesticide manufacturers.

The surest way to dramatically reduce pesticide dietary exposures is to convert acreage from conventional to organic farming systems, as shown in published research carried out by two teams of scientists at the University of Washington (UW). Dr. Alex Lu presented the results of the two UW studies at the AAAS meeting. Both focused on school age children and found that dietary exposures to OP insecticides were essentially eliminated when children consumed a diet composed mostly of organic foods. A "dramatic" reduction in exposure occurred after just a few days eating organic foods. Exposure levels went back up to pre-study levels after just a few days back on conventional foods.

The great promise of the FQPA to reduce pesticide exposures to children, while unfulfilled, should not be abandoned. Recent trends in pesticide residues and risk levels should compel the Agency to prevent increases in high-risk pesticide residues in imported foods.

CATALYSTS FOR CHANGE

The EPA can and should do more to encourage pesticide manufacturers to search for and register safer, biologically-based pesticides.

Farmers need much more help from government scientists and the land grant university system in working out the practical details of prevention-based Integrated Pest Management systems.

Today's organic farms are valuable national assets in the search for innovative pest management solutions.

Consumers can and must play a major role if progress in reducing pesticide risks to children is to be accelerated. They can do so by:

- Demanding stronger action by the EPA under the FQPA.
- Seeking out food produced by farmers who have converted to lower-risk pest control systems.
- Shopping in stores and eating in restaurants that feature safe foods backed up by credible ecolabels.
- Choosing only organic fruits and vegetables, especially when planning a family and raising children.
- Urging the U.S. Department of Agriculture to promote the availability of organic foods through the school lunch and other government food and nutrition programs.

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Access more information on children's pesticide exposure and risks in the Critical Issue Report: **"Successes and Lost Opportunities to Reduce Children's Exposure to Pesticides Since the 1990s"** at: www.organic-center.org/science.pest.php