

## Bill 6597 Pesticide Application at Day Care Facilities

Honorable members of the Public Health Committee, I am a physician pathologist trained in the cause and effects of human disease and familiar with the toxic effects of pesticides. Many pesticides are among the most toxic chemicals used where people live, work, and play. Young children are the most vulnerable to the toxic effects of these chemicals. The effects of exposure are linked to cancer, birth defects, reproductive effects, liver or kidney damage, neurotoxicity, and hormonal system disruption.

This statute is **MUCH MORE PROTECTIVE** of young children at day care facilities than the present pesticide statutes. 6597 is very similar to bill 1020 raised by the Environment Committee, except that it does not have the addition of extending the exemption to the pesticide ban for athletic fields and playgrounds at elementary and middle schools for another year. 6597 is much better suited to the needs of day care facilities than bill 257, another day care pesticide bill raised by the Select Committee on Children.

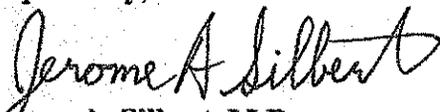
- It provides for a trained, licensed applicator to apply pesticides
- The authority to use a pesticide in an emergency is clarified
- It provides for prior notification of parents or guardians of a pesticide application by any means where none existed before
- It provides that records of what pesticide was applied (when, where, and why) be kept in the facility for 5 years
- It extends this legislation to the grounds of family day care facilities where the grounds are owned and controlled by the family day care licensee

Despite the fact that this legislation protects the youngest and most vulnerable children from toxic pesticides, because of Connecticut's economic situation, this bill will not pass if you do not add the following provision.

**ADD: "The provisions of this section shall be enforced within existing resources"**

The enforcement of this legislation will not be difficult or costly. The DPH inspects day care facilities on a two-year cycle. They only have to look at the records of the facility to see that they are compliant with this legislation. If the facility is not compliant, DPH tells them what they have to do and the facility replies in writing how they have complied with the requirements of the legislation.

Respectfully,

  
Jerome A. Silbert, M.D.

P.S. More exceptions to the definition of pesticides should not be made. A certified pesticide applicator is the most qualified person to know what, where, and how to use indoor pesticides. If further exceptions are allowed the misuse of toxic pesticide products is certain and will endanger children who are most vulnerable.

**The attached letters were written by nationally recognized authorities to support past pesticide legislation and are very relevant to Dr. Silbert's testimony on bill 6597 "An Act Concerning the Application of Pesticides at Child Day Care Facilities."**



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February 26, 2008

Jerry Silbert, M.D.  
Executive Director  
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155 White Birch Drive  
Guilford, CT 06437

**Re: Bill 370 An Act Concerning Pesticide Applications at Day Care Centers**

Dear Dr. Silbert:

Thank you for having asked me to comment on the proposed day care legislation that is being considered in the State of Connecticut. I understand that the intent of this bill is to better regulate the use of pesticides at day care centers in Connecticut. I support the goals of this important legislation. In my opinion, if this bill is passed into law, it will prevent cases of acute pesticide poisoning as well as subclinical neurotoxicity among Connecticut's children at day care centers.

I am a pediatrician who has been involved for many years in studying the impact of pesticides, heavy metals and environmental factors on the health of children. My biosketch is attached to this letter. From 1988 to 1993, I chaired the Committee on Pesticides in the Diets of Infants and Children that was convened by the U.S. National Academy of Sciences at the direction of the U.S. Senate. The report of this Committee documented the very substantial differences that exist between children and adults in exposure and in vulnerability to pesticides. This report concluded that children are uniquely susceptible to pesticides, and it made the strong recommendation that children be provided special protections in law and regulation to safeguard them against the hazardous impacts of pesticides. The recommendations of the NAS Committee on Pesticides that I chaired provided the intellectual basis for the Food Quality Protection Act, the principal federal legislation governing the use of pesticides in the United States.

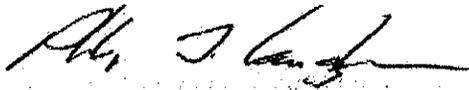
I am currently Professor of Pediatrics and Chairman of the Department of Community and Preventive Medicine at the Mount Sinai School of Medicine in New York City. At Mount Sinai, I am co-principal investigator of our Center for Children's Health and the Environment and Principal Investigator for the New York Vanguard Center for the National Children's Study.

I strongly support the proposal to better regulate toxic pesticides at day care centers in Connecticut. Pesticides are chemicals that are deliberately designed to be toxic. Two widely used classes of chemicals that are of particular concern are the organophosphate and the carbamate pesticides. These classes of chemicals are specifically designed to be toxic to the nervous system, and the war gas sarin, which was used in the Tokyo subway attack, is a member of the organophosphate family. Recent research has shown that organophosphate

pesticides, chlorpyrifos in particular, are extremely hazardous to the developing brains of children. These compounds can cause acute, clinically obvious poisoning and also can cause silent brain damage. Several years ago the U.S. Environmental Protection Agency banned all residential uses of two organophosphates – chlorpyrifos and diazinon. However, many more organophosphate and carbamate pesticides remain on the market. Herbicides are another class of chemical of great concern. Many herbicides are used on school grounds to control weed growth. Among the hazards associated with herbicides are developmental problems and increased risk of certain cancers particularly lymphomas.

In summary, I strongly support the proposed legislation, and I wish you all best success in achieving its passage.

Sincerely,



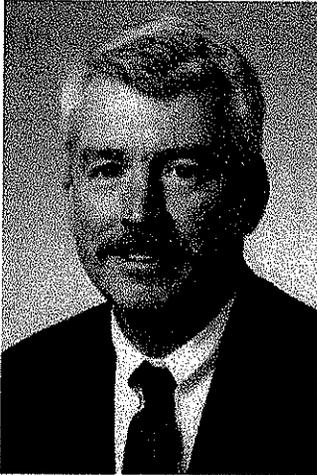
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Enclosure



**Philip J. Landrigan, M.D., M.Sc.**

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Philip J. Landrigan, M.D., M.Sc. is a pediatrician and the Ethel H. Wise Professor and Chair of the Department of Community and Preventive Medicine of the Mount Sinai School of Medicine in New York City. He holds a Professorship in Pediatrics at Mount Sinai. He directs the Mount Sinai Center for Children's Health and the Environment.

Dr. Landrigan obtained his medical degree from the Harvard Medical School in 1967. He interned at Cleveland Metropolitan General Hospital. He completed a residency in Pediatrics at the Children's Hospital Medical Center in Boston. He obtained a Master of Science in occupational medicine and a Diploma of Industrial Health from the University of London.

From 1970 to 1985, Dr. Landrigan served as a commissioned officer in the United States Public Health Service. He served as an Epidemic Intelligence Service Officer and then as a medical epidemiologist with the Centers for Disease Control in Atlanta. While with CDC, Dr. Landrigan served for one year as a field epidemiologist in El Salvador and for another year in northern Nigeria.

Dr. Landrigan was the co-founder and from 1971 to 1977 the medical co-director of the Beacon Hill Community Clinic, a medical center established in partnership with community residents in Decatur, Georgia.

Dr. Landrigan is a member of the Institute of Medicine of the National Academy of Sciences. He is Editor-in-Chief of the *American Journal of Industrial Medicine* and previously was Editor of *Environmental Research*. He has chaired committees at the National Academy of Sciences on *Environmental Neurotoxicology* and on *Pesticides in the Diets of Infants and Children*. Dr. Landrigan's report on pesticides and children's health was instrumental in securing passage of the Food Quality Protection Act of 1996, the major federal pesticide law in the United States.

In New York City, he served on the Mayor's Advisory Committee to prevent Childhood Lead Paint Poisoning and on the Childhood Immunization Advisory Committee. From 1995 to 1997, Dr. Landrigan served on the Presidential Advisory Committee on Gulf War Veteran's Illnesses.

In 1997 and 1998, Dr. Landrigan served as Senior Advisor on Children's Health to the Administrator of the U.S. Environmental Protection Agency. He was responsible at EPA for helping to establish a new Office of Children's Health Protection. Dr. Landrigan has been involved since 1999 in development of the National Children's Study, a major prospective epidemiological study that will follow 100,000 American children from conception to age 21 years in order to identify preventable environmental causes of disease and developmental dysfunction.



**John Peter Wargo, PhD**  
**Professor of Environmental Policy and Risk Analysis**  
**Yale University**  
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January 30, 2007

Senate Environment Committee  
State of Connecticut

Dear Committee Members:

First, I offer my apology for my absence from the hearing. I have two classes at Yale on January 31<sup>st</sup>. My name is John Wargo, and I am a professor of risk analysis and environmental policy and political science at Yale University with appointments in the School of Forestry and Environmental Studies, the Department of Political Science, and I have been Director of Undergraduate Studies for Yale's recently formed Environmental Studies major. I hold a PhD in environmental policy from Yale (1984), taught at Dartmouth in the Thayer School of Engineering until 1986, returned to Yale in 1986, and was promoted to tenure in 1996. Currently, I am a full professor. I have participated in several National Academy of Sciences Panels on human exposure to pesticides, have provided advice to several EPA administrators, have been a long time contributor to EPA's Scientific Advisory Board, testified in both the U.S. House and Senate on issues related to children's environmental health, and advised the U.N. World Health Organization and the Food and Agriculture Organizations on methods to protect children's health from pesticides. I have also participated in the drafting of federal, state and local law designed to protect children from exposure to pesticides in food, air, water, soils, and consumer products, including pesticides. I also have specific experience measuring and modeling children's exposure to pesticides. I have only a few points to make and they follow.

1. Pesticides are intentionally toxic substances. It is a serious mistake to assume they will affect only species they were designed to harm. Pesticides often have unintended effects on non-targeted species.
2. Children are especially vulnerable to pesticides for two reasons. First, children are physiologically more susceptible to health loss due to rapid growth and development of organs and functions. Second, children breathe more air volume, drink more water, eat more food and touch more potentially contaminated surfaces—all per unit of their bodyweight—than adults. For any concentration of pesticide residue in air, water, food or surfaces, children normally experience higher levels of exposure than adults.

3. Children experience rapid growth and development of different organ systems and functions during different periods. Full maturity often does not occur until the age of 20, after high school years.

4. Most pesticides have not been tested to know their effects on the developing nervous, immune, and endocrine systems of humans. There is plausible evidence that many pesticides are neurotoxic, others mimic human hormones, and still others may affect the immune system. Adverse effects are normally dependent upon the intensity of dose, however the doses that children and adolescents experience in school settings are poorly understood.

5. Current pesticide law permits the application of dozens of pesticides in the school environment, and they are normally applied by individuals who have little or no training in modern chemistry, biology, toxicology, epidemiology, exposure assessment or risk assessment.

6. Collectively, these are serious challenges to those who propose continued application of pesticides in or near schools. I strongly support State legislation that would ban pesticide applications for cosmetic purposes and nuisances on school property. A serious public health threat should be demonstrated before any application is permitted. If public health officials determine that a serious health threat from pests does exist, non-chemical solutions should be attempted before the least persistent, mobile and toxic pesticides are applied. Integrated pest management (IPM) is a term-of-art that often used to justify continuation of past pesticide use practices. It is my opinion that IPM should not be relied upon to provide sufficient protection for children's and women's health.

7. I have not accepted payment for this comment, and I encourage all who offer testimony on this issue to disclose their financial interest in the bill.

Sincerely,

John Peter Wargo, Ph.D.  
Professor  
Yale University

American  
Academy of  
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Good afternoon, my name is Robert Zavoski, MD, MPH, President of the Connecticut Chapter of the American Academy of Pediatrics and Medical Director of Community Health Services, a community health center in Hartford. I am here to offer the Academy of Pediatrics' support to Proposed Bill 5234, An Act Banning Pesticide Use in Middle and High Schools.

Children are not little adults. Their physiology and anatomy are different than those of adults, placing them at additional risks when exposed to poisons and toxins in their environments above those faced by adults. Children's metabolic rates are relatively rapid, therefore children and adolescents breathe faster than do adults; their skin is thinner and therefore more likely to absorb toxins; children are shorter with their airways closer to the ground and thus inhale more of ground level toxins than do adults; children are developmentally immature and therefore less likely to recognize risks and take the proper precautions or actions when exposed to toxins. For all of these reasons, children are at far greater relative risk from poisons and toxins in their environment than are adults. In addition, children hopefully have longer to live than adults, therefore the cumulative effects of toxins over time are more likely to effect children than they are to effect adults.

Lastly, the long term adverse effects of many toxins are simply not known. It takes relatively little time to develop a new chemical but generations to determine its long term toxicity. History has many examples of "safe" procedures or products, such as asbestos, arsenic treated lumber, chlordane, DDT, diethylstilbesterol, etc, later found to be unsafe or deadly. It is therefore vitally import to limit exposure to such substances to only the necessary circumstances.

Pesticide use on school athletic fields and lawns is not a necessary exposure. Generations of children have successfully played and competed on fields that were not aesthetically perfect. The risk of pesticides to the present and future health of our children does not justify the use of these toxins; their use should be prohibited.

Thank you for your kind attention.