

Commissioner's Column

Pesticides: It's Time to Prevent Environmental Contamination and Health Risks

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As physicians we are knowledgeable on a wide variety of health risks. With the warmer weather approaching it is a good time to be reminded of one of the pervasive risks to our health in Westchester County – pesticides. Unfortunately, Westchester County continues to be a leader in pesticide application in New York State. According to the New York State Department of Environmental Conservation, our County ranks second in the state by both gallons and pounds of commercial pesticide application, which account for 12% and 10%, respectively, of the total consumed in the state. This is particularly alarming when you consider that Westchester County's geographical area comprises less than one percent of the entire state of New York.

Pesticides - substances intended to prevent, destroy or repel any pest - have been linked to a variety of illnesses. Some are known carcinogens; others have been associated with hormone and endocrine disruption. Children, whose internal organs are still developing, are particularly vulnerable to the health problems pesticides may pose. Many of the pesticides used by the public in Westchester County are neurotoxic. Recognizing that no pesticide is safe, the United States Environmental Protection Agency has taken action to restrict the use of such pesticides. Chlorpyrifos (commercially known as Dursban) is one pesticide that has been banned for most residential uses because of its human health risks.

The risks of commercial pesticide application extend beyond the properties where pesticides are applied. Run-off from pesticides and fertilizers can find their way into the Long Island Sound or one of the many waterways and ponds in Westchester County, promoting algae blooms and killing fish and aquatic life. Additionally, because Westchester County is located in the New York City watershed, pesticides and chemicals will invariably find their way into our bodies via drinking water. Communities that depend on well water are particularly at risk of ingesting pesticide-laced water.

The majority of pesticides applied in Westchester County are used in commercial application to beautify residential lawns and gardens. A fear of contracting Lyme disease and erlichiosis - tickborne illnesses prevalent in our area – also prompts many homeowners to contract with lawn care companies to spray their properties in the aim of reducing the tick population. However, little scientific evidence suggests that pesticides are successful at controlling tickborne diseases.

Westchester County is committed to reducing pesticide use and the health hazards associated with it. In its most recent attempt at turning the pesticide tide, Westchester County has launched the Grassroots Healthy Lawn Program. The new initiative, a collaboration with Grassroots Environmental Education, a non-profit educational organization, will offer pesticide alternatives to homeowners, landscapers, and businesses. The program will focus on educating landscapers and community groups through presentations and the distribution of an educational video about non-toxic lawn care.

The Grassroots program is just one bloom in the garden of pesticide reduction efforts in Westchester County. In addition, the following measures are in place:

- **Adoption of the Neighborhood Notification Law.** Commercial pesticide applicators, homeowners, and retailers alike must comply with specific regulations that require advance notification prior to pesticide treatments. Written warnings and monetary fines are penalties for non-compliance. The law promotes awareness of pesticide use, a first step for minimizing their use.

(Continued on next page)

AMA News (Continued from previous page)

- **Sunset Legislation.** As part of the Westchester County Pesticide Reduction Law originally passed in 1996, the use of pesticides on County-owned properties has been phased-out via "sunset provisions." The last step of this three-year process became effective January 1, 2002, which prohibited the use of Toxicity Category III pesticides on County properties. Westchester County continues to encourage other municipalities to enact similar legislation and join in the commitment to reducing pesticide use.
- **Pest Management Committee.** Made up of citizens appointed by the Board of Legislators and representatives from various County Departments, this committee was formed to implement Integrated Pest Management (IPM) strategies. IPM is a systematic approach to managing pests that strives for long-term prevention with little or no impact on human health or the environment. Functions of the committee include evaluation of current pest management practices and recommendations for changes, selection of least toxic pesticides available, development of educational materials, and acting as a local resource of alternative pest management strategies in the community.
- **Keep Westchester H2OK.** This program educates the public about the importance of protecting water quality, which is often compromised as a result of pesticide use.

In addition to action on the County level, there are many strategies that individuals can use to reduce their reliance upon pesticides when caring for their lawns. Some ideas include:

- Opt for non-toxic weed control by applying corn gluten meal, a natural herbicide that inhibits the germination of weeds.
- Mow lawns frequently and use lawn clippings as fertilizer. Grass clippings provide nitrogen and reduce the amount of fertilizer needed by about one half.
- Plant natural insect repellants such as marigolds and tansies.
- Hand-pull weeds and diseased leaves.
- Use alternative pesticides such as insecticidal soaps and Bt (*Bacillus thuringiensis*), both sold in garden stores.
- Water less often, but longer. This will prevent over-watering, which can create an ideal environment for pathogens to thrive.
- Encourage insects that eat garden pests, such as ladybugs and praying mantises.

Westchester County residents are also encouraged to take advantage of programs aimed at minimizing the use of pesticides and protecting the environment from these and other chemicals. Westchester residents can participate in one of the county's Chemical-Free Garden Sessions or dispose of pesticides on one of several Household Chemical Clean-Up Days. For specific dates as well as access to a wealth of resources and brochures on alternative pest management strategies, please visit our website, www.westchestergov.com/health.

Westchester County encourages physicians and public health professionals to assume an active role in educating residents on reducing pesticide use. Together with progressive public policy, the health and environmental risks associated with these chemicals can be greatly minimized. ♦