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Pesticide Wars: The Solution Non-toxic Alternatives Exist—If Public Demands Them

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Public officials have warned that the recent emergence of West Nile Virus (WNV) in this country is a harbinger of noxious pests and infectious diseases to come.

This caveat sometimes carries another warning: that people better get used to accommodating such outbreaks and the pesticides routinely used to combat them.

Mosquitos transmit West Nile, and when human cases were first discovered in New York City in August 1999, the first response was an aggressive aerial spraying campaign of the insecticide malathion over the Big Apple, surrounding communities, and their 10 million-plus residents. West Nile reappeared the last two summers and spread via migrating infected birds from Canada to Florida. New York City resumed spraying, and most other communities that found the virus followed suit.

Gauging the health and environmental consequences of aerial spraying is difficult, because pesticide use is already so pervasive, says Michael Hansen, Ph.D., a scientist with Consumer's Union. Though agriculture accounts for about 75 percent of all pesticides used in the United States, they are also commonly applied on lawns and golf courses, in homes, gardens, parks, schools, hospitals, and other public and commercial buildings. But we don't know the cumulative effects of more than 50 years of pesticide use, exactly what we are being exposed to, or even how much is being released into the environment. Comprehensive data simply is not collected, Hansen says. It's a case of don't look, don't see.

Pesticide-related health complaints tend to be similar, and thousands have been filed by citizens subjected to aerial spraying of insecticides in California, Florida and now New York. But they are considered anecdotal, because they are not monitored systematically.

Jay Feldman, executive director of the Washington-based pesticides watchdog group, Beyond Pesticides/National Coalition Against the Misuse of Pesticides is only aware of one attempt by U.S. public health officials to track health complaints associated with aerial spraying. Following a spraying campaign against the Mediterranean fruit fly in 1998 over residential areas in Florida, state epidemiologist Dr. Omar Shafey found 123 cases of acute pesticide-related illness. Shafey was fired after he refused to alter a report on his findings. The Florida Department of Health released the final report in January 2000 and concluded that the spraying was not a public health threat.

Biologically-based Integrated Pest Management now offers much more effective and less toxic methods of pest and disease control, says pest management expert, Chuck Benbrook. In the 1996 Consumers Union report, Pest Management at the Crossroads, Benbrook writes that two to five pesticide applications are now needed to do what one application accomplished in the early 1970s. More than 500 insect species have developed resistance to insecticides, while the chemicals have decimated populations of natural enemies that would otherwise have helped keep the target pests in check.

Though the lion's share of research funding is going to biotechnology and more chemical approaches to pest management, Benbrook says the scientific literature and field research make it abundantly clear that IPM techniques, such as the use of a pest's natural enemies or agents that regulate an insect's growth, work best. We're in kind of a golden era of safer biopesticide alternatives that are working well, are affordable, and don't involve genetic

engineering, he said. These techniques also essentially eliminate the risks of chemical pest control to humans and non-target organisms, he adds.

Biopesticides require more skill and attention to the biology of the target pest than broad-spectrum chemicals, and the infrastructure—trained IPM personnel and equipment—is not yet in place to handle as large an outbreak as the West Nile Virus. However, Benbrook says that would change if demand increased. And that will only happen if the public insists.

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