

T E S T I M O N I A L S

THE IMPORTANT ROLE OF PESTICIDES: EXPERTS SPEAK FROM FIRST-HAND EXPERIENCE

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Having traveled to 67 countries on five continents, I've seen the devastation that mosquito-borne diseases have wrought. It's not a pretty picture. I'll not soon forget the anguish in a mother's eyes in a small village in Sri Lanka as she recounts the deaths of nine of her 10 children because of malaria. While this situation is rather drastic, it is not uncommon to find families in Africa whose members have suffered from three separate types of malaria concomitantly prior to the age of 5. The rates of this and other vector-borne diseases are currently skyrocketing in Third World countries that can't afford the proper remedies.

Unfortunately, we in the United States are not safe from these scourges. We continually challenge our medical science by importing diseases from these areas through tourism and trade, and frankly, our medical establishment is ill-equipped to control them. This situation is getting considerably more complicated with the removal of certain public health insecticides from the arsenal of those charged with protecting the public health. If we dismantle our mosquito control infrastructure by banning the use of properly tested and labeled products, it may cost many lives before we can get it up and running again. We should continue to conduct comprehensive and sober reviews of the benefits and risks entailed in the use of public health insecticides so as to prevent the seemingly gratuitous banning of products that have been safely and effectively used for many years. Each time a public health insecticide is removed, the equivalent of another arrow is taken out of our quiver. Eventually, mosquitoes will become resistant to the few products still available. What's worse, the manufacturers are telling us there are no novel classes of mosquito adulticides on the horizon — the cost of

registering new products simply does not justify the capital expenditures. So we are running out of acceptable substitutes for banned products.

The recent emergence and spread of mosquito-borne diseases, such as West Nile virus, underscores the need to recognize the vital contributions safe and effective mosquito control programs have made to the health of our nation's citizens. If such diseases are to ever rise to epidemic heights in the United States, we have only ourselves to blame because the means to safely control them are fully within our grasp — and our citizenry deserves no less.

Richard deShazo, M.D.

Department of Medicine

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I recently published research in the *Annals of Internal Medicine* about the consequences of fire ants. These insects sting more than 50 percent of people living in fire ant-prevalent areas such as the Southeast, Southwest and California. Many stings result in local discomfort; however, a small number of people experience severe allergic reactions, some of which are fatal.

The most susceptible targets of these fiery pests are children, because they stumble into the ant mounds, and nursing home patients, who may be too frail or impaired to defend themselves against fire ant attacks. There's been research on biological methods such as predatory flies to eradicate the ants, but flies can't be released in homes, schools or nursing facilities. The only control measures we have at this time are pesticides. I have no ties to the pesticide industry, but as a physician who practices in a fire ant-prone area, I must familiarize myself with the consequences of ant infestation and available control methods.

Michael Dryden, D.V.M., Ph.D.

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Kansas State University*

When it comes to banning pesticides or enacting "least toxic" legislation, consumers are feeding on pseudo science reported by the media, which only fosters hysteria instead of weighing the true benefits and risks of using pesticides. The public has been led to believe there are alternatives with the same benefits, but through my 18 years of research, I've found that the available alternatives have minimal benefit. People often say they don't want to use pesticides, but when a pest problem arises and it is affecting them directly, then they're willing to do anything or use anything to get rid of the pests. I was recently in Tampa conducting a field study on flea control. One gentleman contacted us and said that he didn't want to use pesticides to control the problem; however, as soon as his house and yard became overrun with fleas, he was spraying pesticides everywhere to get rid of them. There is often a huge disconnect between the perception and the reality of pesticide use. It is based on a lack of knowledge of the true risks and benefits of the use of pesticides. Of course, wherever pesticides are used in schools or homes, they should be used judiciously as prevention against disease and to maintain effective pest management.

Jerome Goddard, Ph.D.

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As a public health entomologist, I have seen firsthand the effects of not using pesticides. Children can get sick from tick and mosquito bites, and it's my job to investigate what caused these illnesses. Unfortunately, sometimes pest control could have prevented these children from getting sick. I've seen the powerful evidence when people have died from Rocky Mountain spotted fever and from encephalitis. Here in Mississippi, people suffer from fire ant stings all the time. Of course I see the other side — the concern about illness from pesticide exposure, but I can't look one mother in the face and tell her that her child counts more than another, especially when a mother's child has died from a pest-related illness that could have been prevented.

Richard Kingston, Pharm.D., C.S.P.I.

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University of Minnesota*

It's sometimes difficult to sort out fact from fiction when discussing the topic of insecticide and herbicide use in schools and other public places. And as a parent of an infant and a preschooler, I understand and share the concern that all parents have regarding the safety of their children. My professional role in academic and clinical toxicology, as well as my practical experience in poison control and injury prevention, has given me the opportunity to put the risks and benefits in perspective. We sometimes forget that insecticides and herbicides registered for use by the EPA are some of the most regulated and studied substances known to man. Risks associated with massive exposure from abuse or misuses are simply not the same as when these EPA-registered products are used as directed in routine applications. In fact, when used as directed, these products are likely safer than most prescription and non-prescription drugs. Their benefits in controlling disease-carrying pests and keeping vegetation in check should be given proper consideration.

Suellen W. Pirages, Ph.D.

Principal, International Center for Toxicology and Medicine

As a toxicologist, I've spoken extensively on public health and environmental issues regarding exposure to chemicals and their safe use. No matter how clean we keep our homes or schools, rodents and a variety of insects are present, both in rural and urban settings. When used properly and safely, pesticides provide us with a means of protecting children's health by reducing, if not eliminating, direct contact with these pests and their waste products, which have been proved to negatively impact human health. Without pesticides, we would be confronted with increased health problems associated with contact with pests. Exposure to pests is believed by some to be a major factor in the current rise in asthma among children, particularly in urban areas. Without the ability to apply pesticides in homes and schools to combat exposure to pests and the diseases associated with them, we greatly increase children's risk for asthma.