

HOT TOPICS

Bystander exposure to 2,4-D is not big threat, study claims

Canadian study reaffirms importance of reading the label, wearing protective clothing.

GUELPH, ONT. Canada—Professional applications of 2,4-D to home lawns pose little exposure risks for homeowners and bystanders.

That was one of the findings of researchers at the University of Guelph. Directing the study were Dr. Keith Solomon, Dr. G.R. Stephenson, Shelly Harris, and Dr. Christopher Hall.

Hall, director of the Guelph Turfgrass Institute, recapped these findings at the PLCAA Convention this past November.

His message was encouraging to the 150-plus lawn and landscape professionals in the room. Most use products containing 2,4-dichlorophenoxyacetic acid, a popular broad-leaf weed control.

"If you do things right, there's not a lot of (2,4-D) exposure risk," emphasized Hall.

Actually, the Guelph studies investigated more than bystander exposure. They also measured 2,4-D exposures received by applicators—both homeowner and professional.

As part of the project, some of the volunteers applied 2,4-D materials as a layman might, with scanty instruction. They

wore regular regular clothing. The other group of applicators received detailed instruction and wore protective clothing—rubber gloves and boots, coveralls, etc.

A granular formulation of fertilizer (10:6:4) with 1% 2,4-D was used for the spring application, and a liquid formulation of 2,4-D for the fall application. Then for 96 hours following the applications, the researchers collected urine samples from the volunteers to measure 2,4-D exposures.

Measureable exposures occurred to applicators who hadn't worn protective clothing during hose-end applications. Only in a few cases could 2,4-D be detected in those who had worn protective clothing while working with liquid 2,4-D.

"The take-home message is to wear protective clothing," said Hall.

It didn't seem to matter much in applications of the granular product, since 2,4-D couldn't be detected in

either group.

"If you are an inexperienced applicator, probably the best way to go is with the granular formulations," Hall suggested.

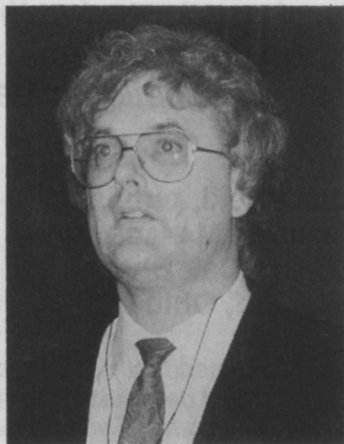
In related investigations, 10 volunteers (five in long pants, short-sleeved shirts, socks and shoes, and five wearing shorts and barefooted) alternately walked, sat and lay down on 2,4-D-sprayed turf an hour after application.

Four days later, detectable residues were found in urine samples supplied by three of the barefooted people.

When the volunteers waited 24 hours after a spray application to repeat their activities on the treated turfgrass, no detectable residues were found on any of them.

Hall said that people can reduce their potential exposure to essentially zero by staying off treated turf for a period of 24 hours or until after rainfall or irrigation.

—Ron Hall



Dr. Hall: 'In Canada, like the United States, we had a lot of trouble with people's perception about the health risks associated with 2,4-D.'

Give clients a say in how, how much pesticide used

CINCINNATI—Dr. Frank Rossi says bowling injures more Americans each year than pesticide applications. Yet nobody protests recreational bowling.

Why?

The answer lies in the makeup of the collective human psyche which sees voluntary and familiar risks—even obvious ones such as smoking and drinking—as somehow less threatening than less-well-understood risks, says Rossi, an experienced environmental educator.

Bowling, therefore, is the type of risk the public is willing to accept. Pesticide use sometimes is not.

"People are not certain about what we're doing, and that's what makes them uneasy," says Rossi, a New York City native and former golf superintendent. "We want people to have a better understanding of what we do."

In fact, Rossi feels it's not chemicals themselves that frighten the

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