

Pesticide Poisoning Tied to Asthma Symptoms

By Matías A. Loewy

Thu February 27, 2003 10:37 AM ET

FOZ DO IGUAÇU, Brazil (Reuters Health) - Pesticide poisoning substantially increases the risk of developing asthma symptoms, or having existing symptoms worsen, according to a study presented here this week at the 27th International Congress on Occupational Health.

Dr. Niece Faría and colleagues at the Federal University of Pelotas, Rio Grande do Sul, interviewed 1,479 farmers, of whom 75% reported current or previous exposure to different pesticides. Twelve percent reported having suffered pesticide poisoning at least once in their lives.

"We found a clear association between asthma symptoms and a history of pesticide poisoning," Faría told Reuters Health.

People who'd been poisoned by pesticides in the past had a 72%-greater risk of having asthma symptoms, even after the researchers accounted for other factors that could play a role, such as smoking and socioeconomic level.

Other recent investigations, including the American Agricultural Health Study, have reached similar conclusions.

The chemical category of unhealthy pesticides was not examined in the study, but the most dangerous ones appear to be organophosphates and pyrethroids, Faría noted.

She pointed out that pyrethroids can be particularly harmful when a person uses them at home as well as in agricultural tasks. For example, pyrethroids are commonly used in insecticides against cockroaches or flies.

Researchers are not sure how these chemicals might cause asthma symptoms.

Poisoning may be a marker of high exposure, but researchers think that it may also trigger a long-term response of the body defenses. Such an immune reaction could eventually lead to wheezing and other respiratory problems.

Brazil is the biggest Latin American consumer of pesticides, and some experts consider it to be the largest potential market in the world. An estimated 15 million farmers, or a tenth of the population of Brazil, are exposed to pesticides on an almost daily basis.

"They should try to reduce exposure to these agents as much as they can--for instance, by wearing protective equipment or adopting hygienic measures once they have finished working with them," Faría suggested.