PESTICIDE CONTROL: THE METHOD OF MICHEL WITH AN EMPHASIS ON QUALITY CONTROL[MAS]

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The use of pesticides, especially organophosphate pesticides, causes different adverse effects in human applicators. Most of the symptoms are due to inhibition of the enzyme cholinesterase. There are several methods that are used to determine these drops in cholinesterase levels. The Montana Department of Health and Environmental Sciences uses a modification of the Method of Michel that measures change in pH of human plasma samples to determine cholinesterase levels. During the 1994 field application season, two new quality control sessions were added to ensure more accurate results and these proved to be helpful. However, this study suggests additional changes including the involvement of more applicators. The program, if run correctly, could protect the health of many Montana pesticide applicators.