

Protective clothing when using pesticides

Fatality File



Irrigators exposed to pesticide dips and sprays

The NIOSH industrial hygienist and medical officer conducted a follow-up site visit. The industrial hygienist observed the contractors' pesticide application and the posting of signs thereafter, interviewed irrigators about respirator training and the use of other protective equipment, and evaluated irrigators' work practices when handling and mixing chemicals. The medical officer interviewed irrigators, propagators, and other workers employed in the cultivation of the plants regarding their concerns about potential pesticide exposure and symptoms related to their work, and conducted patch testing for chrysanthemum sensitization on 22 workers.

Based on the industrial hygienist's interviews and observation of work practices, several potential hazards were identified. The irrigators are exposed to pesticides by not wearing respiratory protection when entering houses that have been recently sprayed. One irrigator was not wearing the proper protective equipment when mixing chemicals. The greenhouse re-entry time was not always entered on the signs posted on the nursery houses after a pesticide application, allowing workers to enter the house prior to the recommended re-entry period. In addition, recent methyl bromide application was reported by the workers under circumstances and utilizing work practices which may have represented a health hazard.

Medical findings at Robert Hall were predominantly dermatitis related to mixtures of pesticides used in dips and in spray applications. Twenty-two workers were patch tested for sensitization to chrysanthemums; only one worker had evidence of sensitization. It was concluded that allergic contact dermatitis to this plant is not the predominant cause of dermatitis among the workers at Robert Hall. Direct contact irritation due to the pesticide dips and spray applications, in combination with the wet work and continuous contact with soil, was most consistent with the pattern of symptoms reported.

Physical findings included irritation of the hands, forearms, face, and throat, with cracking of the palms and fingers and small vesicles on the dorsal surface of the hands and forearms.

Source: *Cdc.gov/*