

## **A Study on the Management of Pesticide Handling in Agricultural and Forestry Industries**

Jae-Kil Jang, Ho-Soon Hwang, Bong-Nyun Kim, Byung-Gon Kim,  
Young-Mi Kim, Si-Jung Jung

Department of Health Hazard Research, Occupational Safety and  
Health Research Institute for Korea Occupational Safety and  
Health Agency, 34-4, Gusan-dong, Bupyeong-gu, Incheon,  
Republic of Korea,

This study was conducted to develop management options for preventing occupational accidents and diseases that might be occurred during pesticide applying, fumigation or injection. Korea has been implemented pesticide handling standards since July of 2003, when the standards were introduced into the Occupational Health Standards for the Occupational Safety and Health Law. Telephone interviews and field investigations were done to grasp real pesticide handling situations in agricultural and forestry establishments that have been under the Occupational Accidents Compensation and Insurance Law. There were 2,196 agricultural establishments with 28,321 employees and 85,885 employees work for 6,145 forestry corporations. About 2,700 workers exposed to pesticides during applications and 19.4 % of applying workers experienced self-identified pesticide poisoning. Twenty nine establishments with about 220 workers control pests in agricultural plants for export and

import shipments by using mainly 11,000 ton/year methyl bromide nationally. About 6,000 employees might be exposed to Phosphamidone during pine tree injections in forestry establishments. Manuals for employers, managements and workers have been developed by mixing knowledge from the field investigations and publications in developed countries.

Key Words : pesticide handling, pesticide fumigation, pesticide injection, methyl bromide, Phosphamidone, personal protective equipment, pest control, forest administration establishment, quarantine of plants