

## **Assessment of dust emission and working conditions in the bamboo and wooden furniture industries in Malaysia**

### **ABSTRACT**

A study was carried out to assess the dust emission and working conditions in the bamboo and rubberwood furniture manufacturing industries in Malaysia. The emission of wood dust arising from these industries was measured in each main work station in the mills. Meanwhile, a questionnaire-based survey was conducted among 5900 workers in 45 companies to obtain information on the occupational accidents that occurred in the mills. The data were collected, compiled, and analyzed using the SPSS package. The highest dust emission from the sanding operation resulted in respiratory ailments among workers. The occurrence of injuries particularly to the hand, wrist, fingers and forearm was due to the prevailing working conditions, safety climate and workers characteristics. The dust exposure levels and working conditions were much more severe in the bamboo furniture manufacturing industry. As a result, a review of existing of dust exposure levels in the woodworking industry is warranted.

**Keyword:** Furniture; Dust; Industrial accidents; Bamboo; Wood; Safety and health