



## SUMMARY

Wood has been largely used since very ancient times. Man from very early days made use of timber in various ways for various purposes. For building houses and household furniture, timber has been used widely. Workers employed in the wood industry are heavily exposed to dust through out the production process. In Sri Lanka studies have not been done in respect of health hazards of the wood workers. Therefore an epidemiological study was done to assess the respiratory status of the workers exposed to wood dust.

The study was carried out in a group of factories in the Medical Officer of Health area of Homagama. A total of 90 workers randomly selected from 12 factories were taken as the study group. A group of workers not exposed to dust at work was selected as the control group.

The study consisted of a questionnaire on respiratory symptoms, a clinical examination, ventilatory function measurement, radiological examination and measurement of environmental dust levels.

The mean age of the wood workers was 33.08 years and 56% of them were smokers.

The workers exposed to wood dust had a statistically significant higher prevalence of chronic cough, occupational asthma, dyspnoea grade III and IV than the control group. There were no chronic bronchitis cases in either group.

A high proportion of workers reported the presence of acute respiratory symptoms such as sneezing, cough, running nose, burning of the throat and dryness of the

throat on exposure to wood dust. All these symptoms showed a statistically significant higher prevalence ( $P < 0.05$ ) in the study group than the control group.

However the difference observed between the mean values of FVC and FEV1 in the study group and the control group were not statistically significant.

The study shows that there is a clear relationship between the respiratory symptoms and smoking. 55% of the smokers in the study group had symptoms whereas 17.7% were found in the control group.

Dust level measurements showed a high level of dust concentration in the working environment and was above the TLV recommended by the ACGIH standards (1989).

Clinical examination revealed only a small percentage of workers ( 4.4% ) positive for clinical signs whereas radiological examination did not reveal positive findings.