# Health Status and Safety Practices of Workers of Asbestos Sheet Manufacturing Factories in Sri Lanka

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Exposure to asbestos causes health hazards including asbestosis, mesothelioma and lung cancer. Asbestos industry workers are at a higher risk of exposure. Objective of this research is to assess the health status and the safety practices of asbestos industry workers. Four hundred seventy-five workers from three asbestos sheet manufacturing factories were recruited into the study. One hundred sixty-two subjects who were not exposed to asbestos were recruited as controls. Study design was a comparative cross-sectional study. Information related to safety practices of workers were collected using an investigator-administered questionnaire. A doctor in the research team examined their respiratory system. They underwent lung function test (Cosmed Pony-FX spirometer). Mean duration of exposure to asbestos was 12.8±10.2 years. Results showed that protective gear for protection of hand, body, eyes and respiratory system from asbestos fibre were worn by 260 (54.74%), 63 (13.26%), 90 (18.95%) and 402 (84.63%), respectively. Regular use of respiratory protection was practiced only by 120 (25.26%). 458 (96.42%) had normal respiratory system examination findings while three (0.63%) had crackles at lung bases and 14 (2.95%) had wheezing. FVC was below predicted in 178 asbestos workers and 58 controls (Odds ratio (OR) 1.075 (95% CI 0.742-1.557), P=0.775). $FEV_1$ was below predicted in 183 asbestos workers and 51 controls (OR 1.364 (95% CI 0.933-1.994), P=0.131). FEV1/FVC ratio was below predicted in 11 asbestos workers and seven controls (OR 0.525 (95% CI 0.200-1.378), P=0.291). FEF 25-75 below predicted in 41 asbestos workers and 21 controls (OR 0.634 (95% CI 0.363-1.110), P=0.146). It is concluded that safety practices of workers can be further improved. Lung function parameters of asbestos industry workers are not significantly different from those of controls.

**Keywords:** *asbestos, safety practices, lung function test*