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PORNNAPA JANTARAWERAGUL: CASE-CONTROL STUDY ON RELATIONSHIP BETWEEN OCCUPATIONAL RISK AND LUNG CANCER. THESIS ADVISOR: SUKHUM POOTHONG, M.Sc. PETCHARIN SRIVANTANAKUL, Ph.D. 69 p. ISBN 974-663-071-7

In Thailand, lung cancer is the second leading cancer in males and fourth in females, as Thailand is now developing to be an industrial country by importing overseas technology without any knowledge and understanding of the prevention of occupational hazards. Additionally, environmental condition and changing lifestyles can cause cancers to occur. The objective of the current study was to estimate the risk of lung cancer attributable to occupational factors and cigarette smoking. At NCI during September 1996-March 1998, 200 lung cancer cases were interviewed, along with 400 controls (normal controls or patients with non-malignant and non-respiratory diseases) matched by sex and age (+ / - 5 years). Statistical analysis was performed by logistic multiple regression using SPSS program.

Risk of lung cancer was increased significantly for occupational exposure to dust (OR=11.61), occupational exposure to other carcinogens (OR=5.27), lifetime cigarette consumption >100,001 rolls (OR=3.35), occupational exposure to fumes or smoke (OR=2.70) and occupational exposure to chemical substances and pesticides (OR=2.25) (p-value <0.05). From this study, it has been shown that construction labourers, cement workers, carpenters and wood handicraft workers have the highest risk of lung cancer. Thus, they should avoid occupational dust by using respiratory protection masks in order to reduce lung cancer.