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PATCHARAPORN SIRICHONGPASERT: INFORMATION SYSTEM DEVELOPMENT FOR OCCUPATIONAL HEALTH MONITORING OF SILICOSIS. THESIS ADVISORS: LADDAWAN TONGNOOP, M.P.H. SURA PATANAKIAT, M.sc. NAREERAT OPASEE, M.sc. 99 p. ISBN 974-661-885-7

Silicosis is an important occupational disease in Thailand. The objective of the study on the information system development for occupational health monitoring of silicosis was to apply information system technology and database management to the occupational health monitoring of silicosis. This is a necessary task for protecting worker's health in industries where this is a high risk of silicosis. This study aims to emphasize provincial implementation for providing easy, rapid and reliable data gathering and reporting both the past and present situations. The research methodology for this study was System Development Life Cycle (SDLC) with 3 stages: system analysis, system design and system implementation. Furthermore, a computer application was developed by using database management with relational database, as past of this study.

This study revealed that an information system for occupational health monitoring of silicosis should be draw on 4 important type of data: industrial data, worker data, worker's health data and industrial dust data. The satisfaction evaluation on the information system were as follows. System satisfaction was good. Ease of implementation satisfaction was moderate. Report use satisfaction was good. System application satisfaction was good.

It is recommended that techniques and knowledge of computer graphics should be applied to store chest X-ray information for the purpose of quickly screening workers who are at high risk of silicosis. The study sevealed that the back-up data system and security system in data implementation should be improved as they were found to be inadequate.