### Health Risk Assessment of Hydrogen Sulfide Exposure among Workers in a Thai Rubber Latex Industry

**Rattanapan C, Tachapattworakul Suksaroj T, Chumpikul J, Choosong T.**


The research objective was to assess health risk from exposure to hydrogen sulfide among rubber latex workers. The results showed that the hydrogen sulfide concentrations of fifteen sample air sample were the rage between 0.0537-0.0610 ppm and average of 0.0612 ppm. Secondly, levels of knowledge, attitude and preventive behavior among rubber latex workers about exposure to hydrogen sulfide located in moderate. In additional, the receiving training and the knowledge were the strong predictor for preventive behavior (p < 0.05). Finally, assessing health risk from exposure to hydrogen sulfide among workers was 0.1259, which was lower than 1 and acceptable based on United States Environmental Protection Agency. However, the health risk reduction approach among workers from exposure to hydrogen sulfide was recommenced. It divided two parts: (1) the reductions of hydrogen sulfide concentration from rubber latex process and (2) the health risk reduction with rubber latex workers.

### Urinary 1-Hydroxypyrene Levels in Workers Exposed to Polycyclic Aromatic Hydrocarbon from Rubber Wood Burning

**Choosong T, Phakthongsuk P, Tekasakul S, Tekasakul P.**


**Background:** Urinary 1-hydroxypyrene (1-OHP) was selected as a biomarker of polycyclic aromatic hydrocarbons (PAHs) to explore the accumulation level in the bodies of workers at rubber smoke sheet factories in southern Thailand.

**Methods:** Spot urine samples were taken from four groups of workers from June 2006 to November 2007. The nonexposure or control groups included habitual cigarette smokers and nonsmokers. The other two groups were workers exposed to particle-bound PAHs from rubber wood smoke and they were nonsmokers. All spot urine samples were analyzed for 1-OHP and creatinine levels.

**Results:** The mean ± standard deviation urinary 1-OHP in the control group of habitual smokers and the nonsmokers was 0.24 ± 0.16 μmol/mol creatinine and not-detected to 0.14 μmol/mol creatinine, respectively. In the workers, the 1-OHP levels on workdays had no significant difference from the 1-OHP levels on the days off. The yearly average 1-OHP level was 0.76 ± 0.41 μmol/mol creatinine whereas the average 1-OHP level during 10 consecutive workdays was 1.06 ± 0.29 μmol/mol creatinine (p > 0.05).

**Conclusion:** The urinary 1-OHP levels of workers exposed to PAHs were high. The accumulation of 1-OHP in the body was not clear although the workers had long working hours with few days off during their working experience. Therefore, a regular day off schedule and rotation shift work during high productive RSS should be set for RSS workers.
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<th>Khaimook W, Suksamae P, Choosong T, Chayarpham S, Tantisarasart R. The Prevalence of Noise-Induced Occupational Hearing Loss in Dentistry Personnel. Workplace Health &amp; Safety. 2014; 62(9):357-60.</th>
<th>Occupational hearing loss is the second most common health problem in the industrialized world. Dental personnel exposed to occupational noise may experience hearing loss. This article compares the prevalence of hearing loss in the general population to that of dental personnel exposed to noise during work hours and identifies risk factors for hearing loss among workers at a dental school. This prospective study included 76 dental personnel on the faculty of dentistry at a major university in Asia who were exposed to noise and 76 individuals in a control group. Nearly 16% of the study group and 21% of the control group had lost hearing, a nonsignificant difference (p = .09). Hearing loss was significantly related to work tenure longer than 15 years and age older than 40 years (p &lt; .001).</th>
<th><a href="http://www.healio.com/nursing/journals/aaohn/2014-9-62-9/%7Becee0b5e-7418-466c-b157-7ef6ff220997%7D/the-prevalence-of-noise-induced-occupational-hearing-loss-in-dentistry-personnel">http://www.healio.com/nursing/journals/aaohn/2014-9-62-9/%7Becee0b5e-7418-466c-b157-7ef6ff220997%7D/the-prevalence-of-noise-induced-occupational-hearing-loss-in-dentistry-personnel</a></th>
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| 4 | Assanangkornchai S, Balthip Q, Edwards JG, Sathirapunya C, Pattanasattayawong U, Suvarnbhumii K, Arunpongpaisarn S. Implementing the Alcohol, Smoking, Substance Involvement Screening Test and linked brief intervention service in primary care in Thailand. Public Health. 2014;36(3):443-9 | **Background**: This paper reports findings on the implementation, acceptability and uptake of the screening and brief intervention programme based on the Alcohol, Smoking and Substance Involvement Screening Test (ASSIST) to help decrease substance misuse in primary care in Thailand.  

**Methods**: Action research involving selection of suitable study areas; obtaining support for its introduction and corporation at national and local levels; training and monitoring of healthcare providers; delivery of the ASSIST-BI (brief intervention) procedure and assessments of acceptability and uptake of the procedure by patients and staff.  

**Results**: Between October 2011 and October 2012, 5931 patients (2.5% of all patients attending primary care units) were screened with the ASSIST. Of these, 29.6 and 3.4% were in the moderate- and high-risk groups, respectively, and were offered BI or other treatment. The most popular substances used were tobacco and alcohol. Less than 1% screened positively for illicit substances.  

**Conclusion**: The ASSIST detected many substance users capable of benefiting from intervention. The programme was well received by patients and staff. The development of the project from conception to inclusion in Thailand's national public health strategy is described and suggested as a model for introducing similar procedures into developing countries. | http://www.ncbi.nlm.nih.gov/pubmed/24573365 |
**Material and Method:** A cross sectional study on stratified community-based sampling of population aged over thirty five years in Phatthalung province was conducted. The demographic data and cardiovascular risk factors were collected, and the subjects with stroke were identified and confirmed by a neurologist. Barthel’s Index (BI) as well as the Thai Geriatric Depression Scale (TGDS) assessed the post stroke disability and depression.  
**Results:** A total subjects of 2,843 were enrolled. The prevalence of stroke was 2.21% (95% Confidence Interval; 95% CI 0.017 to 0.028). The significant risk factors for stroke found were hypertension (OR 11.95; 95% CI 6.291 to 22.710), age fifty five years old or more (OR 2.94; 95% CI 1.612 to 5.378), smoking (OR 1.68; 95% CI 1.073 to 2.632), and male gender (OR 1.67; 95% CI 1.002 to 2.776). The mean BI score was 10.13, and the prevalence of post stroke depression was as high as 72.5%. The young, recent and severely disabled stroke patients had a higher prevalence of post-stroke.  
**Conclusion:** Hypertension, advanced age, smoking, and male gender were the significant risk factors for stroke. Apart from physical disability, proper care and management of post stroke depression should be emphasized in a holistic approach. | http://medinfo.psu.ac.th/smj2/32_5_2014/01_chutarat.pdf |