

Working and Health Conditions of Workers in Government Chemical Laboratories In Metro Manila

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Abstract

This study aimed at 1) identifying the most commonly used chemicals in government analytical laboratories, 2) determining the working conditions and levels of exposure of workers to chemicals in government analytical laboratories through work environment evaluation, 3) determining the knowledge, perception and practices of workers in government chemical laboratories regarding laboratory safety and health, and 4) at assessing the general health status of the respondents. Ten (10) government laboratories with research and analytical functions involving 122 respondents working in government chemical laboratories in Metro Manila were selected for the study. The working conditions and the health of the laboratory workers were assessed and evaluated.

Work practices observed in these laboratories included chemical mishandling like aspiration of liquid chemicals by mouth, not using hoods during mixing and preparation of reagents, and not wearing laboratory gowns, gloves and respiratory masks. Laboratory workers were exposed to chemicals such as solvents, acids and heavy metals. The mean ambient concentrations of these substances measured in the specific laboratories were found to be within their corresponding threshold limit values. Only 49 of the 122 or 40% of the workers were aware of the possible health effects of the chemicals they were handling. Except for wearing the laboratory gown, majority of the workers do not use other PPEs regularly. The most frequent complaints of the respondents concerned to the musculoskeletal system. This study showed that the need for improvement

of the workplace environment could be increased by adequate training of laboratory technicians and workers on health and safety. Further studies are needed in order to correlate specific chemical exposures to diseases and specific group of laboratory workers.