UNIVERSITI TEKNOLOGI MARA

THE LUNG FUNCTION PERFORMANCE AND FACTORS CONTRIBUTING TO RESPIRATORY HEALTH AMONG WASTE COLLECTORS

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Project submitted in fulfillment of the requirements for
the degree of
Bachelor in Environmental Health and Safety (Hons.)

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DECLARATION BY STUDENT

Project titled "Lung Function Performance and Factors Contributing to Respiratory Health among Waste Collectors" is of my original research work. Whenever contribution of others involved is quoted, it is indicated clearly, with due reference to literature,–acknowledgement of collaborative research and discussion. The project was done under the guidance of Project Supervisor, Puan Siti Rohana Bt Mohd Yatim. It has been submitted to the Faculty of Health Science in partial fulfillment of the requirement for the Degree of Bachelor in Environmental Health and Safety (Hons).

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ACKNOWLEDGMENT

In the name of Allah, The Most Gracious, s Most Merciful.

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TABLE OF CONTENTS

ABSTRACT

Study on respiratory health among waste collectors is important in order to identify the environmental, physical of the job and condition that may impact their health condition. Therefore, this study was aimed to determine level of lung function performance among waste collectors in Hulu Selangor**.** A cross sectional study was carried out among municipal waste collectors where they are constantly exposed to the risk and hazard in working environment. Data collected involved 76 of the waste collectors. Each individual has been demonstrated with correct procedure of Peak Flow Meter (PEFR) with duration of 5 minutes. Participant is required to stand straight and a nose clip is given to be placed on the nose. Participant need to breathe in and out normally. Secondly, they were required to breathe in as deep as possible before placing the mouth piece in the mouth. Then, immediately breathe out as hard as possible to get the reading. The highest reading of three measurements was selected to determine the PEFR. The study found that PEFR is decreasing with the increasing in age. Association between respiratory symptoms of smokers and non-smokers group and lung function performance are found to be significant where it shows the lung function performance of the workers are significantly low and affected from the smoking habit. Duration of employment also seem to affect the force vital capacity of the waste collectors. Smokers group are found to experience cough during day/night; phlegm; and shortness of breath and among non-smokers groups with p-value less than 0.05 found to significantly experience cough and chest pain. Working in the municipal solid waste industry has high occupational risk and exposure. Smoking habit also give an impact in the Peak expiratory flow measurement.

Keywords: *lung function performance, waste collectors, PEFR*