

**UNIVERSITI TEKNOLOGI MARA**

**THE IMPACT OF HEALTH  
PRACTICES AMONG FOGGERS IN  
VECTOR UNIT**

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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 entitled “The Impact of Health Practices Among Foggers of Vector Unit” is a presentation of my original research work. Whenever contributions of others are involved, every effort is made to indicate this clearly, with due reference to literature, and acknowledgement of collaborative research and discussions. The project was done under the guidance of Project Supervisor, En. Razi Ikhwan Bin Md Rashid. It has been submitted to the Faculty of Health Sciences in partial fulfilment of the requirement for the Degree of Bachelor in Environmental Health and Safety (Hons).

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## ABSTRACT

The foggers of the Vector Unit in the Ministry of Health (MOH) is at danger due to the handling of hazardous chemicals which may cause organophosphate poisoning. Study was performed to study the impact of health practice to the cholinesterase level among the foggers and to determine the association. Baseline and periodic blood sample from a total of 35 foggers from vector unit of Pejabat Kesihatan Kawasan Kota Kinabalu was taken for cholinesterase test and a set of questionnaires, (KKM/BKP/OHU/08) that was adapted from the Occupational Safety & Environmental Unit, MOH was distributed to the respondents to determine their health practice. The compliance to personal protective equipment (PPE) during the mixing of pesticide and fogging activity showing higher cholinesterase percentage reduction are among foggers that did not used PPE. This means that those who used PPE are less exposed to organophosphate (OP) pesticide compared to foggers who did not used PPE. Besides that, those foggers who takes bath and changing clothes after fogging is less exposed than those who do not as higher percentage of cholinesterase reduction are among those not taking their bath. In addition, fogging against the direction of the wind has higher exposure among foggers towards OP compared to those not fogging against the direction as higher percentage of cholinesterase reduction are among foggers who fogs against the wind direction. Hence, level of exposure towards organophosphate pesticide among foggers has strong association with the health practice.

Keywords: *Foggers, Organophosphate pesticide, Health practice, Cholinesterase level,*