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## PREVENTIVE HEALTH IN A CHANGING WORLD

### PREVALENCE OF RESPIRATORY SYMPTOMS AMONG STUDENTS AT PRIMARY SCHOOLS IN INDUSTRIAL AREA

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#### **Background**

Industrial development and economic growth have generated prosperity to the community as well as pollution and air pollution is the most complained issue. Health effects from exposure to air pollutants could be found in high susceptibility group, especially children and elderly. The air pollutants which are outside interference could deteriorate pulmonary function and increase the prevalence of respiratory symptoms. Therefore, this research aims to study the prevalence of respiratory symptoms and pulmonary function of students in schools located close to industrial area.

#### **Methods**

A cross-sectional study of prevalence rate of respiratory symptoms and lung function of students was carried out. 74 students were selected from a school in high-density industrial area as the study group and 79 samples were selected from a school in a lower density zone as the comparative group. Both sample groups were then interviewed using a questionnaire and selected to take a pulmonary function test.

#### **Results**

The prevalence rate found statistically significant between two groups belonged only to sneezing out of the total 13 respiratory symptoms. There was no abnormality of pulmonary function in both groups. Comparing the mean of FEV1% and FEV1/FVC% between groups, the difference was found statistically significant. In the study group, the difference in pulmonary function found statistically significant was classified by gender and body mass index.

#### **Conclusion**

Being in a high-density industrial area may cause some respiratory symptoms and decrease lung performance. Therefore, monitoring the health impact of susceptibility people in this area is as important as air pollution mitigation.