

SUMMARY

City traffic policemen are one of the most exposed population to lead from vehicular emissions through out their employment. It is considered to be an occupational health hazard and there has been increasing concern about the possible harmful effect of lead from automobile exhaust on health of traffic policemen.

Only one study has being carried out to find out blood lead levels and the possible harmful effects on health of traffic policemen in Sri Lanka (Arewgoda, 1993). The present study was carried out prior to banning the use of leaded gasoline by the government of Sri Lanka and it is extremely useful to carry out this study at this particular point in time, to observe the possible harmful effect of lead due to occupational exposure to vehicular exhaust and health benefits of such interventions later.

A descriptive cross-sectional study design was used where the main objective was to determine the blood lead levels of traffic policemen in Colombo city traffic division. After applying inclusion and exclusion criteria, 64 traffic policemen were selected as the study group. Non-traffic policemen, engaged in office work and matched in all aspects with the study group other than work exposure, were taken as the comparison group. The tools used in data collection in the study were an interviewer administered questionnaire, clinical examination of all study subjects and laboratory investigation of blood lead levels. The study revealed no statistically significant difference in mean blood lead levels between traffic and non-traffic policemen. Although, the mean blood

lead level of traffic policemen was slightly higher than that of non-traffic policemen, a statistically significant higher percentage of traffic policemen had hypertension, tremors and abdominal discomfort. Percentage who had other selected signs and symptoms of lead intoxication did not show any statistically significant difference between two groups.