

ABSTRACT

## LEAD IN HUMANS AND THE LOCAL ENVIRONMENT

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This study sought to determine the levels of lead in the blood of persons occupationally exposed to gasoline and its by products, relative to a control population. In addition, lead in air along roadways, roadside dusts, water, beverages and foods were monitored, to estimate lead intake by the local population. Atomic absorption spectrometry was used to determine the lead levels in samples.

Mean blood lead levels of occupationally exposed persons, as well as secondarily exposed subjects, were significantly higher ( $p < 0.05$ ) than that of the control population. A limited study of neonates and their mothers demonstrated the presence of lead in the former, which correlated with that of their mothers. Lead levels in water were relatively low, except for one hot water sample. Likewise, lead levels in foods and beverages were low, and below maximum permissible levels. On the other hand, lead in air along busy roadways in Trinidad, and roadside dusts were higher than those reported in other countries, and represent a constant source of lead to the local population.