

## ABSTRACT

### Indoor Air Quality In Schools: Implications For Environmental Health

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Trinidad and Tobago has the highest level of motorization in Latin America and the Caribbean. Building design in many cases allows a continuum between outdoor and indoor air, thus infiltration of vehicular emissions into indoor spaces is possible. Schools close to roadways are therefore at risk of having higher levels of carbon monoxide and sulphur dioxide indoors than those that are not. Two of the schools in the study were high risk as they were in close proximity to roadways; one other school was low risk. A multi gas monitor was used to determine the levels of carbon monoxide and sulphur dioxide inside the classrooms of the three schools. The instrument sampled the indoor air continuously over three hours in the morning and one hour in the evening, giving average levels at one-minute intervals. Highest average levels of carbon monoxide measured over three days were 2.7ppm, 1.5ppm and 0.39ppm at T.M.L High School, St. Mary's College and Tunapuna Government respectively. The averages for the evening sampling were 0.57ppm, 0.052ppm and 0.083ppm for the same schools. The levels of sulphur dioxide were negligible. These levels fall way below the occupational and residential reference values. Thus short term effects on health and learning are not anticipated. However, because children will spend years in these schoolrooms long term effects have to be considered.

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Keywords: Opheila Caron Lyder; Carbon monoxide and sulphur dioxide inside the classrooms.

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