

# The avoidable health effects of air pollution in three Latin American cities: Santiago, São Paulo, and Mexico City

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Urban centers in Latin American often face high levels of air pollution as a result of economic and industrial growth. Decisions with regard to industry, transportation, and development will affect air pollution and health both in the short term and in the far future through climate change. We investigated the pollution health consequences of modest changes in fossil fuel use for three case study cities in Latin American: Mexico City, Mexico; Santiago, Chile; and São Paulo, Brazil. Annual levels of ozone and particulate matter were estimated from 2000 to 2020 for two emissions scenarios: (1) business-as-usual based on current emissions patterns and regulatory trends and (2) a control policy aimed at lowering air pollution emissions. The resulting air pollution levels were linked to health endpoints through concentration-response functions derived from epidemiological studies, using local studies where available. Results indicate that the air pollution control policy would have vast hea