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27 February 2017

Lyll Thurston
Chair
Rotorua Air Quality Working Party
Bay of Plenty Regional Council
PO Box 364
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Dear Lyll

Re: Air Pollution

Outdoor air pollution is a serious problem for many urban areas around the world. The major pollutants of concern are particulate matter, carbon monoxide, oxides of nitrogen, ozone, sulfur dioxide and volatile organic compounds. Air pollution is generated from industrial, transport, domestic heating and naturally occurring sources such as volcanic ash, dust and geothermal activity. In urban environments the overwhelming majority of air pollution is attributable to anthropogenic sources such as domestic heating appliances.

PM₁₀ is particular matter of less than 10 micrometres in diameter. It is one of the most commonly researched pollutants and is widely monitored. A high level of PM₁₀ is indicative of high levels of other air pollutants.

Degradation of air quality due to air pollution has serious health consequences. Constant exposure to air pollutants has been shown to reduce life expectancy. Long term exposure is associated with increased mortality, cancer, lung disease, cardiovascular disease, development of asthma in childhood and respiratory infections.

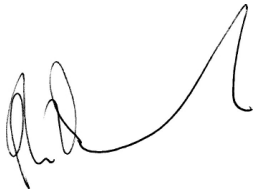
Increases in daily concentrations of air pollution can induce acute health responses such as myocardial infarction, stroke, and exacerbation of pre-existing respiratory conditions (especially asthma). At a population level an acute worsening of air pollution is associated with increased mortality, hospital admissions, and emergency room visits. Some less serious health outcomes, although still important because they reduce people's quality of life, are wheezing, cough, and activity restricted days.

No safe levels of air pollution have been identified. Even people living in cities and towns that experience relatively low levels of air pollution still get some adverse health outcomes attributable to air pollution.

Individuals have little control over their exposure to outdoor air pollution. They are reliant on government and local authorities to set rules and regulations to protect their health. The efforts of Rotorua Lakes Council, along with Bay of Plenty Regional Council, to improve air quality in the Rotorua air shed will make a real difference to the health of local residents.



Regards



Dr Phil Shoemack
Medical Officer of Health

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