

22 April 2016

Ami Dhabuwala

Email: fyi-request-3862-d09243bc@requests.fyi.org.nz

Dear Ami

Re Official Information Act Request

I refer to your Official Information Act request dated 6 April 2016 requesting the following information:

I am working on an article regarding Air Pollution in Auckland.

Can you please provide me:

- 1. Mortality rate due to air pollution in 2015, including their age group in Auckland.**
- 2. Statistics of patients being diagnosed with asthma/Bronchitis due to Air Pollution during last five years, including their age group in Auckland.**
- 3. Statistics of cancer patients due to air pollution during last five years, including their age group in Auckland.**

The specific information you requested is not gathered by the Auckland District Health Board or by the Auckland Regional Public Health Service. However, we can provide you with information on how the health impacts of air pollution are estimated, along with links to website sources of information on air pollution in Auckland and the rest of New Zealand.

Death certificates, hospital admission summaries and cancer registrations record the actual disease or injury causing death or illness. They sometimes record the immediate cause of death or illness such as injury, but generally do not record an environmental factor such as air pollution.

The health effects of air pollution in Auckland are estimated by combining the results from very large research projects (mostly from North America and Europe, which cover many millions of people) and air quality information from Auckland. The research projects measure the relationship between

levels of air pollution and specific illnesses such as heart attacks, stroke and respiratory illness (e.g. asthma and bronchitis). For example, research might show that there is a 0.6% increase in admissions to hospital for heart attacks for an increase in PM10 of 10 µg per cubic metre of air. (PM10 measures particles in the air less than 10 micrometres diameter).

The research results are then combined with New Zealand air quality monitoring to estimate the numbers of deaths, hospital admissions and days of restricted activity due to illnesses linked with air pollution.

The latest estimates are contained in the Health and Air Pollution in New Zealand (HAPINZ) report updated in 2012, which is on the HAPINZ website, www.hapinz.org.nz. The website has copies of reports and spreadsheets used for calculating air pollution effects. The main conclusions from HAPINZ include:

- The primary health impact resulting from air pollution (in terms of social costs) is premature mortality in adults. More than 2,300 New Zealanders are estimated to die prematurely each year due to exposure to PM10 pollution from all sources, with just over half associated with anthropogenic sources.
- The total health impacts associated with anthropogenic air pollution in New Zealand each year are:
 - 1,175 premature deaths in adults and babies
 - 607 extra hospital admissions for respiratory and cardiac illnesses
 - 1.49 million restricted activity days (days on which people cannot do the things they might otherwise have done if air pollution was not present)

The results page for Auckland from the spreadsheet available on the HAPINZ website can be found here:

- Health and Air Pollution in New Zealand (HAPINZ): www.hapinz.org.nz
- Auckland Council air quality web page:

<http://www.aucklandcouncil.govt.nz/EN/environmentwaste/pollution/Pages/airquality.aspx>

Yours faithfully



Ailsa Claire, OBE
Chief Executive