



Nitrogen dioxide concentrations: New Zealand Transport Agency data, 2010–16

Title	Nitrogen dioxide concentrations: New Zealand Transport Agency data, 2010–16
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Description	Nitrogen dioxide (NO ₂) is a gas that is harmful to human health, ecosystems, and plants (US EPA, 2008). It can be emitted directly into the air but is often formed as a secondary pollutant when nitric oxide (NO) emissions react with other chemicals. It also contributes to the formation of secondary particulate matter (PM) and ozone, which have their own health impacts. In New Zealand, motor vehicles are the main human-made source of nitrogen oxides (NO _x), the collective term for NO ₂ and NO. Because nitrogen dioxide concentrations are closely associated with vehicle emissions, it can be used as a proxy for other motor-vehicle pollutants such as benzene, carbon dioxide, and carbon monoxide. Human exposure to high nitrogen dioxide concentrations causes inflammation of the airways and respiratory problems, particularly asthma. Nitrogen dioxide causes leaf injury in plants exposed to high levels. It also contributes to forming secondary particulate matter and ozone, which have their own health impacts. We report on observed nitrogen dioxide concentrations from the New Zealand Transport Agency's (NZTA) monitoring network. NZTA has comprehensive coverage across New Zealand. More information on this dataset and how it relates to our environmental reporting indicators and topics can be found in the attached data quality pdf.
Source	New Zealand Transport Agency, National Institute for Water and Atmospheric Research
Rights	Creative Commons Attribution 4.0 New Zealand
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