



Nitrogen dioxide concentrations: council and unitary authority data, 2004–17

Title	Nitrogen dioxide concentrations: council and unitary authority data, 2004–17
Publisher	New Zealand's Environment Reporting Series: The Ministry for the Environment and Statistics New Zealand
Description	<p>Nitrogen dioxide (NO₂) 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 NO₂ 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 13 regional council and unitary authority monitoring sites. Council and unitary authority data are measured using regulatory-compliant monitors that can be directly compared with health guidelines. 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.</p>
Source	Regional councils, unitary authorities
Rights	Creative Commons Attribution 4.0 New Zealand
Rights	Attribution 4.0 International
Rights	https://creativecommons.org/licenses/by/4.0/
Coverage	2004–17
Identifier	https://data.mfe.govt.nz/table/98420-nitrogen-dioxide-concentrations-council-and-unitary-authority-data-200417/
Identifier	OA18/010
Type	Dataset
Language	eng-nz
Subject	Environmental reporting series: Our air 2026