Information topic	Details
Indicator name	Monitoring sites exceeding the WHO annual average guideline for $PM_{2.5}$
Domain and topic	Air Quality: Particulate matter
Indicator definition and units	Number of monitored sites that exceeded the WHO annual average guideline for PM _{2.5} : exceedances occur when annual average concentrations are greater than $10\mu g/m^3$ (Ministry for the Environment and Stats NZ 2018).
Data source	Ministry for the Environment and Stats NZ. New Zealand's Environmental Reporting Series. URL: https://data.mfe.govt.nz/
Numerator	Monitoring sites exceeding the WHO annual average guideline
Time period and time scale	Annual; from 2008 onwards
Spatial Coverage	All sites with valid data that were reported by the Ministry for the Environment and Stats NZ
Measures of frequency	Annual average concentrations, by monitoring station and year
Limitations of indicator	The population coverage of the monitoring site is unknown, meaning a national representative average cannot be applied.
Limitations of data source	 Monitoring information is only reported if the site achieves greater than 75% valid data collection and data were present for at least three years within the last ten years and at least one year within the last three years. Some of the monitoring occurs at peak sites (sites expected to have high concentrations eg. where home heating emissions accumulate, close to high-volume road traffic or near industrial activities). These sites may therefore not be representative of the surrounding area.
Created by	Ministry for the Environment and Stats NZ
Related indicators	 Monitoring sites exceeding the national environmental standard (one-hour average) for sulphur dioxide Monitoring sites exceeding the WHO daily guideline for sulphur dioxide Carbon monoxide 8-hour maximum levels at monitored sites Monitoring sites exceeding the national environmental standard (one-hour average) for nitrogen dioxide
For more information	Ministry for the Environment and Stats NZ. Environmental reporting on air. URL: https://www.mfe.govt.nz/air/state-of-our-

Metadata

	<u>air/environmental-reporting-air</u> (accessed February 2020).
References	Ministry for the Environment and Stats NZ. 2018. <i>Our air 2018. Data to 2017</i> . Wellington: Ministry for the Environment.