

Information topic	Details
Indicator name	<b>Monitoring sites exceeding the WHO one-hour average guideline for carbon monoxide</b>
Domain and topic	Air Quality: Other air pollutants
Indicator definition and units	Number of monitored sites that exceeded the WHO one-hour average guideline for carbon monoxide (CO): exceedances occur when one-hour average concentrations are greater than 30µg/m <sup>3</sup> (Ministry for the Environment and Stats NZ 2018).
Data source	Ministry for the Environment and Stats NZ. New Zealand's Environmental Reporting Series. URL: <a href="https://data.mfe.govt.nz/">https://data.mfe.govt.nz/</a>
Numerator	Monitoring sites exceeding the WHO guideline
Time period and time scale	Annual; from 1996 onwards
Spatial Coverage	All sites with valid data that were reported by the Ministry for the Environment and Stats NZ
Measures of frequency	One-hour 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	<ul style="list-style-type: none"> <li>- 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.</li> <li>- 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.</li> </ul>
Created by	Ministry for the Environment and Stats NZ
Related indicators	<ul style="list-style-type: none"> <li>- Monitoring sites exceeding the national environmental standard (one-hour average) for sulphur dioxide</li> <li>- Monitoring sites exceeding the WHO daily guideline for sulphur dioxide</li> <li>- Monitoring sites exceeding the national environmental standard (one-hour average) for nitrogen dioxide</li> <li>- Monitoring sites exceeding the WHO annual average guideline for nitrogen dioxide</li> </ul>
For more information	Ministry for the Environment and Stats NZ. Environmental reporting on air. URL: <a href="https://www.mfe.govt.nz/air/state-of-our-">https://www.mfe.govt.nz/air/state-of-our-</a>

## Metadata

	<a href="#">air/environmental-reporting-air</a> (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.