

Information topic	Details
Indicator name	Hazardous substances-related deaths reported to the coroner in New Zealand
Domain and topic	Hazardous substances domain: Hazardous substance-related deaths reported to the coroner in New Zealand
Indicator definition and units	<p>The number and rate of deaths from a hazardous substance, referred to the coroner in New Zealand. Rates are presented per 100,000 population.</p> <p>A hazardous substance is anything that can explode, catch fire, oxidise, corrode or be toxic to humans, as defined in the Hazardous Substances and New Organisms Act (HSNO) 1996. Substances that are covered by the HSNO Act, and the Health Act’s “poisoning arising from chemical contamination of the environment”, in particular carbon monoxide, are included.</p> <p>Within the NCIS database, cases are identified through either:</p> <ol style="list-style-type: none"> 1. Mechanism of Injury classified as “Exposure to chemical or other substance”. 2. Object or substance causing injury classified as “Other non-pharmaceutical chemical substance”. <p>The following deaths were excluded from analysis:</p> <ul style="list-style-type: none"> • Pike river mining explosion • Assault incidents • Human pharmaceutical exposures • Hanging incidents • Alcohol-related deaths • Drowning-related incidents not caused by a hazardous substance
Data source	National Coronial Information System
Numerator	The number of hazardous substances-related deaths in reported to the coroner in New Zealand.
Denominator	Population estimates (mid-year), prepared by Statistics New Zealand.
Methodology	<p>Prioritised ethnic groups have been used in the following prioritisation order: Māori, Pacific Peoples, Asian, European/Other.</p> <p>Crude rates are suppressed for counts less than 5 or populations less than 30, due to unreliability of the estimate with small numbers.</p> <p>When comparing groups of varying population sizes, differences that involve small groups may not be statistically significantly different, compared with similar differences for larger groups. This is due to a higher variability associated with the rate of the small group. For a more detailed explanation of this issue, see Appendix 2 – EHINZ Analytical Toolkit & Glossary.</p>

Metadata

Time period and time scale	Annual data, from 2007 when the NCIS dataset was established in New Zealand through to the most recent year with closed cases, 2021.
Population coverage	New Zealand resident population of all ages.
Spatial Coverage	National.
Measures of frequency	Results are presented by year, ethnic group, age group, sex and intent.
Limitations of indicator	The number of hazardous substance deaths in New Zealand is small, with the number referred to the coroner being only a fraction of this. As such there can be marked fluctuations in counts and rates between years. Rates derived from small numbers should be interpreted with caution.
Limitations of data source	Coronial investigations can take many years to complete and close. As such interpretation of changes over time should be done with caution, especially when considering events within the past three years of which the data is available (2019–21).
Related indicators	Hazardous substance deaths registered in NZ Unintentional hazardous substance-related hospitalisations Hazardous substances notifications Unintentional hazardous substances exposures in children
For more information	National Coronial Information System website: https://www.ncis.org.au/ HSNO Act 1996 monitoring report 2016 https://epa.govt.nz/assets/RecordsAPI/fd4d1267c7/Monitoring-the-effectiveness-of-the-HSNO-Act-2016.pdf