

Information topic	Details
Indicator name	Meningococcal disease notifications in children aged 0–14 years
Domain and topic	Indoor Environment (and Children’s Environmental Health) domain: Meningococcal Disease
Indicator definition and units	The number and rate of notifications of meningococcal disease. Rates are presented per 100,000 population.
Data source	National database of notifiable diseases (EpiSurv), from ESR (Institute of Environmental Science and Research Ltd).
Numerator	Annual number of notifications of meningococcal disease in children aged 0–14 years.
Denominator	Population estimates (2013 and prior) and projections (after 2013) from Statistics New Zealand. For the NZDep2013 analysis, the 2013 denominator population by NZDep2013 deciles, age group and sex has been used.
Methodology	Age-standardised rates have been calculated using the direct method, using the World Health Organization world population age distribution (Ahmad et al 2000). Prioritised ethnicity has been used, in the following prioritisation order: Māori, Pacific peoples, Asian, European/Other. We have used the variables provided on the dataset for the analysis, including prioritised ethnicity, sex, NZDep2013 decile and District Health Board (DHB).
Time period and time scale	Annual data, from 2007 to the most recent data available. Serogroup data is not available before 2007.
Population coverage	National.
Spatial Coverage	Nationally, with regional results available by District Health Board.
Measures of frequency	Results are presented by year, sex, age group, ethnic group, NZDep, and District Health Board (DHB). Results are also presented by serogroup.
Confidence interval methodology	95% confidence intervals were calculated based on the methodology outlined in APHO (2008). Confidence intervals are presented as error bars on graphs.
Limitations of indicator	Meningococcal disease is a notifiable in New Zealand. All cases diagnosed by doctors and/or laboratories are required to be notified to the Medical Officer of Health in the region, who notifies the case to the national data collection (EpiSurv) administered by ESR, or directly to EpiSurv for further investigation.

Metadata

	Notifications only cover those people who visited a GP or hospital for treatment, and therefore may underestimate the true rate of disease in the population.
Limitations of data source	As above.
Created by	Institute of Environmental Science and Research Ltd
Related indicators	Household crowding Second-hand smoke exposure Lower respiratory tract infection hospitalisations
For more information	ESR. Meningococcal Disease Reports. Available from https://surv.esr.cri.nz/surveillance/Meningococcal_disease.php
References	<p>Ahmad OB, et al. (2000). <i>Age Standardization of Rates: A New WHO Standard (Technical Report)</i>. GPE Discussion Paper Series: No. 31. Geneva: World Health Organization.</p> <p>APHO. (2008). <i>Technical Briefing 3: Commonly used public health statistics and their confidence intervals</i>. York, UK: Association of Public Health Observatories.</p>