

Children admitted to hospital one or more times with a primary diagnosis of asthma or wheeze

Te Tāhū Hauora
Health Quality & Safety
Commission



Source: [/measure/children-admitted-hospital-one-or-more-times-primary-diagnosis-asthma-or-wheeze](#)

Description

This measure gives the rate of children under 12 years who were admitted to hospital with asthma and wheeze as the primary diagnosis per 1,000 children.

Rationale

Hospital admissions with asthma are considered to be potentially preventable by addressing exposure to risk factors eg, cigarette smoking, poor quality housing, access to primary healthcare and appropriate use of preventer medication. Asthma is a major health problem in New Zealand and our prevalence rates are among some of the highest in the world. The cost burden of Asthma is estimated by the Asthma and Respiratory Foundation New Zealand (ARFNZ) to be \$1.195b in direct costs from hospitalisations, prescriptions and primary care visits and \$918.9 in indirect costs from work days lost, disability affected life years and mortality.

Measure set

[Asthma domain](#)

Health areas and conditions

[Long-term conditions](#)

Notes about this measure set

This indicator shows the number and rate per 1,000 children under 12 years who were admitted to hospital with asthma or wheeze as the primary diagnosis. Due to the difficulty / uncertainty of diagnosing asthma in under five-year olds, viral-induced wheeze as an alternate diagnosis was included in this analysis. ED attendances meeting the three-hour rule are included as an admission in this indicator. Admissions of neonates under 28 days old are excluded.

Measure type

Other

Numerator

The number of children aged under 12 years admitted one or more times in the calendar year with a primary diagnosis of asthma or wheeze.

Code (ICD10 AM): J45 Asthma; J46 Status Asthmaticus; R06.2 Wheeze

Numerator exclusions

Admissions of neonates under 28 days old are excluded

Denominator

Children aged under 12 years, PHO enrolment collection

Denominator exclusions

Admissions of neonates under 28 days old are excluded

Data sources

National Minimum Dataset (NMDS)

PHO Enrolment Collection

Disaggregation

District analysis: By year (2018 –2023), age group (0–4, 5–11), gender (female, male), ethnic group (Māori, Pacific peoples, European/Other) and Health New Zealand district of domicile.

PHO analysis: By year (2023), age group, gender, ethnic group, Primary Health Organisation (PHO) most recently enrolled with (for the relevant year), PHO group (small, medium, medium-large and large).

Notes

People who were excluded from analysis include:

- those who aren't enrolled in a PHO in the calendar year. This allowed us to use the number of PHO-enrolled people as the denominator.
- individuals with missing demographics – that is, those with no recorded value for one or more of the NHI fields used to derive the demographic variables of interest (age, gender, ethnicity and district of domicile). For instance, if there are any missing values for age, they are excluded from all analyses. This approach ensures a consistent denominator throughout the analyses.

Age group is assigned using 30 June of each calendar year as the cutoff point. For example, if a person turned 45 years old on 1 July 2023, they will still be considered 44 years old for 2023.

People who died during the calendar year are included in this indicator.

Data is not presented where the number of people in the numerator was less than 10. This is to preserve confidentiality.

See technical document for details

Responsible organisation(s)

Health Quality & Safety Commission | Te Tahi Hauora

Resources

<https://www.hqsc.govt.nz/assets/Our-data/Publications-resources/Asthma-atlas-methodology-2025.pdf>

Resource link

[Asthma-domain-Overall-Technical-document.pdf](#)

Resource Type

Measures & documentation

Measure methodology last updated

September 2025

Reference period

2018-2023