

Prevalence of diabetes



Source: /measure/prevalence-diabetes

Official name

Prevalence of diabetes

Other names

Indicator #1

Description

This indicator shows the number and percent of the PHO-enrolled New Zealand population recorded as having diabetes in the VDR.

Rationale

Diabetes affects a significant proportion of the population in New Zealand, and an even larger number are estimated to have prediabetes (Coppell et al 2013; Health New Zealand 2023). It is estimated that about 307,000 people are diagnosed with diabetes. Diabetes disproportionately affects Pacific peoples, Indian and Māori populations when compared with European/other ethnic groups (Health New Zealand 2023). Children and young people are increasingly being diagnosed with type 2 diabetes, in part related to increasing obesity rates (Sjardin et al 2018).

Understanding variation in the prevalence of diabetes is crucial for long-term health care planning. It helps to predict future health care needs and allows for the development of sustainable strategies to manage and prevent diabetes.

Diabetes is associated with substantial health care costs, both direct (eg, medical treatment) and indirect (eg, productivity losses). Understanding variation in prevalence can help estimate the economic burden and plan for health care expenditure accordingly.

It should be noted that we used PHO enrolment data as the denominator for the diabetes prevalence indicator, replacing Stats NZ estimated population projections. This ensures alignment and consistency with the Health New Zealand VDR web tool. However, we acknowledge that some population groups are more likely to be unenrolled compared to others. For more information on access to primary care by demographics, please see <https://www.tewhatauora.govt.nz/for-health-providers/primary-care-sector/primary-health-organisations/enrolment-with-a-general-practice-and-primary-health-organisation>.

Measure set

Atlas of Healthcare Variation

Diabetes domain

Health areas and conditions

Long-term conditions

Population health

Notes about this measure set

- Data is not presented where the number of people in the numerator was less than 10. This is to preserve confidentiality.
- People were assigned to their Health New Zealand / Te Whatu Ora (Health New Zealand) district of domicile; where more than one domicile was recorded, the most recent value was selected.
- Ethnicity data presented is prioritised ethnic group (Māori, Pacific peoples, Indian and European/other). Prioritised ethnic groups involve each participant being assigned to a single ethnic group, based on the ethnicities they have identified with, in the prioritised order of Māori, Pacific peoples, Indian and European/other. The European/other ethnic group includes persons of the following ethnicities: European (including New Zealand European), MELAA (Middle Eastern, Latin American and African), other Asian and Other. Where people report different ethnic groups at different timepoints, the most recent value is selected.
- Rates are not age standardised; this means our prevalence rates are different to those on the Health New Zealand diabetes dashboard (<https://tewhatuora.shinyapps.io/virtual-diabetes-register-web-tool/>).
- For all indicators, individuals with missing values for any of the variables of interest (age, gender, ethnicity and district) are excluded completely. 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.
- Since we aggregate data for the numerator and denominator separately for Indicator #1, we use demographic information from the Virtual Diabetes Register (VDR) for the numerator and from the Primary Health Organisation (PHO) Enrolment Collection for the denominator. For Indicators #2-12, demographic information is taken from the VDR. For Indicator #13, demographic information is from the National Minimum Dataset (NMDS).
- For PHO analyses, we analysed Indicator #1 to determine the size of diabetic population each PHO serves. Then we categorised them into small (< 3,000), medium (3,000-5,000), medium-large (5,000-10,000) and large (> 10,000).

Measure type

Count

Percent

Numerator

Count of distinct master NHIs identified as having diabetes as per the VDR.

Numerator exclusions

To add

Denominator

PHO enrolments for relevant years

Notes

- Individuals not enrolled with a PHO as at 31 December of the VDR year have been excluded from the numerator for that year.
- It was not possible from the national data sets to infer the type of diabetes, so all data presented is a combination of those with type 1 and type 2 diabetes.
- Women diagnosed with gestational diabetes are not included.

Responsible organisation(s)

Health New Zealand | Te Whatu Ora

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Origin

Atlas of Healthcare Variation - diabetes domain

Measure methodology last updated

Last updated June 2024. This measure has not yet been updated. Refer to the Atlas of Healthcare Variation.