

Household Disability Survey 2023 – findings, definitions, and design summary





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Citation

Stats NZ (2025). *Household Disability Survey 2023 – findings, definitions, and design summary*. Retrieved from www.stats.govt.nz.

ISBN 978-1-991307-44-6 (online)

Published in February 2025 by

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1. Purpose

Household Disability Survey 2023 – findings, definitions, and design summary provides findings from the 2023 Household Disability Survey (HDS) on the **prevalence of disability** (how many people are disabled) among people living in New Zealand households.

The HDS also collected data on social and economic outcomes for disabled people, the level and type of support they need, and barriers to participation in important aspects of life such as work, education, and recreation.

This report focuses on disability prevalence, given that only the HDS can provide official statistics on prevalence, and is the first update since the 2013 HDS. Disability prevalence data is crucial for planning and providing effective disability support services and for a broad range of other public services.

[Disability statistics: 2023](#) and [Disabled people need more care and support](#) report findings from other parts of the 2023 HDS.

2. Key findings

- In 2023, 17 percent of people living in New Zealand households were disabled. This equated to 851,000 people, of whom 98,000 were children and 753,000 were adults.
- Females were more likely to be disabled than males, at 18 percent and 15 percent respectively.
- The disability rate for children was 10 percent and for adults, 18 percent. The survey collected data from adults (aged 15 years or over) and children (under 15 years) living in households and had no upper or lower age limits.
- Disability rates increased with age. The rate for adults aged 15 to 44 years (12 percent) was not much higher than the child rate (10 percent). The rate was 17 percent for adults aged 45 to 64, and 35 percent for adults aged 65 and over.
- Disability rates differed by ethnic group. Māori had a disability rate of 21 percent, Pacific people 16 percent, and Asian people 9 percent.
- Adjusting for age differences increased disability rates in these three ethnic groups as they have younger population profiles than the total population. With age-adjustment, the Māori disability rate moved to 24 percent, the Pacific people rate to 21 percent, and the Asian rate to 13 percent.
- The disability rate for the LGBTIQ+ population was 29 percent, significantly higher than the non-LGBTIQ+ rate of 17 percent. After age-adjustment, the LGBTIQ+ rate was 31 percent.
- Regions with disability rates significantly higher than the national rate were Northland (23 percent), Manawatū-Whanganui (21 percent), and Taranaki (21 percent).
- Auckland (14 percent) had a disability rate significantly lower than the national rate.
- Disability status was based on functional difficulty. People were counted as disabled if they – or for children, their caregiver – reported having difficulty in at least one of the aspects of universal human functioning (domains) that were measured in the survey and their level of difficulty met the threshold for that domain.
- For adults, difficulties with physical functioning were the most common. For children, difficulties with mental health and with accepting change to their routine were the most common.

3. Introduction

The 2023 Household Disability Survey (HDS) was designed to provide estimates of disability prevalence among people living in New Zealand households, and information about their experiences and needs. The HDS is an important source of official statistics about disabled people in New Zealand and helps to show how well they are faring compared with non-disabled people. The 2023 HDS sample was selected from the 2023 Census of Population and Dwellings (2023 Census).

In this survey the word ‘disabled’ is used to mean having functional difficulty that limits everyday activities. There are other ways in which disability can be understood. The HDS counted a person as disabled if they reported (or for children, if their caregiver reported) a long-term difficulty in at least one functional domain included for their age group.

[6.1 Defining disability](#) provides more information on the definition of disability used in the survey.

The 2023 HDS was the fifth disability-specific survey of usual New Zealand residents living in households. The first was carried out in 1996, followed by others after the 2001, 2006, and 2013 population censuses. The concept of disability measured in these surveys (functional difficulty) has been broadly consistent across them. However, findings from 2023 are not comparable with the earlier surveys due to differences in the survey questions. Compared with the 2013 disability survey for example, a higher threshold was set for counting a person as disabled and this was expected to result in lower disability prevalence in 2023. There were also changes in the number and wording of the screening questions.

[10.2 Comparability with previous disability surveys](#) provides more detail on screening questions.

4. HDS findings about disability prevalence

An estimated 17 percent of people living in New Zealand households were counted as disabled in 2023, amounting to 851,000 people. Disability varies across demographic groups. The following sections provide details on disability prevalence by those groups.

For sampling errors on all estimates, see the Excel tables available for download from [Disability statistics: 2023](#).

4.1 By age group

The disability prevalence rate (disability rate) for adults living in New Zealand households was 18 percent, and for children it was 10 percent. This means that 753,000 adults and 98,000 children were counted as disabled. The survey defined children as people aged 0 to 14 years inclusive, and adults as people aged 15 years or older.

The correlation between age and disability is widely understood and the 2023 HDS findings support this relationship. Older people have had longer to acquire functional difficulties from injury or disease, and ageing itself causes increasing difficulty with functioning.

Table 1 shows that the disability rate was lowest for children at 10 percent. Three age groups are shown for adults. The disability rates rose in each adult age group to reach 35 percent for adults aged 65 years and over.

Table 1

Disability prevalence by age group		
Age group	Disability rate (%)	Number of disabled people
Children (0 to 14 years)	10	98,000
Adults (15+ years)	18	753,000
15 to 44 years	12	254,000
45 to 64 years	17	216,000
65+ years	35	283,000
Total	17	851,000
Source: Stats NZ		

A more detailed 10-year age group breakdown (table 2) shows that disability prevalence increased more steeply after 50 years of age. The disability rate by age remained below the national rate of 17 percent until the 50 to 59-year age group. From 50 years, the rate climbed with increasing steepness until nearly one in three people aged 70 to 79 years were counted as disabled, and over half of people aged 80 or over.

Table 2

Disability prevalence by 10-year age groups		
Age group	Disability rate (%)	Number of disabled people
0 to 9 years	9	55,000
10 to 19 years	13	86,000
20 to 29 years	14	96,000

30 to 39 years	10	78,000
40 to 49 years	12	75,000
50 to 59 years	17	113,000
60 to 69 years	23	133,000
70 to 79 years	32	122,000
80+ years	52	92,000
Total	17	851,000
Source: Stats NZ		

The relationship between age and disability means that over half of all disabled people were aged 50 years or over, and a third were 65 years or over.

4.2 By gender¹

The disability rate for all females was 18 percent, 3 percentage points higher than the male rate of 15 percent. This equated to 89,000 more disabled females than males.

A higher disability rate for females was observed across the adult life span. In adulthood, the disability rate was 20 percent for women compared with 15 percent for men. This equated to 113,000 more disabled women than disabled men.

Among children however, disability rate was higher for boys than for girls, at 12 percent and 8 percent respectively. The difference in disability rates meant 24,000 more disabled boys than disabled girls.

On average women live longer than men and, because disability increases with age, this is a factor in the higher prevalence of disability for females. However, the disability rate for women was higher than that for men across all adult age groups, showing that women were more likely than men to be disabled at any age and the higher rate for women is not solely due to women living longer.

Table 3

Disability prevalence by age group and gender						
Age group	Total		Male		Female	
	Disability rate (%)	Number of disabled people	Disability rate (%)	Number of disabled people	Disability rate (%)	Number of disabled people
Children (0 to 14 years)	10	98,000	12	61,000	8	37,000
Adults (15+ years)	18	753,000	15	316,000	20	429,000
15 to 44 years	12	254,000	10	108,000	14	140,000
45 to 64 years	17	216,000	14	89,000	19	126,000
65+ years	35	283,000	31	119,000	38	164,000
Total	17	851,000	15	377,000	18	466,000
People with a gender other than male or female (including non-specified genders) are included in the total column only.						
Source: Stats NZ						

¹ The 2023 HDS collected gender, rather than sex, in alignment with the [data standard for gender, sex, and variations of sex characteristics](#). Survey respondents could report a gender other than male or female. Estimates for people who reported another gender have not been published due to very small sample sizes.

4.3 By ethnic group

Disability prevalence varied across ethnic groups.

The disability rates for Māori (21 percent) and European (18 percent) ethnic groups were higher than the national rate (17 percent), and the Asian rate (9 percent) was lower.

Table 4

Disability prevalence by ethnic group for children and adults						
Ethnic group	Total		Children (0–14 years)		Adults (15+ years)	
	Disability rate (%)	Number of disabled people	Disability rate (%)	Number of disabled children	Disability rate (%)	Number of disabled adults
Māori	21	184,000	14	38,000	24	146,000
European	18	647,000	11	71,000	20	575,000
Pacific	16	66,000	11	14,000	18	53,000
Asian	9	84,000	6	11,000	10	73,000
Total	17	851,000	10	98,000	18	753,000

People who belong to more than one ethnic group are included in each.
Source: Stats NZ

Māori adults had the highest disability rate compared with adults in other ethnic groups, and Asian adults had the lowest rate. The European adult rate was higher than the national adult rate due, at least in part, to the older age profile of the European ethnic group population.

As was the case for adults, the disability rate for Māori children was higher than the national rate for children and the rate for Asian children was lower.

Māori, Pacific, and Asian ethnic groups had younger age-profiles than the total population, while the European ethnic group's age-profile was older. Because disability rates increase with age, the full extent of differences in disability rates can be hidden by these differing age-profiles.

It is helpful to look at age-adjusted disability rates for these groups. The age-adjusted disability rate for any population group is the rate that it would have if the age-profile for that group was the same as that of the total population.

Table 5

Disability prevalence by ethnic group, original and age-adjusted rates		
Age group	Unadjusted disability rate (%)	Age-adjusted disability rate (%)
Māori	21	24
European	18	17
Pacific	16	21
Asian	9	13
Total	17	17

People who belong to more than one ethnic group are included in each.
Source: Stats NZ

Age-adjusted disability rates for Māori and Pacific people were significantly higher than the national disability rate of 17 percent.

Even after age adjustment, the Asian ethnic group still had a lower disability rate than the national rate.

Cultural differences affecting the tendency to report difficulties may have contributed to ethnic variations in measured disability rates, so variations may not be solely due to differences in functional difficulties.

4.4 By LGBTIQ+ status²

The disability rate for the LGBTIQ+ adult population was 29 percent, significantly higher than the rate for the non-LGBTIQ+ population of 17 percent.

Disability rates for the LGBTIQ+ population also differed by ethnic group. In all ethnic groups shown in table 6, the disability rate was significantly higher among the LGBTIQ+ population. The Asian ethnic group had too few people in the sample to show in table 6.

Table 6

Disability prevalence by ethnic group and LGBTIQ+ status						
Ethnic group	Total adults		LGBTIQ+ adults		Non-LGBTIQ+ adults	
	Disability rate (%)	Number of disabled adults	Disability rate (%)	Number of disabled adults	Disability rate (%)	Number of disabled adults
Māori	24	146,000	45	20,000	22	126,000
European	20	575,000	32	53,000	19	522,000
Pacific	18	53,000	36	5,000	18	48,000
Total	18	753,000	29	64,000	17	688,000
People who belong to more than one ethnic group are included in each.						
People with a non-specified LGBTIQ+ status are included in the total column only.						
Source: Stats NZ						

The LGBTIQ+ population has a younger age-profile than that of the total population so age-adjustment is appropriate to compare overall disability rates.

The disability rate for the LGBTIQ+ population after age-adjustment was 31 percent compared with the unadjusted rate of 29 percent.

4.5 By region

Of the 12 regions, four had disability prevalence rates that were significantly different to the national rate of 17 percent. Three were higher and one lower.

The regions with disability rates higher than the national rate were Northland (23%), Manawatū-Whanganui (21%), and Taranaki (21%). Contributors to the higher rates in these regions were older-than-average age profiles, a high proportion of Māori, and a low proportion of Asian people living there.

² For a detailed definition of how the LGBTIQ+ population is defined in the HDS see [6.2 Definitions of terms](#).

Auckland (14%) had a disability rate lower than the national rate. Even so, over a quarter of disabled people lived in Auckland, reflecting its status as the largest region in New Zealand by population size. The low rate was driven by Auckland having a younger-than-average age profile, high proportion of Asian people, and high proportion of recent migrants (New Zealand has an ‘acceptable standard of health’ criteria which often stops disabled people or people with health conditions from immigrating to New Zealand).

5. HDS findings about functional domains

The number and type of functional domains included in a survey will directly affect the number of people counted as disabled. Being disabled in a functional domain means that a person has difficulty functioning at or above the threshold set for that domain by the survey.

To count as a disabled person in the HDS, the respondent must be disabled in at least one of the domains that are included for their age group. The domains differ between adults and children. This section provides information about the functional domains that are most prevalent by demographic groups.

For sampling error on all estimates, see the Excel tables available for download from [Disability statistics: 2023](#).

5.1 Functional domains for adults

The two highest disability rates for adults were both in physical functioning domains – walking and flexibility/dexterity. Seven percent of all adults had sufficient difficulty with walking to be counted as disabled because of it, and 6 percent because of difficulties with flexibility or dexterity.

The seeing domain had the third highest rate, at 4 percent.

Table 7

Functional domain disability rates for adults		
Functional domains for adults	Disability rate (%)	Number of disabled adults
Walking	7	271,000
Flexibility/dexterity	6	239,000
Seeing	4	182,000
Pain	3	136,000
Mental health	3	135,000
Socialising	3	117,000
Remembering	2	103,000
Concentrating	2	99,000
Fatigue	2	90,000
Communication	1	57,000
Learning	1	55,000
Hearing	1	51,000
Personal care	1	45,000
Intellectual	1	28,000
Total	18	753,000

Adults with functional difficulties in more than one domain were counted in each.
Source: Stats NZ

Some of the functional domains in table 7 are small. To disaggregate the data by demographic characteristics, some domains were combined (as shown in table 8).

For the rest of this section on adult domain rates, the grouped functional domains are used.

Table 8

Grouped functional domain disability rates for adults		
Grouped functional domains for adults	Disability rate (%)	Number of disabled adults
Physical (walking and flexibility/ dexterity)	9	370,000
Sensory (seeing and hearing)	5	223,000
Cognition (remembering, concentrating, and learning)	4	170,000
Pain	3	136,000
Mental health	3	135,000
Socialising	3	117,000
Other (personal care, communication, and intellectual)	3	106,000
Fatigue	2	90,000
Total	18	753,000

Adults with functional difficulties in more than one domain were counted in each.
Source: Stats NZ

5.1.1 By gender

Women were more likely than men to report difficulties in the physical, sensory, pain, mental health, and fatigue domains.

Table 9

Grouped functional domain disability rates for adults, by gender						
Grouped functional domains for adults	Total adults		Men		Women	
	Disability rate (%)	Number of disabled adults	Disability rate (%)	Number of disabled adults	Disability rate (%)	Number of disabled adults
Physical	9	370,000	7	143,000	11	226,000
Sensory	5	223,000	5	95,000	6	126,000
Pain	3	136,000	3	56,000	4	79,000
Mental health	3	135,000	2	51,000	4	80,000
Fatigue	2	90,000	2	31,000	3	58,000
Cognition	4	170,000	4	77,000	4	89,000
Socialising	3	117,000	3	51,000	3	61,000
Other	3	106,000	3	53,000	2	52,000
Total	18	753,000	15	316,000	20	429,000

Adults with functional difficulties in more than one domain were counted in each.
 Adults with a gender other than male or female (including non-specified genders) are included in the total column only.
 Domains with significant differences between men and women are listed first, by total size. Domains without significant differences between men and women are listed next, also by total size.
Source: Stats NZ

5.1.2 By age group

The disability rate in the physical domain increased most with age. Sensory was also strongly linked with ageing. Rates in the pain and ‘other’ domains were also higher for older adults (65+ years) than younger adults (15 to 44 years), although these increases were not as large.

Disability in the mental health and socialising domains were lower in older age groups. For cognition and fatigue there was no evidence of a statistically significant difference between younger and older adults.

Table 10

Grouped functional domain disability rates for adults, by age group						
Grouped functional domains for adults	15–44 years		44–64 years		65+ years	
	Disability rate (%)	Number of disabled adults	Disability rate (%)	Number of disabled adults	Disability rate (%)	Number of disabled adults
Physical	2	48,000	9	110,000	26	212,000
Sensory	2	48,000	6	81,000	11	94,000
Pain	2	38,000	4	49,000	6	50,000
Other	2	49,000	2	24,000	4	33,000
Mental health	4	86,000	3	37,000	1	11,000
Socialising	3	68,000	2	31,000	2	18,000
Cognition	4	93,000	3	39,000	5	39,000
Fatigue	2	42,000	2	28,000	2	20,000
Total	12	254,000	17	216,000	35	283,000

Adults with functional difficulties in more than one domain were counted in each.
 Domains that had disability rates which increased with age are listed first, by size of the increase, followed by domains that decreased with age, and then domains that didn't show age effects.
Source: Stats NZ

5.1.3 By ethnic group

Disability rates in adult functional domains showed differences by ethnic group.

Māori adults had significantly higher rates than the national adult rate (all adults) for five out of the eight domains:

- cognition – 8 percent for Māori adults and 4 percent for all adults
- mental health – 6 percent and 3 percent respectively
- socialising – 6 percent and 3 percent respectively
- fatigue – 3 percent and 2 percent respectively
- other – 4 percent and 3 percent respectively.

For Asian adults, disability rates were significantly lower than those for the total adult population in all functional domains.

For Pacific adults, no domains were significantly different from the national adult rates except for pain which was lower for Pacific adults (2 percent for Pacific adults and 3 percent for adults nationally).

European was the largest ethnic group, so rates for this group drove the overall adult domain rates. For all domains combined, there was enough data to show that the disability rate for European adults was significantly higher than the national adult rate. No individual domain was significantly different from the national adult rates.

For more detail on domain rates by ethnic group, see the Excel tables available for download from [Disability statistics: 2023](#).

5.1.4 By LGBTIQ+ status

There were five domains in which the LGBTIQ+ population had significantly higher disability rates than the non-LGBTIQ+ population. These were:

- cognition – 11 percent for the LGBTIQ+ population and 4 percent for the non-LGBTIQ+ population
- mental health – 10 percent and 3 percent respectively
- socialising – 8 percent and 3 percent respectively
- sensory – 8 percent and 5 percent respectively
- fatigue – 5 percent and 2 percent respectively.

5.2 Functional domains for children

The functional domains used to count disabled children varied depending on the child’s age. This is because expectations of a child’s capacity to carry out activities changes as they grow and develop. The domains for children in table 11 show the age range to which they apply.

The domains with the highest rates of disability among children were mental health (which included daily feelings of anxiety or depression) and accepting change to routine, with 5 percent of children counted as disabled in each of these. The making friends, controlling their own behaviour, and developmental delay domains each had similar rates between 3 and 4 percent (of appropriately aged children). The remaining child domains had disability rates of 2 percent or lower.

Table 11

Functional domain disability rates for children		
Functional domains	Disability rate (%)	Number of disabled children
Mental health – 5 to 14 years	5	35,000
Accepting change to routine – 5 to 14 years	5	35,000
Making friends – 5 to 14 years	4	25,000
Controlling own behaviour – 2 to 14 years	3	30,000
Developmental delay – 0 to 4 years	3	10,000
Communication – 2 to 14 years	2	18,000
Remembering – 5 to 14 years	2	15,000
Learning – 2 to 14 years	2	14,000
Concentrating – 5 to 14 years	2	11,000
Intellectual – 5 to 14 years	1	7,000
Walking – 2 to 14 years	1	6,000
Personal care – 5 to 14 years	1	5,000

Flexibility/dexterity – 0 to 14 years	< 0.5	3,000
Hearing – 0 to 14 years	< 0.5	2,000
Playing – 3 months to 4 years	< 0.5	1,000
Seeing – 0 to 14 years	S	S
Total – 0 to 14 years	10	98,000
Children with functional difficulties in more than one domain were counted in each. 'S' means the data is suppressed because numbers are too small to report. Source: Stats NZ		

Some of the functional domains in table 11 are small. To disaggregate the data by demographic characteristics, domains were combined (as shown in table 12).

For the rest of this section on child domain rates, the grouped functional domains are used.

Table 12

Grouped functional domain disability rates for children		
Grouped functional domains	Disability rate (%)	Number of disabled children
Mental health – 5 to 14 years	5	35,000
Accepting change to routine – 5 to 14 years	5	35,000
Making friends – 5 to 14 years	4	25,000
Other (communication, personal care, intellectual, playing, and developmental delay) – 0 to 14 years	3	32,000
Controlling own behaviour – 2 to 14 years	3	30,000
Cognition (learning, remembering, and concentrating) – 2 to 14 years	3	29,000
Physical (walking and flexibility/dexterity) – 0 to 14 years	1	7,000
Sensory (seeing and hearing) – 0 to 14 years	< 0.5	3,000
Total – 0 to 14 years	10	98,000
Children with functional difficulties in more than one domain were counted in each. Source: Stats NZ		

5.2.1 By gender

Boys were more likely than girls to be disabled with disability rates of 12 and 8 percent respectively. Contributing to their higher disability rate, boys had significantly higher rates of disability in five functional domains:

- accepting change to routine
- making friends
- the 'other' domain
- controlling their own behaviour
- cognition.

For the remaining three domains (mental health, physical, and sensory), the differences between disability rates for boys and girls were not statistically significant.

Table 13

Grouped functional domain disability rates for children, by gender						
Grouped functional domains	Total children		Boys		Girls	
	Disability rate (%)	Number of disabled children	Disability rate (%)	Number of disabled children	Disability rate (%)	Number of disabled children
Accepting change to routine – 5 to 14 years	5	35,000	7	24,000	3	11,000
Making friends – 5 to 14 years	4	25,000	5	17,000	3	8,000
Other – 0 to 14 years	3	32,000	4	21,000	2	11,000
Controlling own behaviour – 2 to 14 years	3	30,000	5	22,000	2	8,000
Cognition – 2 to 14 years	3	29,000	5	21,000	2	8,000
Mental health – 5 to 14 years	5	35,000	5	18,000	5	16,000
Physical – 0 to 14 years	1	7,000	1	4,000	1	3,000
Sensory – 0 to 14 years	< 0.5	3,000	< 0.5	2,000	< 0.5	2,000
Total – 0 to 14 years	10	98,000	12	61,000	8	37,000
Children with functional difficulties in more than one domain were counted in each.						
Children with a gender other than male or female (including non-specified genders) are included in the total column only.						
Domains with significant differences between boys and girls are listed first, by total size. Domains without significant differences between boys and girls listed next, also by total size.						
Source: Stats NZ						

5.2.2 By ethnic group

Māori children had significantly higher disability rates than the national child rates in four functional domains. These domains were:

- accepting change to routine – 8 percent for Māori children and 5 percent for all children
- controlling behaviour – 5 percent and 3 percent respectively
- making friends – 6 percent and 4 percent respectively
- other – 5 percent and 3 percent respectively.

For Asian children, disability rates were significantly lower than the national child rates for most domains, the sensory domain was too small to report, and differences in the physical and ‘other’ domains were not significant.

For more detailed HDS data on prevalence, functional domains, and on the experiences of disabled people, see the Excel tables available for download from [Disability statistics: 2023](#).

The remainder of this report contains definitions used in the HDS and a summary of the survey design.

6. Definitions

6.1 Defining disability

Disability is an evolving concept, as recognised in the UN Convention on the Rights of Persons with Disabilities (UNCRPD)³. There are several ways to frame disability and the way in which disabled people are identified in any given context depends on the reason for doing so.

The New Zealand Government signed the Convention at the United Nations on 30 March 2007 and ratified it on 26 September 2008. New Zealand acceded to the Optional Protocol to the Convention on 5 October 2016 and this came into force on 4 November 2016.

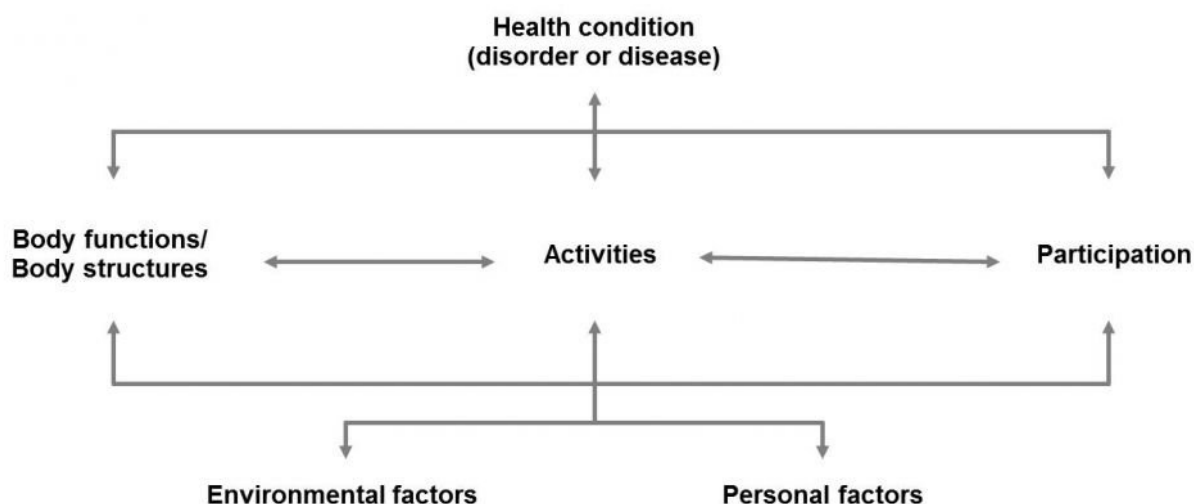
The definition of disabled people in the UNCRPD reads: "...[people] who have long-term physical, mental, intellectual or sensory impairments which, in interaction with various barriers, may hinder their full and effective participation in society on an equal basis with others"³.

For data collection purposes, the conceptual framework for measuring disability in the HDS is provided by the International Classification of Functioning, Disability, and Health (ICF).

The ICF conceptualises a person's level of functioning as a dynamic interaction between their health conditions, environmental factors, and personal factors. It is a biopsychosocial model of disability, based on an integration of social and medical views of disability. The ICF states that disability is an umbrella term for impairments, activity limitations, and participation restrictions⁴.

As figure 1 shows, in the ICF disability and functioning are viewed as outcomes of interactions between health conditions (diseases, disorders, and injuries) and contextual factors⁵.

Figure 1. Components of the International Classification of Functioning, Disability, and Health framework



³ [Convention on the Rights of Persons with Disabilities and Optional Protocol.](#)

⁴ [The ICF: an overview \(CDC\).](#)

⁵ [Towards a common language for functioning, disability and health \(WHO\).](#)

The high-level definition and conceptual framework for understanding disability influence the way in which disabled people are counted in a data collection. However, choices must still be made about the specific questions to be used.

In surveys that identify disabled people, the responses provided to a particular set of questions are used to distinguish between disabled and non-disabled people in that survey. These are referred to in the HDS as ‘screening questions’.

The 2023 HDS screening questions were based on question sets developed by the Washington Group on Disability Statistics (WG) – the [WG Extended Set on Functioning](#) for adults, and the [Child Functioning Module](#) for children. The WG questions were amended and supplemented by Stats NZ to address concerns raised by HDS users in the consultation phase and to reduce potential misunderstanding by survey respondents or interviewers.

The WG questions focus on difficulties with functioning. It is this dimension of the ICF that is self-assessed by respondents in the screening questions and their answers are used to assign disability status. Statistics about functional difficulty in a population are important for understanding the needs of that population.

Other dimensions of the ICF were captured in the survey but were not screening questions, so they were not used to assign disability status. These included personal and environmental factors as well as selected activities and participation in different life situations.

An adult was counted as disabled in the HDS if they self-reported long-term difficulty in at least one of the functional domains for adults. If they were unable to self-report during the period in which the survey was in the field because of health or disability issues, then a proxy interview was used (that is, someone else answered the survey questionnaire on behalf of the respondent).

A child was counted as disabled if their carer, in a proxy interview, reported long-term difficulty in at least one of the functional domains for the child’s age group.

Stats NZ uses the term ‘disabled person’ in keeping with [disability language](#) in the New Zealand Disability Strategy. Other terms are used by many people and organisations. Their preference is acknowledged and fully respected.

6.1.1 Functional domains included in the 2023 HDS

The decision about which domains of functioning to include in the questionnaire directly affects the size and composition of the disabled population identified in any survey.

In the 2023 HDS, we included the following domains of functioning:

- For adults there were 14 domains: seeing, hearing, walking, flexibility/dexterity, personal care, communication, concentrating, remembering, learning, intellectual function, mental health, socialising, pain, and fatigue.
- For children aged 5 to 14 years there were 14 domains: seeing, hearing, walking, flexibility/dexterity, personal care, communication, concentrating, remembering, learning, intellectual function, mental health, making friends, accepting change to routine, and controlling own behaviour.
- For children aged 2 to 4 years there were nine domains: seeing, hearing, walking, flexibility/dexterity, communication, learning, controlling own behaviour, developmental delay, and playing.

- For children aged 3 months to 1 year there were five domains: seeing, hearing, flexibility, developmental delay, and playing.
- For children under 3 months there were four domains: seeing, hearing, flexibility, and developmental delay.

Most of these domains were developed by the Washington Group on Disability Statistics. After consultation, Stats NZ added questions:

- For adults, questions on intellectual function, learning, and socialising were added, as well as additional questions on mental health (other than anxiety/depression).
- For children aged 5 to 14 years, questions on intellectual function and flexibility/dexterity were added.
- For children aged 2 to 4 years, a question on developmental delay and additional questions on flexibility/dexterity.
- For children aged below 2 years, the WG does not have questions. In response to user interest, some were added for this age group. It is acknowledged that in this age group it is hard to determine if difficulties are simply due to variations in infant development.

6.1.2 The threshold for counting a person as disabled

To create a binary variable like disability status, a threshold must be set. The threshold defines the boundary between disabled and non-disabled people. The decision about where to set this threshold in each functional domain directly affects the size and composition of the disabled population.

In some questions in the 2023 HDS, answer options were scaled in four steps – ‘no difficulty’, ‘some difficulty’, ‘a lot of difficulty’, and ‘unable to do it at all’. The amount of difficulty reported needed to be one of the top two steps (either ‘a lot of difficulty’ or ‘unable to do it at all’) for a person to be counted as disabled.

Some domains used a different threshold because the function being measured required this:

- The mental health domain required strong⁶ daily feelings of anxiety or depression.
- The pain domain required strong⁶ feelings of pain most days or every day.
- The fatigue domain required strong⁶ feelings of fatigue that lasted most of the day or the whole day and occurred most days or every day.
- The intellectual domain required a diagnosis of an intellectual disability.
- The developmental delay domain required a diagnosis of a condition that delays development.
- The controlling own behaviour domain for children 2 to 4 years required that the child kick, bite, or hit a lot more than children of the same age.

6.1.3 The treatment of assistive equipment or technology

Assistive devices can be helpful in reducing the limiting effects of functional difficulties. In line with the [Washington Group's practice](#), HDS participants were asked about any difficulties seeing or hearing while **using** their assistive devices (like glasses and hearing aids).

⁶ Self-described as strong for the most recent occurrence.

For other functional domains, the questions were meant to be answered as if they were **not using** any assistive devices. The extent to which respondents answered the questions as designers intended is not known.

6.2 Definitions of terms

Term	Definition
Activity limitation	Difficulty carrying out a task or action.
Adult	A person aged 15 years or over.
Body functions	Physiological functions of body systems (including psychological functions).
Body structures	Anatomical parts of the body such as organs, limbs, and their components.
Child	A person aged 0 to 14 years.
Contextual factors	The entire background of a person's life and living situation including environmental and personal factors.
Difficulty or functional difficulty	<p>In the context of assessing disability status for each participant or when talking about ‘difficulty in a functional domain’, difficulty is determined in different ways depending on the question structure in that domain.</p> <p>Most often it refers to having selected one of the response options ‘a lot of difficulty’ or ‘unable to do it at all’ for at least one of the questions in that domain.</p> <p>Some questions were phrased differently. In those cases, ‘difficulty’ is assumed to arise when the respondent/proxy reports:</p> <ul style="list-style-type: none"> • severe and persistent feelings of depression, anxiety, pain, or fatigue • a diagnosed intellectual disability or developmental delay • kicking, biting, or hitting a lot more than children of the same age.
Disability prevalence rate or disability rate	The proportion, expressed as a percentage, of disabled people in a specified population.
Disability status	A binary variable denoting whether the respondent is disabled or not.
Disabled person	<p>A person who self-reported – or in the case of children, their caregiver reported – a long-term difficulty in at least one of the functional domains for their age group. Where answer options were scaled, the amount of difficulty reported needed to meet a specified threshold.</p> <p>For what counts as ‘difficulty’ in the context of assessing disability, see the definition in this table.</p>
Dwelling	Any building or structure used, or intended to be used, for human habitation.

Term	Definition
Environmental factors	The physical, social, and attitudinal environment in which people live. These factors are external to the person and can have a positive or negative influence, that is, they can serve as a facilitator or a barrier for a person’s functioning.
Functional domain	An aspect of human functioning that is assessed as part of a method for identifying disabled people in a data collection like a survey (for example, seeing, hearing, or walking).
Functioning	An umbrella term for body function, body structures, activities, and participation. It denotes the positive or neutral aspects of the interaction between a person’s health condition(s) and that individual’s contextual factors (environmental and personal factors).
Gender	A person’s social and personal identity as male, female, or another gender. A person’s current gender may differ from their sex recorded at birth. The HDS collected gender, rather than sex, in alignment with the ‘gender by default’ principle in the data standard for gender, sex, and variations of sex characteristics .
Household	Either one person who usually lives alone, or two or more people who usually live together and share facilities (such as for eating, cooking, or a living area; and bathroom and toilet). For the 2023 Census, a household must be living in a private dwelling. For the HDS, people living together in a residential and community care facility were also treated as a household.
Impairments	Problems in body function and/or structure such as significant deviation from statistical norms.
Intellectual disability or learning disability	The term ‘learning disability’ is often used and preferred over the term ‘intellectual disability’. However, the HDS uses the term ‘intellectual disability’ because it remains in use in New Zealand (particularly in legislation and eligibility for services), and to avoid confusion with the HDS’s learning functional domain. The learning domain indicates difficulty with the skills required to learn and is not about intellectual functioning or adaptive behaviour.
LGBTIQ+ population	Adults who reported any of the following in the 2023 Census: <ul style="list-style-type: none"> • a gender that was not male or female • a sexual identity that was homosexual, bisexual, another identity that was not heterosexual (straight) • a gender that was different to what was recorded for their sex at birth • a variation of sex characteristics (innate genetic, hormonal, or physical sex characteristics that do not conform to medical norms for female or male bodies).
Long-term	Six months or more.
Participation	Involvement in a life situation such as education, employment, or leisure.

Term	Definition
Participation restrictions	Difficulty with involvement in life situations.
Personal factors	The background of a person's life and living situation. This may include, but is not limited to, gender, age, race, fitness, lifestyle, habits, and social background. Personal factors can have a positive or negative impact on a person's body functions and structures, and activities and participation.
Proxy interview	<p>An interview in which someone else (called 'the proxy') answers the survey questionnaire on behalf of the selected respondent.</p> <p>In the HDS, proxy interviews were used for all selected children (the proxy was usually a parent or other caregiver of the selected child).</p> <p>Ideally, selected adults answered for themselves. Exceptions were made if they could not do so because of difficulties arising from health or disability issues. Interviews could be rescheduled so the difficulties must have been expected to last for the remainder of the collection period.</p>
Residential and community care facility	<p>A type of dwelling type that provides supported living arrangements for people in the community. It includes dwellings that provide care for disabled people (such as the homes run by IDEA Services). It does not include aged-care facilities, long-stay hospitals, or other care facilities where the person is not being supported to live in the community. As a part of the census, all dwellings in New Zealand are classified by type. 'Residential and community care facilities' are one of many types of dwellings.</p> <p>Census dwelling type classification details the dwelling type classification.</p>
Screening questions	The set of questions used to identify the disability status of each respondent in the survey. A threshold (or boundary) is set so that answers can be used to count disabled and non-disabled people.

7. Survey design summary

7.1 Survey purpose

The purpose of the 2023 HDS was to understand the prevalence of disability within the usually resident population living in New Zealand households and how this differs by demographic group.

Its other purpose was to investigate the social, wellbeing, and economic outcomes and participation of disabled people, including how they differ from those for non-disabled people.

7.2 Survey objectives

The survey objectives are listed below:

1. To understand the prevalence of disability within the usually resident population living in New Zealand households and how prevalence differs by demographic group. Specifically to:
 - produce national estimates of the disability prevalence for people living in households both in total and for selected demographic characteristics.
 - produce national estimates of the disability prevalence for people living in households by the functional domain in which they have difficulty.
2. To understand the experiences of disabled people, and the extent to which social, wellbeing, and economic outcomes for disabled people differ from those for non-disabled people, and how those outcomes differ between demographic groups within the disabled population.
3. To understand the level and type of support disabled people need to perform activities of daily living, including identifying unmet need for such support.
4. To understand what hinders participation by disabled people in important aspects of life such as work, education, civic society, and recreation.

7.3 Survey content

In 2021, Stats NZ consulted on user needs for the 2023 HDS. The questions included in the HDS were a direct result of this consultation. The survey questionnaire had 11 topics or modules:

1. screening
2. assistive equipment and technology
3. personal and household support
4. health services
5. employment
6. education
7. transport
8. housing
9. leisure
10. wellbeing
11. child's main carer.

[Household Disability Survey 2023: Final content](#), published in January 2023, is a full report on the survey content.

7.4 Target population

The target population of a survey is the population about which the survey intends to produce data.

The target population for the 2023 HDS was the usually resident population of New Zealand, living in occupied private dwellings or in residential and community care facilities, at the 2023 Census.

The usually resident population of New Zealand at the 2023 Census included all people who usually live and were present in New Zealand for the 2023 Census. It excluded overseas visitors and New Zealand residents who were temporarily overseas.

The two types of dwellings included in the target population (private dwellings and residential and community care facilities) were identified using the 2023 Census classification of dwelling types. As part of census, every dwelling in New Zealand is assessed and assigned a dwelling type.

[Census dwelling type classification](#) details the dwelling type classification.

The target population excluded people living in all types of non-private dwellings except residential and community care facilities. Examples of people excluded on this basis were those living in hotels, motels, hostels, military camps, aged care facilities, hospitals, and in prison.

7.5 Sample design

The HDS is a post-censal survey – a survey that uses a census to support the survey sample design. A post-censal survey enables people in a particular subpopulation (like disabled people) to have a higher chance of being included in the sample than would occur with a random selection. It is a cost-effective way to survey smaller population groups.

The 2023 Census included questions about activity limitations and limiting health conditions. During HDS sample selection, those questions were used to indicate people who were more likely to meet the threshold for being disabled in the HDS. Selecting more generously from this group increased the likelihood of having enough disabled people in the sample. Without this approach, a larger and more expensive survey would have been required to achieve estimates of the same quality. In addition, information collected in Census could be used in the analysis of the survey which reduces the burden on respondents and data collection costs.

The sample selection for the HDS was conducted in two stages:

1. Selecting primary sampling units (PSUs). PSUs are small geographic areas designed to contain a standard number of dwellings.
2. Selecting people from within PSUs based on information from their 2023 Census forms.

In stage one, a sample of PSUs were selected from a list or ‘sampling frame’. This frame of PSUs is used to select samples and manage overlap for all Stats NZ household surveys. The frame lists PSUs with attributes determined by data collected in the 2023 Census.

PSUs were divided into groups or ‘strata’ based on which region they belonged to and whether they were classified as urban or rural. A proportionate number of PSUs were selected from each region, with the aim of making the sample representative of New Zealand’s regional population distribution. For this survey, 1,805 PSUs were selected.

During PSU selection, efforts were made to improve the quality of survey estimates for Pacific people. This was done by deliberately oversampling PSUs that were known to have a relatively high

number of Pacific people living in them. The oversampling of ‘Pacific-dense’ PSUs was expected to increase the number of Pacific people in the HDS and, therefore, create better quality estimates for Pacific people.

More direct methods were taken to help ensure that there were sufficient children, Māori, and disabled people in the sample (see [7.5.2 Selecting from strata](#) for more information).

In stage two, 2023 Census records were retrieved for dwellings and people within the selected PSUs to create a sampling frame of people who could be selected for the HDS.

7.5.1 Survey population and sampling frame

A ‘target population’ is the population about which information is being sought, and a ‘survey population’ is all the members of the target population who have a chance of being selected for a survey. So, the survey population is the population from which information about the target population can be obtained (via the survey).

The survey population needs to very closely resemble the target population because it will be used to produce information that represents the entire target population.

The HDS survey population was the same as its target population (the usually resident population of New Zealand, living in permanent private dwellings or residential and community care facilities on the main islands of New Zealand during the 2023 Census) but with some exclusions made, typically for cost and practicality reasons. These exclusions were a small percentage of the target population, so any bias introduced was minimal. The exclusions were:

- people living in non-permanent private dwellings (such as tents or caravans)
- people living on islands other than the North, South, and Waiheke Islands (such as Great Barrier, Kawau, Chatham, and Stewart Islands)
- people who did not complete the 2023 Census.

After these exclusions, the HDS survey population was the usually resident population of New Zealand who lived in permanent private dwellings or residential and community care facilities on the North, South or Waiheke Islands when the 2023 Census was taken and who completed the census.

A ‘sampling frame’ is simply the list of units within the survey population (‘units’ may be individuals, dwellings, businesses, and so on). By being on this list, every unit in the sampling frame has a chance of being selected.

The HDS sampling frame was created by taking 2023 Census responses for individuals living in the selected 1,805 PSUs and using the HDS eligibility criteria to remove anyone who was not eligible to be in the survey because they were not members of the survey population (for example, people who were not usual residents, people who did not live in either a private dwelling or a residential and community care facility, people living in non-permanent private dwellings, people living on islands other than the North, South, and Waiheke Islands).

The HDS sample was then selected from the sampling frame.

7.5.2 Selecting from strata

With the sampling frame created, all individuals included in the frame were then placed into strata. Strata are groups that a population is divided into, based on certain shared characteristics.

Everyone in the HDS sampling frame was placed into exactly one stratum based on their age, ethnicity, and whether they were more likely than others to be disabled (as determined by their 2023 Census responses). A set number of individuals were then selected from within each stratum.

When a survey selects individuals from within strata, it is called ‘stratified sampling’. Reasons for using stratified sampling include:

- increasing the efficiency of a sample design through lowered costs and improved estimator precision
- ensuring that all relevant subgroups within a population are adequately represented in the sample
- targeting subgroups by disproportionate sampling (or over-sampling) certain strata.

To ensure adequate representation of children, Māori, and disabled people in the HDS, the subgroups used for stratification were age group, Māori, and likelihood of disability (from 2023 Census). The strata were⁷:

1. Non-Māori aged 0 to 14 years who were more likely to be disabled
2. Non-Māori aged 15 to 44 years who were more likely to be disabled
3. Non-Māori aged 45 to 64 years who were more likely to be disabled
4. Non-Māori aged 65+ years who were more likely to be disabled
5. Māori aged 0 to 14 years who were more likely to be disabled
6. Māori aged 15 to 44 years who were more likely to be disabled
7. Māori aged 45+ years who were more likely to be disabled
8. Non-Māori aged 0 to 14 years who were not more likely to be disabled
9. Non-Māori aged 15 to 44 years who were not more likely to be disabled
10. Non-Māori aged 45 to 64 years who were not more likely to be disabled
11. Non-Māori aged 65+ years who were not more likely to be disabled
12. Māori aged 0 to 14 years who were not more likely to be disabled
13. Māori aged 15 to 44 years who were not more likely to be disabled
14. Māori aged 45+ years who were not more likely to be disabled

People were selected from each strata using systematic random sampling. The number of people selected from each of the 14 strata was determined by the need to oversample some people (children, Māori, and people more likely to be disabled).

In total, 25,000 people were selected for the HDS. Five were immediately discarded because they provided insufficient name information in the 2023 Census.

Because people were selected to be in the survey using age strata, people who had not given their age on their Census form and had not had their age found through admin data at the time of the sample selection, were unable to be selected because they were excluded from all strata. People missing either ethnic information and/or disability information from Census were not excluded but were assumed to be non-Māori and/or less likely to be disabled for the purposes of placing them into strata.

No limit was set on how many people from a particular dwelling could be selected for the HDS.

⁷ The highest age strata for Māori was 45+ years and for non-Māori it was 65+ years. This is reflective of Māori having a younger age profile and a proportionately low number of adults in older age groups.

7.5.3 Sample weighting

Of the 25,000 people selected for the 2023 HDS, 21,636 successfully completed the survey. Making 21,636 the number of valid respondents.

The HDS aimed to represent the target population and not just the group who responded. To do this each valid respondent was assigned a ‘weight’ to denote how many people in the target population a single respondent represented. A person with a weight of 200 represented 200 people in the target population. The weights for each respondent added up to the total target population.

Determining the size of the weight for each respondent was done in three distinct steps:

1. Assign an initial selection weight to account for some respondents having had a higher probability of being selected.
2. Carry out a non-response adjustment to reduce bias by compensating for the 3,364 people who were selected to be in the survey but did not answer it.
3. Calibrate with the target population to make the sum of weights equivalent to the target population within specified subgroups.

In the first step, each person selected into the sample was given a ‘selection weight’. Selection weights were based on both the PSU and stratum that a person belonged to because people in different PSUs and strata had different probabilities of being selected.

Selection weights were calculated as the inverse probability a person had of being selected. So, people who came from strata that were oversampled (children, Māori, or likely to be disabled) or from PSUs that had a higher probability of being selected (Pacific-dense or non-rural) had lower selection weights.

The second step in working out the weight for each respondent was non-response adjustment. A total of 3,364 people were in the sample but did not provide a response. Non-response in surveys can happen for several reasons including:

- the person being overseas for the entire collection period
- the person refusing to take part
- the phone number and address held by Stats NZ being incorrect or out-of-date (leaving Stats NZ with no way to contact the person)
- the person having serious, long-lasting health problems that meant they were too unwell to answer the survey for the entire collection period, and they did not have anyone who could do a proxy interview.

People who were selected for the survey but did not respond need to be represented in the survey estimates by people who did respond. To work out how best to do this, a statistical model was used.

The model produced an estimate of how likely each selected person was to respond to the survey, based on their personal characteristics. This is known as their ‘response propensity’ and it was expressed as a percentage. The estimated response propensity was used to adjust the weights of people who did respond so that they represented the people who did not. The adjustment involved multiplying each individual’s selection weight by the multiplicative inverse of their estimated response propensity.

Once the weights were adjusted for non-response, the third and final step of weighting involved calibration to target population benchmarks. Benchmarks are independent counts of people in the target population.

The benchmarks used in the HDS were estimates of the March 2023 population based on 2018 Census counts. This means that benchmarks used were for sex rather than gender as gender was not available from the 2018 Census.

After being calibrated, the weights sum to each set of benchmarks at the same time. Calibration was done so that survey weight totals matched the benchmark data for:

1. Five-year age groups by sex
2. Five-year age groups by sex for Māori ethnic group
3. Twelve regions.

Calibration adjusted for coverage errors in the sampling frame and the under- or over-representation of groups in the sample.

7.6 Field work

The data collection took place over 12 and a half weeks, from 23 August 2023 to 19 November 2023.

Survey responses were collected either by phone or face-to-face interviews by trained interviewers using an electronic questionnaire. NZSL trained interviewers were available, as well as other methods, so hearing impaired people could participate in the survey. By default, all sample members were initially interviewed by telephone unless:

- there was no phone number on their 2023 Census form, in which case an interviewer visited them at home
- they had indicated on their 2023 Census form that they had a hearing impairment, in which case they were contacted by a member of the NZ Sign Language interviewer team.

Respondents could switch from one mode of interviewing to the other, by request. In total, 26 percent of respondents completed their survey in person, and 74 percent by phone.

Children selected for the HDS had their interview completed by an adult proxy. These were typically the child's parent or another primary caregiver. Wherever possible, adults completed the survey for themselves and could be supported to do so by someone they trusted. However, if an adult was unable to participate due to a health condition or disability, a proxy was sought to complete the survey on their behalf. That proxy was typically their carer.

The HDS electronic questionnaire was designed in flowcharts. It was then built using Blaise® (a computer-assisted interviewing system and survey processing tool developed by Statistics Netherlands). Salesforce was used to manage sample members while the survey was in the field.

The 2023 Census collected phone numbers so that people could be contacted if selected for the HDS. Contact details collected in the Census were reviewed in preparation for fieldwork and any obvious scanning errors or typos corrected. Five people were removed from the sample during this review process because they had not provided enough of their name on the 2023 Census form for them to be identified by interviewers.

Before being contacted by Stats NZ, a letter was sent to all sample members at the address they gave on their 2023 Census form. The letter advised that they'd been selected for the HDS and encouraged them to call Stats NZ to complete the survey or otherwise wait for Stats NZ to contact them.

Of the 25,000 people who were selected to be in the survey, 21,636 completed it, a response rate of 86.5 percent (higher than its target rate of 80 percent).

Out of the 21,636 respondents, 3,757 were counted as disabled by the survey. This included:

- 927 tāngata whaikaha Māori (Māori disabled people)
- 411 Pacific disabled people
- 352 Asian disabled people
- 237 LGBTIQ+ disabled people.

There were 1,085 disabled children and 2,672 disabled adults in the achieved sample.

8. Use of Census data

In addition to using contact details provided during the 2023 Census, the HDS used other data from census. Census collected information about the personal characteristics of respondents and about their living situation. If a question had already been asked in the 2023 Census, it was not included in the HDS. Instead, 2023 Census records for each HDS respondent were attached to their HDS record, creating a dataset made up of both 2023 Census and HDS data. Utilising 2023 Census data in this way reduced respondent burden (because respondents did not have to repeat answers they had already given a few months earlier on their census form) and freed up space in the HDS to collect new information.

2023 Census records were linked to HDS responses using unique ID numbers that were assigned to individuals and dwellings during census. Only this ID number was used. No identifiable information about respondents, such as their names and addresses, were used for the linking.

The following variables from the 2023 Census were used with HDS data in the Excel tables available in [Disability statistics: 2023](#):

- ethnic group
- LGBTIQ+ status
- region in which they live
- personal income
- occupation and industry of employment
- participation in unpaid work
- highest qualification held
- main mode of transport to work or study
- household income
- tenure of current home
- dampness in home
- mould in home
- heating sources in home
- access to basic amenities in home
- access to telecommunications in home
- number of motor vehicles available to the household.

Data from 2023 Census is subject to any quality issues identified in that data collection.

[2023 Census of Population and Dwellings – Information by concepts](#) and [Data quality ratings for 2023 Census variables](#) have more information on census variables and their quality.

9. Presentation of estimates

Like all sample surveys, the HDS estimates are affected by both sampling error and non-sampling error.

The effects of non-sampling error are not quantifiable. It arises due to respondents or interviewers misinterpreting questions, respondents giving incorrect answers, or mistakes in the recording, collecting, coding, or processing of data. The impact of non-sampling errors is minimised by applying good survey techniques.

Sampling error can be estimated. The estimate is a measure of the variability that occurs by chance because a sample, rather than an entire population, has been surveyed. The absolute sampling error (ASE) that is reported by Stats NZ is the margin of error in percentage points at 95 percent confidence. For example, if the estimated total proportion of people with some characteristic is 27 percent and the estimate is subject to an ASE of 2 percent, that means the 95 percent confidence interval on the estimate of 27% is plus or minus 2 percentage points (that is, the confidence interval at 95% is 25 percent to 29 percent).

The relative sampling error (RSE) is a percentage showing how big the ASE is compared with the estimate itself. RSE is calculated as $ASE/estimate \times 100$. In the Excel tables, estimates with an RSE of 30 percent or higher are marked with an asterisk and estimates with an RSE of 50 percent or higher are marked with two asterisks. It is recommended that estimates marked with an asterisk be used with caution.

The following rules apply to all HDS estimates:

- Count estimates and their attached ASEs are rounded to the nearest 1,000 when published.
- Percentage estimates are rounded to zero decimal points. The ASE for rates or percentages are rounded to one decimal point. This is done to reduce the amount of rounding to zero in the tables.
- Percentages are always calculated using unrounded counts and exclude residual responses (that is, 'don't know' or 'refused').
- Estimates with very few contributors are deemed both a risk to respondent confidentiality and unreliable for national statistics. Count estimates are suppressed if the weighted count is less than 1,000 or if less than six unweighted respondents contributed to the estimate. The same rules apply for percentage estimates – percentages are suppressed if the numerator or denominator is less than 1,000 weighted or less than six unweighted. Suppressed estimates are marked with an 'S' in tables.

10. Comparability

10.1 Comparability with other surveys

Findings about disability will differ across different surveys (including the 2023 Census) because of differences in the way disabled people are identified.

The 2023 HDS estimates of prevalence used a more extensive set of questions to count disabled people than is used in many surveys.

Statistics about disabled people are produced from other government surveys, many of which use disability questions from the Washington Group’s [Short Set on Functioning](#) or [Short Set on Functioning – Enhanced](#). These question sets were not intended to provide measures of disability prevalence. Their purpose is to provide information about disparities between disabled and non-disabled people for whatever subject their host survey is primarily focused on (for example, wellbeing, employment, crime).

10.2 Comparability with previous disability surveys

Estimates from the 2023 HDS are also not comparable with those from previous disability surveys run by Stats NZ. This is due to substantial changes in the way disabled people were identified in the 2023 survey compared with previous surveys.

In previous disability surveys run by Stats NZ (there have been four between 1996 and 2013), disabled people were identified using a set of screening questions. The 2023 HDS also used a set of screening questions, but the previous screening questions from the 2013 Disability Survey were replaced with sets based on the Washington Group’s [Extended Set on Functioning](#) and [Child Functioning Module](#).

The 2013 and 2023 screening questions differed in two important ways:

1. The questions themselves were different.

The 2023 question set was longer and covered more functional domains. Even for functional domains that were included in both 2013 and 2023 (for example, seeing, hearing, walking), the wording and specifics of the questions changed, effectively changing the assessment of functional difficulty in that domain, or changing the ‘yardstick’ used to measure that functional difficulty.

An example of this is the questions about difficulty walking and the differing treatment of assistive equipment (for example, crutches). In 2013, respondents were expected to assess their difficulty while using their assistive equipment. In 2023, respondents were expected to assess their difficulty based on not using their assistive equipment.

2. The answer options and threshold for disability were different.

The 2023 HDS made a greater distinction between levels of difficulty than previous surveys, and it required respondents to report higher levels of difficulty to be counted as a disabled person. Most screening questions in the 2023 HDS had the answer options ‘no difficulty’, ‘some difficulty’, ‘a lot of difficulty’, and ‘cannot do at all’. The 2013 and prior surveys used the answer options ‘easily’, ‘with difficulty’, and ‘not at all’.

The 2023 survey differentiated between people who reported ‘some difficulty’ and those who reported ‘a lot of difficulty’, whereas in 2013 these differing levels of difficulty were grouped together as ‘with difficulty’.

In 2023, a person needed to say ‘a lot of difficulty’ or ‘cannot do at all’ to be counted as disabled. In 2013, they needed to say ‘with difficulty’ or ‘not at all’. The all-encompassing ‘with difficulty’ answer option used in 2013 allowed people with lower levels of difficulty to be counted as disabled.

Therefore, the threshold at which a person was counted as disabled was effectively set higher in 2023 than in previous surveys because people with lower levels of difficulty could no longer be counted as disabled.

Because the measurement tool changed, the group of people counted as disabled in the 2023 HDS were not defined in the same way as in previous surveys. This means the 2023 results cannot be meaningfully compared with results from previous New Zealand disability surveys.

No single method for defining and counting disabled people in data collections can address all information needs. The Washington Group’s approach to disability measurement was considered to represent the most appropriate tool for a population survey of this type and the questions used in the 2023 HDS were believed to provide a more useful count of disabled people than those used in previous New Zealand disability surveys.