

# Disability Survey: 2013

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## Key facts

- In 2013, 24 percent of the New Zealand population were identified as disabled, a total of 1.1 million people.
- The increase from the 2001 rate (20 percent) is partly explained by our ageing population.
- People aged 65 or over were much more likely to be disabled (59 percent) than adults under 65 years (21 percent) or children under 15 years (11 percent).
- Māori and Pacific people had higher-than-average disability rates, after adjusting for differences in ethnic population age profiles.
- For adults, physical limitations were the most common type of impairment. Eighteen percent of people aged 15 or over, 64 percent of disabled adults, were physically impaired.
- For children, learning difficulty was the most common impairment type. Six percent of children, 52 percent of disabled children, had difficulty learning.
- Just over half of all disabled people (53 percent) had more than one type of impairment.
- The most common cause of disability for adults was disease or illness (42 percent). For children, the most common cause was a condition that existed at birth (49 percent).
- The Auckland regional disability rate, at 19 percent, was lower than the national average. Bay of Plenty and Manawatu-Wanganui (both 27 percent), Northland (29 percent), and Taranaki (30 percent) experienced above-average disability rates.

[An easy-read version of key facts and a PDF brochure of key findings from the 2013 Disability Survey are available.](#)

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## Commentary

- [New Zealand Disability Survey](#)
- [One in four people live with disability](#)
- [Disability increases with age](#)
- [Disability rates vary by ethnic group](#)
- [Impairment type varies by sex and age](#)
- [Multiple impairment is common](#)
- [Main limitation is most likely to be physical](#)
- [Main cause of impairment is disease or illness](#)
- [Māori have higher disability rates than non-Māori](#)
- [Disability rates are lower in Auckland](#)

## New Zealand Disability Survey

In 2013, we carried out a national survey on disability for the fourth time. The New Zealand Disability Survey is currently the most comprehensive source of information on disabled people in New Zealand. It allows for comparisons between disabled and non-disabled people on key social and economic outcomes.

This first release of information from the 2013 Disability Survey focuses on the prevalence of disability across population subgroups and on disability rates for specific impairment types. Information is also available from the survey on barriers that disabled people encounter in their everyday lives, including their use of and need for support services and assistive devices. Compared with earlier disability surveys, the 2013 Disability Survey includes a greater range of information about social outcomes. In addition to the economic outcomes of labour force status, income, and educational attainment, we now have information about feelings of safety and experience of crime; social contact; and access to leisure activities.

As in the three previous surveys, disability is defined as long-term limitation (resulting from impairment) in a person's ability to carry out daily activities. The limitations identified were self-reported or reported on behalf of the disabled person by their parent or primary caregiver.

The survey collected data from adults (aged 15 years or over) and children (under 15 years) living in private households or group homes and from adults living in residential care facilities. All of these groups are included in the data, except where stated.

## One in four people live with disability

In 2013, an estimated 24 percent of people living in New Zealand were identified as disabled. A total of 1,062,000 people were limited in their ability to carry out everyday activities by at least one impairment type.

Both the number of disabled people and the disability rate are higher than in earlier surveys. The proportion of the New Zealand population in older age groups is growing, and people in these age groups are more likely to be disabled than younger adults or children. However, population ageing does not account for all of the increase. People may be more willing to report their limitations as public perception of disability changes; methodological improvements to the survey could also be a contributing factor.

**Number and rate of disabled people for adults, children, and total population, 2001, 2013**

Year	Children <sup>(1)</sup> (0 to 14 years)		Adults (15 years or over)		Total population	
	Number	Rate (%)	Number	Rate (%)	Number	Rate (%)
2001	92,000	11	669,000	23	762,000	20
2013	95,000	11	967,000	27	1,062,000	24

1. Between 2001 and 2013 we changed the screening questions for children; see the data quality section.

**Source:** Statistics NZ

**Disability increases with age**

In 2013, 11 percent of children were disabled, compared with 59 percent of people aged 65 or over. Boys were more likely than girls to be disabled (13 percent and 8 percent, respectively). However, there was little difference in disability rates for men and women (aged 15 years and over).

**Number and rate of disabled people by age and sex**

Age group	Male		Female		Total population	
	Number	Rate (%)	Number	Rate (%)	Number	Rate (%)
Under 15 years	60,000	13	35,000	8	95,000	11
15 to 44 years	138,000	16	145,000	16	283,000	16
45 to 64 years	149,000	28	165,000	28	314,000	28
65 years and over	169,000	58	201,000	60	370,000	59
All ages	516,000	24	545,000	24	1,062,000	24

**Source:** Statistics NZ

**Disability rates vary by ethnic group**

Disability rates for the four main ethnic groups were:

- Māori – 26 percent
- European – 25 percent
- Pacific – 19 percent
- Asian – 13 percent.

Māori had a higher-than-average disability rate, despite having a younger population age profile than that of the total population.

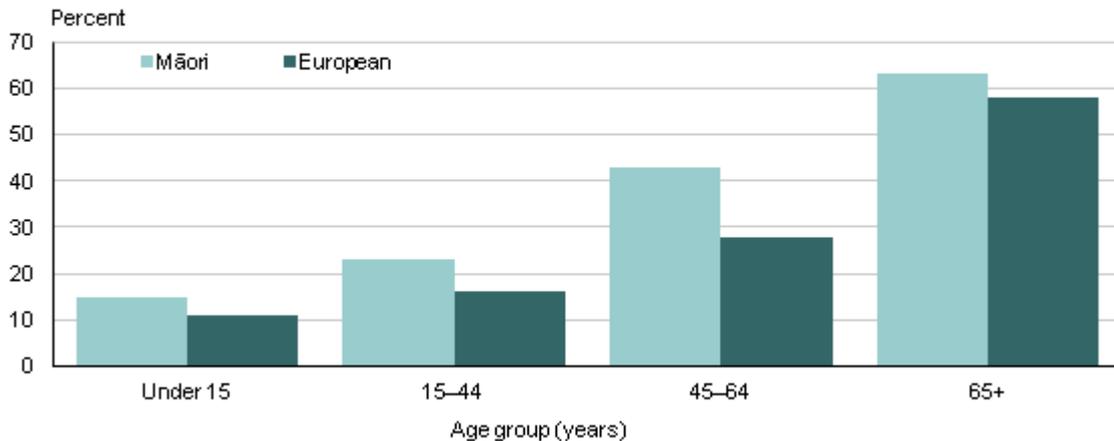
Pacific people also have a young population age profile and the Pacific disability rate was well below the national rate.

The median age of disabled people in each ethnic group was:

- Māori – 40 years
- European – 57 years
- Pacific – 39 years
- Asian – 45 years.

## Disability rates for Māori and European ethnic groups

By age group  
2013



Source: Statistics New Zealand

The true extent of differences between disability rates for ethnic groups is masked by the different age profile of ethnic populations.

We adjusted disability rates to the age profile of the total population, which gave:

- Māori – 32 percent
- European – 24 percent
- Pacific – 26 percent
- Asian – 17 percent.

The age-adjusted rate is the disability rate the ethnic group would have if their population age profile was the same as that of the total population.

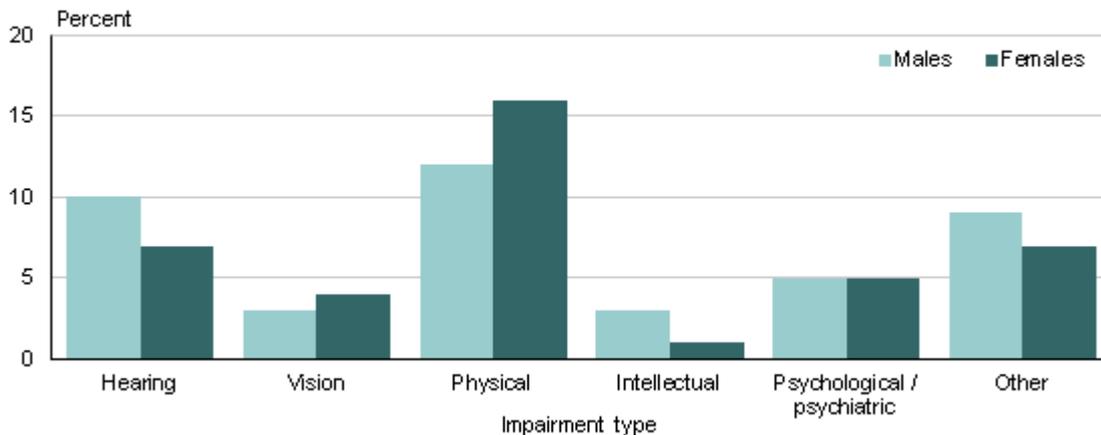
The age adjustment increased disability rates for the Māori, Pacific, and Asian ethnic groups, reflecting their younger age profile compared with the total population. The rate increase was smaller for Asian people due to their relatively low disability rates for older people.

## Impairment type varies by sex and age

The 2013 Disability Survey asked people about their ability to carry out a range of everyday activities. Each activity was associated with a specific impairment type. Males and females, and adults and children showed differences in the extent to which they experienced different impairment types.

### Impairment rates for males and females

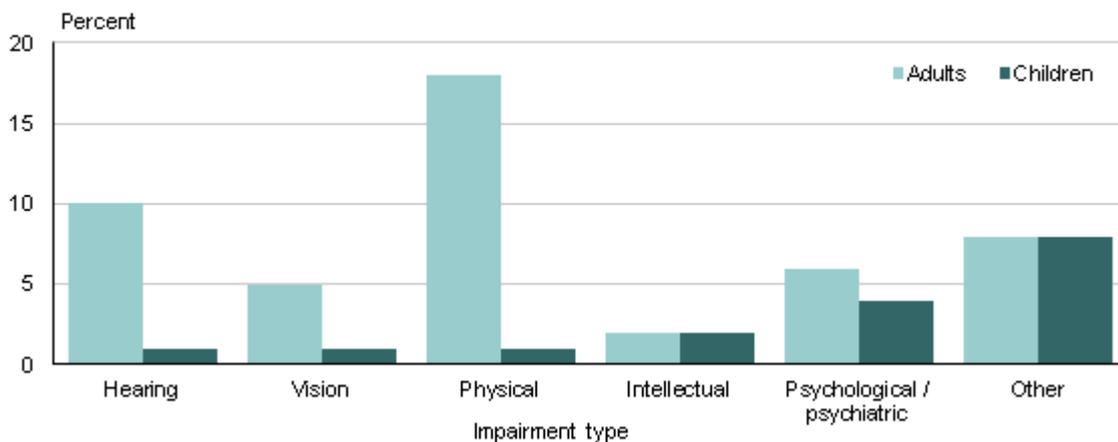
By impairment type  
2013



Source: Statistics New Zealand

### Impairment rates for adults and children

By impairment type  
2013



Source: Statistics New Zealand

### Physical impairment is most common type

An estimated 14 percent of the New Zealand population (632,000 people) reported that a physical impairment limited their everyday activities. This was the most common impairment type for adults (15 years or over), and is one that increases strongly with age. Forty-nine percent of adults aged 65 or over were physically disabled, compared with 7 percent of adults aged less than 45 years.

Women were more likely than men to experience physical disability (20 percent compared with 15 percent). The difference by sex was evident for all adult age groups. Physical disability rates for children were low for both girls and boys (1 percent and 2 percent, respectively).

### Sensory impairments limit 11 percent of people

An estimated 484,000 people (11 percent of the total population) were limited in their everyday activities by sensory impairments (hearing and vision loss) that assistive devices such as hearing

aids or glasses did not eliminate. Hearing impairment affected 380,000 people (9 percent of the total population) and vision impairment affected 168,000 people (4 percent).

Hearing impairment was:

- more likely to be experienced by men (12 percent) than women (9 percent)
- equally likely in boys and girls (1 percent for children)
- strongly related to age.

For adults over 65, 34 percent of men and 23 percent of women experienced hearing loss. This compares with 5 percent and 3 percent, respectively, for men and women aged 15 to 44.

Vision impairment was:

- more likely to be experienced by women (5 percent) than men (4 percent)
- equally likely in boys and girls (1 percent for children)
- strongly related to age.

Eleven percent of adults over 65 years experienced vision impairment, compared with 2 percent for adults aged 15 to 44.

### **Intellectual disability rates low**

At 2 percent of the population, rates of intellectual disability were low compared with other types of impairment.

Males were more likely to be living with intellectual disability (3 percent) than females (1 percent). This pattern was evident for both children and adults.

### **Psychological/psychiatric limitations affect 5 percent**

An estimated 5 percent of the New Zealand population (242,000 people) were living with long-term limitations in their daily activities as a result of the effects of psychological and/or psychiatric impairments. Boys were more likely to be affected than girls, with impairment rates of 6 percent and 3 percent, respectively.

There was no difference by sex for adults and, although the adult rate (6 percent) was higher than the child rate (4 percent), the survey provided no evidence of rates changing with age amongst adults.

### **Other impairments**

Four other impairment types were covered by the survey: speaking, learning, memory, and developmental delay.

A total of 358,000 adults and children (8 percent of the population) were limited by at least one of these impairment types, and males (9 percent) were more likely to be affected than females (7 percent).

Having difficulty speaking (and being understood) because of a long-term condition or medical problem affected 3 percent of the total population. Of these:

- boys (5 percent) had a higher rate than girls (2 percent)
- men (3 percent) had a higher rate than women (2 percent).

Having difficulty learning new things because of a long-term condition or medical problem affected 5 percent of the total population. Of these:

- boys (7 percent) had a higher rate than girls (4 percent)
- men (5 percent) had a higher rate than women (4 percent).

Questions about memory loss were only asked of adults. Five percent of the adult population had ongoing difficulty with their ability to remember. This impairment type rises with age. Ten percent of people aged 65 or over were affected, compared with 5 percent of those aged 45 to 64, and 2 percent of those aged 15 to 44. There were no differences by sex.

Questions about developmental delay are only asked of parents or caregivers who are responding on behalf of a child in their care. Rates were low, with only 1 percent of children affected by a diagnosed disorder or impairment that significantly delayed their development.

## **Multiple impairment is common**

About half of all disabled people reported living with limitations arising from more than one impairment type. Forty-seven percent of disabled people indicated that they were limited by a single impairment type, while the remaining 53 percent were limited by more than one impairment type.

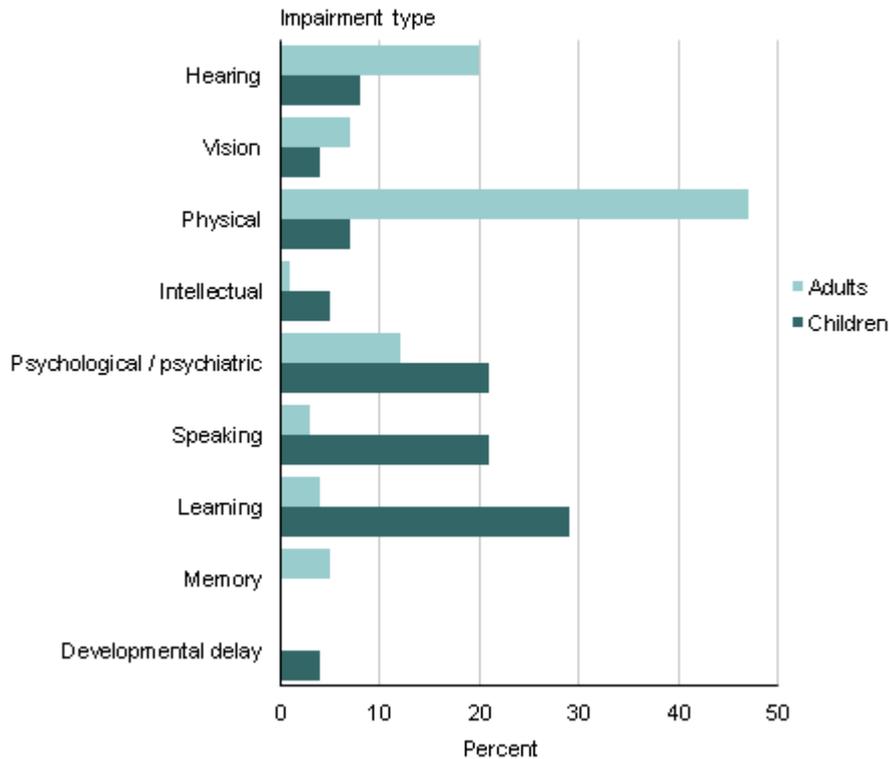
For adults, multiple impairment increases with age. Forty-two percent of adults aged 15 to 44 years reported being limited by more than one impairment type, compared with 63 percent of older adults (65 or over). Forty-eight percent of children had multiple impairments.

## **Main limitation is most likely to be physical**

Physical impairment is the most common main limitation for disabled people. For an estimated 404,000 people (43 percent of the disabled population) physical limitation was either their only impairment, or was more limiting than the other impairments with which they were living.

For children, learning, psychological/psychiatric, and speaking difficulties were the three most common main impairments.

**Percentage of disabled adults and children**  
By main impairment type  
2013



Source: Statistics New Zealand

**Main cause of impairment is disease or illness**

Forty-one percent of the disabled population were limited in their daily lives by impairments that resulted from disease or illness. This was the most common cause of disabling impairment for adults (42 percent).

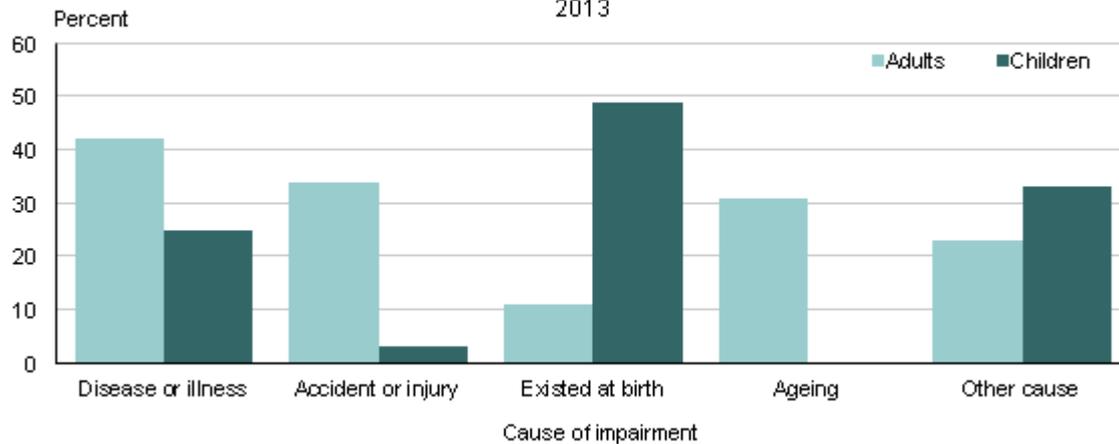
Accident or injury was another common cause of impairment for adults. Thirty-four percent of disabled adults were limited in their everyday lives as a result of an accident or injury. Almost half (47 percent) of adults impaired by accident or injury reported that the damage occurred at work.

The third-most common cause of impairment for adults was ageing. For 31 percent of disabled adults, ageing was the cause of at least one of the limitations they experienced. For all adults aged 65 years or over, 53 percent were limited by impairments caused by ageing.

For children, conditions that existed at birth were the most common cause of limiting impairments. Forty-nine percent of disabled children were affected by such impairments. For 33 percent of disabled children, the cause of their impairment fell under 'other cause'. This includes conditions on the autism spectrum, attention deficit hyperactivity disorder, and developmental delay, as well as dyslexia and dyspraxia. While these conditions may have existed at birth they are not usually identified until later, and may be regarded by parents or caregivers as not having been present at birth.

## Percentage of disabled adults and children

By cause of impairment  
2013



Source: Statistics New Zealand

## Māori have higher disability rates than non-Māori

Māori were more likely to be disabled (26 percent) than non-Māori (24 percent).

- Māori adults had a disability rate of 32 percent, compared with 27 percent for non-Māori adults.
- Māori children had a disability rate of 15 percent, compared with 9 percent for non-Māori children.

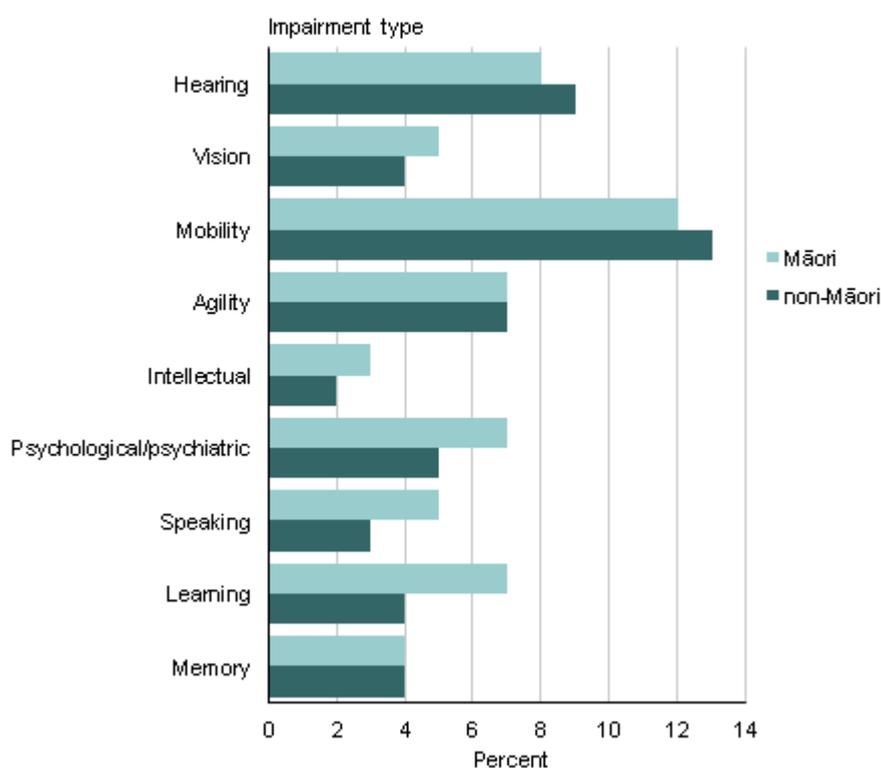
The Māori disability rate was driven by four impairment types that were significantly more likely to be experienced by Māori than non-Māori. These types were:

- psychological/psychiatric impairments
- difficulty with learning
- difficulty with speaking
- intellectual disability.

Māori also had slightly higher rates of vision impairment and slightly lower rates of mobility impairment than non-Māori.

The difference between disability rates for Māori men (32 percent) and Māori women (31 percent) was not significant. Māori boys, however, experienced disability at a higher rate than Māori girls (19 percent and 10 percent, respectively). The difference between boys and girls was driven by the same four impairment types as above: psychological/psychiatric impairments, learning, speaking, and intellectual disability.

### Impairment rates for Māori and non-Māori By impairment type 2013



Source: Statistics New Zealand

### Disability rates are lower in Auckland

Disability rates differ by region. The Auckland rate (19 percent) was significantly lower than the national average, while Bay of Plenty and Manawatu-Wanganui (both at 27 percent), Northland (29 percent), and Taranaki (30 percent) all experienced disability rates that were significantly higher than average. For the remaining regions, disability rates did not differ significantly from the national rate.

Regional information is available for adults and children living in households. The 4 percent of disabled adults living in residential care facilities are not included in the regional figures.

<b>Disability rates by region</b>		
<b>Region</b>	<b>Number of disabled people</b>	<b>Disability rate (%)</b>
Northland	44,000	29
Auckland	271,000	19
Waikato	105,000	25
Bay of Plenty	73,000	27
Gisborne/Hawke's Bay	46,000	23
Taranaki	36,000	30
Manawatu-Wanganui	67,000	27
Wellington	114,000	22
Canterbury	143,000	25
Otago	52,000	26
Southland	27,000	26
Rest of South Island <sup>(1)</sup>	41,000	27
<b>New Zealand</b>	<b>1,020,000</b>	<b>23</b>
1. Includes Nelson, Tasman, Marlborough, and the West Coast regions.		

The younger age structure of the Auckland population partly explains the lower Auckland disability rate. The Auckland region had lower-than-average rates for:

- hearing impairment (7 percent)
- mobility impairment (10 percent)
- agility impairment (5 percent)
- psychological/psychiatric impairment (4 percent)
- difficulties with speaking (2 percent).

People living in Northland had higher-than-average rates for physical limitations (19 percent) and learning difficulties (7 percent). Canterbury had a higher-than-average rate for psychological/psychiatric impairment (7 percent).

For more detailed data see the Excel tables in the 'Downloads' box.

## Definitions

### About the 2013 Disability Survey

This publication contains results from the 2013 Disability Survey conducted throughout New Zealand from July to October 2013. The Disability Survey was first conducted in 1996. We have run it following each census since then. This is the fourth post-censal disability survey.

While we refer to 'the Disability Survey', we collect data through two surveys:

1. the Household Disability Survey (HDS) of adults and children living in private dwellings or group homes (of fewer than five people)
2. the Disability Survey of Residential Facilities (DSRF), surveying adults living in residential care facilities with five or more beds.

The purpose of the 2013 Disability Survey is to answer the following questions, listed in priority order:

1. What is the prevalence of disability in New Zealand, and how does it vary across key population subgroups based on age group, sex, and ethnic group?
2. To what extent do the social and economic outcomes of disabled people differ from those of non-disabled people, and how do outcomes vary between different groups within the disabled population?
3. To what extent are the needs of disabled people currently being met? What level and type of support do they need to perform everyday activities?
4. What factors help or hinder the participation of disabled people in important life areas (eg learning opportunities, paid work, civic society)?
5. Who are the main carers of disabled people and what types of support do they need?

### More definitions

Here are the definitions of the main measures and terms included in this release.

**Activity:** the completion of a task or action by an individual (eg reading the newspaper).

**Activity limitations:** difficulties an individual may have completing activities.

**Adult:** a person who is a usual resident of New Zealand, aged 15 years or over.

**Agility impairment (in adults):** adults with an agility impairment have difficulty with or cannot do one or more of the following:

- dress and undress independently
- cut their own toe- or fingernails
- use fingers to grasp or handle things like scissors or pliers
- use arms to reach in any direction
- cut their own food.

See the [data quality section](#) for more information about the reclassification of agility impairments for the 2013 survey.

**Agility impairment (in children):** children with an agility impairment have difficulty with or cannot do one or more of the following:

- use hands to grasp an object such as a spoon or a pencil/crayon
- raise arms to take off a t-shirt.

We only asked about the use of hands for grasping objects of/about children aged 2–14 years old, and about raising arms to take off a t-shirt of/about children aged 5–14 years old.

**Asian (ethnic group):** people who specified their ethnic group to be one of:

- Chinese
- Indian
- Sri Lankan
- Korean
- Japanese
- any other Asian group as their sole ethnic group, or as one of several ethnic groups.

**Child:** a usual resident of New Zealand aged 0–14 years.

**Developmental delay:** a diagnosed disorder or impairment that significantly delays a child's development. We only asked this question of/about children aged 0–4 years old.

**Disability:** an impairment that has a long-term, limiting effect on a person's ability to carry out day-to-day activities. 'Long-term' is defined as six months or longer. 'Limiting effect' means a restriction or lack of ability to perform.

People were not considered to have a disability if an assistive device (such as glasses or crutches) eliminated their impairment.

**Disability rate:** the proportion of people reporting a disability in the population or in any sub-population (eg age group).

**Disability Survey of Residential Facilities (DSRF):** one of two surveys that make up the 2013 Disability Survey. It included adults aged 15 years or over:

- living in a rest home, or
- staying in a long-stay bed or under continuing care in a hospital, or
- living in residential disability facility.

**Ethnic group:** is the ethnic group or groups that respondents identify with or feel they belong to. Ethnicity is self-perceived and people can belong to more than one ethnic group.

Ethnicity is a measure of cultural affiliation, as opposed to race, ancestry, nationality, or citizenship.

See [New Zealand Standard Classification of Ethnicity 2005](#) for more information.

**European (ethnic group):** people who specified their ethnic group to be one of:

- New Zealand European (Pākehā)
- Australian
- Dutch
- Greek
- English
- Scottish
- Irish
- any other European group as their sole ethnic group, or as one of several ethnic groups.

**Group homes:** community/independent-living households. For 2013, the HDS included group homes of fewer than five people.

**Hearing impairment (in adults):** adults with hearing impairments cannot hear, or have difficulty hearing, what is said in a conversation with one other person and/or what is said in a group conversation with three or more people, even when using an assistive hearing device such as a hearing aid.

**Hearing impairment (in children):** children with hearing impairments cannot hear or have difficulty hearing, even when using assistive hearing devices such as a hearing aid, grommets, or a cochlear implant.

**Household:** is either one person who usually resides alone, or two or more people who usually reside together and share facilities (such as for eating, cooking, or a living area; and bathroom and toilet) in a private dwelling.

**Household Disability Survey (HDS):** one of two surveys that make up the 2013 Disability Survey. The HDS collected information from children (0–14 years) and adults (aged 15 years and over) living in private dwellings or group homes (of fewer than five people).

**Intellectual disability (in adults):** adults with an intellectual disability need support or help from people or organisations, have been to a special school, or receive special education because of an intellectual disability.

**Intellectual disability (in children):** for children, the parent or caregiver was asked whether a child (5–14 years old) has ‘a recognised intellectual disability’.

**Learning impairment:** a long-term condition or health problem that makes it hard in general for someone to learn. This question was only asked of/about respondents aged five years and older.

**Long-stay bed:** people staying in long-stay beds were assessed as needing continuing care (ie rehabilitation). ‘Long-stay’ means the resident has been or is expected to be in the residential care facility for six months or more.

**Main impairment:** the impairment that the respondent considered limited their everyday activities the most.

**Māori (ethnic group):** people who specified ‘Māori’ as either their sole ethnic group, or as one of several ethnic groups with which they identify.

**Memory impairment:** a long-term condition or health problem that causes ongoing difficulty with an adult's ability to remember. We only asked about memory loss for adults 15 years and older.

**Mobility impairment (in adults):** adults with mobility impairment have difficulty with or couldn't do one or more of the following:

- walk about 350 metres without resting
- walk up or down a flight of stairs
- carry an object as heavy as five kilograms over a distance
- move from room to room within the home
- stand for period of 20 minutes
- bend down without support
- get in and out of bed independently.

See the [data quality section](#) for more information about the reclassification of agility/mobility impairments for the 2013 survey.

**Mobility impairment (in children):** children with mobility impairment have difficulty with or cannot do one or more of the following:

- stand without assistive devices such as braces or crutches
- walk on a flat footpath
- move from room to room within the home
- bend down without support.

We only asked questions about mobility of/about children aged 2–14 years old.

**Other impairment (in adults):** includes difficulties with speaking, learning, and memory.

**Other impairment (in children):** includes difficulties with speaking and learning, as well as developmental delay.

**Pacific (ethnic group):**

This refers to people who specified their ethnic group to be one of:

- Samoan
- Cook Islands Maori
- Tongan
- Niuean
- Tokelauan
- Fijian
- or any other Pacific ethnic group as their sole ethnic group, or as one of several ethnic groups.

**Physical impairment:** mobility and/or agility impairments.

**Psychological/psychiatric impairment (in adults):** a long-term emotional, psychological, or psychiatric condition that causes:

- difficulty with everyday activities, or
- difficulty communicating, mixing with others, or socialising.

**Psychological/psychiatric impairment (in children):** having one or more of the following:

- occasional emotional, nervous, or behavioural problems that limit the type or amount of activity a child can do
- a long-term psychological or mental health condition that causes difficulty with everyday activities.

We only asked questions about psychological/psychiatric impairment of/about children aged 5–14 years old.

**Region:** this is based on regional council areas. The following regional breakdowns are available from the survey:

- Northland
- Auckland
- Waikato
- Bay of Plenty
- Gisborne/Hawke's Bay
- Taranaki
- Manawatu-Wanganui
- Wellington
- Canterbury
- Otago
- Southland
- Rest of South Island (West Coast, Tasman, Nelson, and Marlborough).

**Residential care facility:** a non-private dwelling, being one of:

- rest home (standard-level care)
- rest home (dementia)
- continuing care hospital (geriatric)
- continuing care hospital (psycho-geriatric)
- intellectual disability unit
- physical disability unit
- sensory disability unit
- psychiatric disability unit
- multi-disability unit.

**Vision impairment (in adults):** adults with vision impairment have difficulty seeing, or cannot see, ordinary newsprint, and/or the face of someone from across a room, even when wearing corrective lenses.

**Vision impairment (in children):** children with vision impairment cannot see, or have difficulty seeing, even when wearing glasses or contact lenses.

**Sensory impairment:** a hearing and/or vision impairment.

**Speaking impairment:** people with a speaking impairment have difficulty speaking or being understood. We only ask this question of/about respondents aged two years and older.

**Use of special equipment:** the use of specialised equipment or technical aids, such as a wheelchair, crutches, walking sticks, a walking frame or any other kind of walking aid, a standing

frame, an artificial limb, or any other type of equipment because of a long-term condition or health problem (not including asthma inhalers, braces for teeth, or grommets).

Topics included in the 2013 Disability Survey has a list of output variables for the survey.

## Related links

### Upcoming releases

We will be publishing more information from the 2013 Disability Survey throughout 2014.

The [release calendar](#) lists all our upcoming information releases by date of release.

### Past releases

[2006 Disability Survey](#) – information release from the 2006 Disability Survey

[2001 Disability Counts](#) – information release from the 2001 Disability Survey

[1996 Disability Counts](#) – information release from the 1996 Disability Survey

### Related information

[Topics included in the 2013 Disability Survey](#)

Information on output variables in the 2013 Disability Survey.

[2011 Disability Survey: Discussion paper on proposed content](#)

Originally planned for 2011, this survey was postponed along with the 2011 Census due to the Canterbury earthquakes. This is the discussion paper for the proposed content for the 2011/2013 Disability Survey.

[Analytical reports from the 2006 Disability Survey](#)

These reports present findings from the 2006 Disability Survey. Topics include: education, formal supports, informal care, labour market, Māori, and transport.

[2006 Disability survey tables on NZ.Stat](#)

NZ.Stat tables about disabled children and adults.

[Disability snapshots from the 2001 Disability Survey](#)

These snapshots present a selection of findings from the 2001 Disability Survey. Topics include: key facts, Māori, Pacific peoples, people in residential care, children, and sensory, physical, intellectual, and psychological/psychiatric disabilities.

See [Disabilities](#) for more information.

## Data quality

### Period-specific information

This section contains data information that has changed since the last release.

- [Reference period](#)
- [Response rate](#)
- [Change due to 22 February 2011 earthquake](#)
- [Comparability with data from the 2006 survey](#)
- [Changes to survey content](#)
- [Changes to census disability questions](#)
- [Changes to survey sample](#)
- [Release of embargoed data](#)

### General information

This section contains information that does not change between releases.

- [Target population](#)
- [Survey population](#)
- [Collection methods](#)
- [Survey methodology](#)
- [Reliability of survey estimates](#)
- [Presentation of information](#)

## Period-specific information

### Reference period

The data collection took place over 11 weeks, from 24 July 2013 to 10 October 2013. Collection for the Household Disability Survey (HDS) took place from 24 July to 7 October, and for the Disability Survey of Residential Facilities (DSRF) from 26 August to 10 October.

### Response rate

The target response rates for the HDS and DSRF were 80 and 90 percent, respectively.

The HDS achieved an 82 percent response rate, with our minimum target of 4,000 disabled people reached. The DSRF survey achieved a response rate of 93 percent.

The response rate is the estimated number of eligible people who responded to the survey, divided by the estimated number of eligible people, and expressed as a percentage.

### Change due to the 22 February 2011 earthquake

This survey was originally planned for 2011 but due to the earthquakes in Canterbury, the Disability Survey was postponed along with the 2011 Census until 2013.

## **Comparability with data from the 2006 survey**

The 2006 survey reported a significant decline in the disability rate (17 percent) compared with that reported in earlier surveys (the 2001 and 1996 rates were both 20 percent). The 2006 information release advised people to be cautious when comparing the 2006 disability rate with disability rates from previous surveys, particularly for the adult household rate. This recommendation also applies to comparisons of 2006 with 2013 disability rates. In this release, we have compared disability rates with 2001 only.

For more information see 'Comment on the apparent decline in the disability rate' in the [technical notes of the 2006 information release](#).

## **Changes to survey content**

The content of the disability survey was relatively unchanged between the 1996, 2001, and 2006 surveys. A key aim in redeveloping the 2013 survey was to update the content to produce the best-possible estimates of disability prevalence and to ensure the statistics are relevant to current and emerging needs.

The New Zealand Government ratified the United Nations Convention on the Rights of Persons with Disabilities in 2008. Obligations to report against this convention led to some changes in the content of the 2013 Disability Survey compared with 2006.

During 2008, we consulted a range of groups and individuals representing the disabled community, to identify priority needs for the content of the 2011/2013 survey.

For more information about this review see the [2011 Disability Survey: Discussion paper on proposed content](#).

## **Definition of 'disability'**

In previous surveys, we used a functional concept of disability: 'any restriction or lack (resulting from impairment) of ability to perform an activity in the manner or within the normal range considered normal for a human being.'

For the 2013 Disability Survey, we defined a disability as: 'an impairment which has a long-term limiting effect on a person's ability to carry out day-to-day activities. Long-term means six months or longer and limiting effect means a restriction or lack of ability to perform.'

## **Questionnaire content**

The following changes have resulted from the redevelopment of the 2013 Disability Survey:

- the questions focusing on main conditions or health problems causing difficulties were not included
- less detail was collected on the use of assistive devices
- a series of questions relating to social outcomes were included
- the screening questions used to define whether a child is disabled or non-disabled have been changed to more closely align with the adult screening questions. This means that data for children from the 2013 survey is not directly comparable with previous disability surveys.

The 2013 Disability Survey includes new information about social outcomes. We collected information about leisure activities and carers of children in the 2013 children questionnaire. We collected information about feelings of safety, experience of crime, social contact, and access to leisure activities in the 2013 adult household questionnaire.

### **Other changes related to output variables**

#### **Ethnic group**

For earlier surveys, ethnic group was prioritised. This means we categorised the ethnicity of a person who identified with more than one ethnic group to a single group.

The order of prioritisation was Māori, Pacific, Asian, Other, and European. For example, a person who identified as Māori and Samoan would be categorised as Māori. A person who identified as New Zealand European and Samoan would be categorised in the Pacific ethnic group.

For the 2013 survey, we categorised ethnicity using grouped total responses. In this method, a person who identifies with more than one ethnic group is counted once in each group. For example, at level one of the ethnic group classification, a person of Samoan, Tongan, and German ethnicity would be counted once in the Pacific ethnic group and once in the European ethnic group.

Disability data on the Māori population is the only ethnic-group data that is consistent over time. Ethnic data from the 2013 survey is not comparable with previous disability surveys.

#### **Reclassification of agility questions**

In previous surveys, the following questions were classified as 'agility' impairments:

1. *When standing, can you bend down and pick something up off the floor, for example a shoe?*
2. *Can you get in and out of bed by yourself? If answered 'no', then asked: Is this because of a long-term condition or health problem?*

For the 2013 survey, these questions have been classified as 'mobility' impairments.

Be cautious when comparing agility and/or mobility data, as these impairment types are not comparable over time.

#### **Changes to census disability questions**

We used census data to form the sample frame for the Household Disability Survey. To make sure we included enough disabled people, the sample selection relies on responses to two census questions about disability. We changed the relevant census questions for the 2013 Census to better identify disabled people for the sample selection.

### **2013 Census disability questions:**

Q16: Does a health problem or a condition you have (lasting six months or more) cause you difficulty with, or stop you from:

- seeing, even when wearing glasses or contact lenses
- hearing, even when using a hearing aid
- walking, lifting, or bending
- using your hands to hold, grasp, or use objects
- learning, concentrating, or remembering
- communicating, mixing with others, or socialising, or
- no difficulty with any of these.

Q17: Do you have a long-term disability (lasting six months or more) that stops you from doing everyday things other people can do?

- Yes
- No

### **2006 Census disability questions:**

Q16: Does a health problem or a condition you have (lasting six months or more) cause you difficulty with, or stop you doing:

- everyday activities that people your age can usually do
- communicating, mixing with others, or socialising
- any other activity that people your age can usually do, or
- no difficulty with any of these.

Q17: Do you have any disability or handicap that is long-term (lasting six months or more)?

- Yes
- No

## **Changes to survey sample**

### **Household Disability Survey (HDS)**

The 2001 and 2006 HDS samples included a 10,000 oversample of Māori and Pacific peoples, contributing to a total sample of 40,000. In the 2013 survey there was no oversample for Pacific people, and an oversample of 2,000 for Māori, contributing to a total sample size of 23,000.

For the 2001 and 2006 surveys, we included group homes (with fewer than 10 people) in the HDS. For 2013, we included group homes with fewer than five people in the sample for the HDS.

### **Disability Survey of Residential Facilities (DSRF)**

Whereas the 2001 and 2006 survey samples included facilities with 10 or more long-stay beds, the 2013 survey includes facilities with as few as five long-stay beds. This change has meant that more psychiatric-type care only facilities are now included in the sample for the DSRF because these types of facilities usually have fewer than 10 beds.

## Release of embargoed data

In March 2014, we received a special and urgent data request from the Ministry of Health for embargoed provisional data from the 2013 Disability Survey. The data required was to inform their minister on policy-cost estimates for funded family care of disabled people.

It is only under exceptional circumstances that we allow access to data prior to the official embargoed release date. A strict process was followed to determine the risk of providing this data and the value for the Ministry of Health's project. The following factors informed the decision:

- the Ministry of Health agreed to abide by all restrictions around access and use of the data to ensure the confidentiality of the data supplied
- the data supplied is only a very small part of the survey
- the data requested was not a key survey output
- the data requested was not market sensitive.

For these reasons, we released the data to the Ministry of Health before the public release of data on 17 June 2014.

## General information

### Target population

The target population for 2013 Household Disability Survey is the usually resident population of New Zealand, living in occupied private dwellings or group homes on the night of the 2013 Census of Population and Dwellings.

The *usually resident population* excludes:

- non-New Zealand diplomats and non-New Zealand members of their staff and households
- members of non-New Zealand armed forces stationed in New Zealand and their dependants
- overseas visitors who have been resident in New Zealand for less than 12 months and who do not intend to stay in New Zealand for a total period of more than 12 months.

*Occupied private dwellings* can be permanent or temporary dwellings that are occupied by a person or group of people and are not available for public use. The main purpose of a private dwelling is as a place of habitation, and it is usually built (or converted) to function as a self-contained housing unit. This includes:

- separate houses
- flats/units and apartments that are self-contained in respect of sleeping, cooking, dining, bathing, and toilet facilities
- motor camps
- tents
- caravans
- campervans
- boats.

The target population for the 2013 Disability Survey of Residential Facilities is the usually resident population of New Zealand aged 15 years and over living in residential care facilities (or occupied non-private dwellings) on the night of the 2013 Census of Population and Dwellings.

*Occupied non-private dwellings* provide short- or long-term communal or transitory-type accommodation. They are generally available to the public for reasons of employment, study, special need, legal requirement, or recreation. Examples of occupied non-private dwellings include hospitals, hotels, motels, and boarding houses.

A *residential care facility* is a non-private dwelling being one of:

- rest home (standard-level care or dementia)
- continuing care hospital (geriatric or psycho-geriatric)
- disability units (intellectual, physical, sensory, psychiatric, or multi-disability).

## **Survey population**

The survey population for the HDS is the usually resident population of New Zealand, staying in occupied private dwellings and group homes (with fewer than five people) on the main islands of New Zealand (North, South, and Waiheke) on the night of the 2013 Census (5 March 2013).

The survey population for the DSRF is people aged 15 years and over, and living in rest homes, occupying long-stay beds in continuing care hospitals, or living in long-stay residential units for people with intellectual and/or physical impairments (with five or more people).

## **Collection methods**

### **Interview methods**

We collected information for the survey by trained interviewers either by Computer Assisted Telephone Interview (CATI) or face-to-face through Computer Assisted Personal Interview (CAPI).

For the HDS, we carried out 90 percent of interviews by CATI and 10 percent face-to-face (CAPI). Collection for the DSRF was solely by face-to-face interviews (CAPI).

People selected for the HDS were automatically allocated to a CAPI interview if:

- they had no telephone contact number on their 2013 Census form
- they indicated on their census form that they had a hearing impairment.

Options were available to access services such as sign language interpreters and NZ Relay Service to help respondents complete the survey. One interview was completed using a sign language interpreter.

### **Proxy**

For children (0–14 years), an adult (parent, guardian, or caregiver) answered the survey questions on behalf of the selected child.

Where possible, we interviewed the selected adults. If a selected adult could not answer the questions due to a health condition or disability, another adult (usually a caregiver or guardian) answered the questions on their behalf.

Interviewing of individuals living in residential facilities involved a signed consent form.

## **Survey methodology**

### **Survey design**

The 2013 Disability Survey was a post-censal survey. A post-censal survey provides a unique opportunity to run a large survey of a small subgroup of the population in a cost-effective manner. Administrative lists, such as the electoral roll, suffer from serious undercoverage, and using the Statistics NZ household survey frame is expensive because of the need to screen many households to find the target population. Using the 2013 Census as a frame provided a degree of coverage not matched by any other single method.

In addition, information collected in the 2013 Disability Survey was linked with census responses to questions such as income and labour force status. This minimises the burden on respondents and helps to reduce data collection costs.

### **Sample design**

The two surveys making up the Disability Survey (HDS and DSRF) had different sample designs.

#### **Sample design for HDS**

The HDS used information from the 2013 Census to create a frame (or list) from which to draw the sample. Formation of the sample frame is made possible by including two disability questions in the census.

The sample selection for the HDS is conducted in three stages:

1. selecting primary sampling units (PSU) from the Household Survey Frame
2. selecting people within PSUs and stratum
3. random subsampling of one person per household where more than one person was selected.

At the first stage, we select a sample of PSUs from the Household Survey Frame (HSF). A primary sampling unit (PSU) is a small geographic area made up of meshblocks and aims to contain a standard number of permanent private dwellings as much as possible. The HSF is the standard sampling frame we use to select samples and manage overlap control for all of our household surveys. The HSF lists PSUs with attributes determined by data from the census. PSUs are then assigned to standard strata based on these attributes. For this survey, we selected a sample of 1,600 PSUs.

The second stage of selection involves retrieving 2013 Census records from within the selected PSUs, and drawing the final sample from these. We eliminate the following from the census data before selecting the final sample:

- individuals in non-private dwellings
- individuals for whom age cannot be derived
- other invalid records.

The third stage of selection involves randomly subsampling one person from households where more than one person was originally selected. So, if three people were selected after the second stage of selection, we discard two of them at random. This ensures that we interview only one person from each private household that we select for the survey.

We selected a sample of 23,000 people for the HDS, out of which 14,900 were adults and 8,100 were children.

### Sample design for DSRF

The sampling frame for the DSRF is provided by the Ministry of Health and is a list of the number of beds in all residential facilities.

The sample for the DSRF was selected in two stages:

1. selection of residential facilities
2. selection of residents within the selected facilities.

At the first stage, we used three strata (rest homes, hospitals, and residential facilities) to sample facilities. We used proportional sampling to allocate residents to strata. See table below for information about the strata used for the DSRF.

Strata	Type of residential care facility included
1. Rest home	Rest home: standard-level care
	Rest home: dementia
2. Hospitals	Hospital: continuing care (age and geriatric)
	Hospital: specialised care (psycho-geriatric)
3. Disability facilities	Residential: intellectual disability
	Residential: physical disability
	Residential: sensory disability
	Residential: psychiatric disability
	Residential: multi-disability

At the second stage, we selected residents within facilities by probability proportional to size (PPS) sampling. We selected five residents per facility in the strata 'rest homes' and 'hospitals', and three residents from the strata 'disability facilities', since most of these facilities have fewer than 10 residents.

The interviewer selected the residents from each facility from a list of eligible residents provided by the facility. If a facility offered multiple types of care (rest home, hospital, and/or other residential disability care) we separated it into multiple facilities. It was possible for a facility to be selected twice in the survey.

The final selected sample for the DSRF was 864 individuals from 177 residential facilities.

### Reliability of survey estimates

The estimates in this publication are based on information obtained from a sample of people, and are therefore subject to sampling variability. That is, the estimates may differ from results that would have been produced if all people were included in the survey.

Two types of error are possible in estimates based on a sample survey: non-sampling error and sampling error.

**Non-sampling errors** are all errors that are not quantifiable. They include unintentional mistakes by respondents, variation in the respondent's and interviewer's interpretations of the questions asked, and errors in recording and coding data. We try to minimise the impact of these errors by applying best survey practices and monitoring known indicators (eg non-response).

**Sampling error** can be measured, and quantifies the variability that occurs by chance because a sample rather than an entire population is surveyed. In the 2013 Disability Survey, sampling errors were estimated using a jack-knife method. This method is based on the variation between estimates, and involves taking 100 mutually exclusive subsamples from the whole sample. Sampling errors are quoted at the 95 percent confidence level. For example, if the estimated total number of people is 315,000 and the estimate is subject to a sampling error of plus or minus 7,250 or 2.3 percent (measured at the 95 percent confidence level), that shows there is a 95 percent chance that the true total number of people lies between 322,250 and 307,750.

**Relative sampling errors (RSE)** show the sample error as a percentage of the estimate. These figures will not give a precise measure of the sample error for a particular estimate, but will indicate its magnitude. Smaller estimates, such as the number of disabled Pacific peoples who are unemployed, are subject to larger RSEs than larger estimates. Very small estimates are subject to such high sample errors (relative to the estimate) as to detract seriously from their value for most reasonable uses.

## **Presentation of information**

### **Weights**

The survey has weights attached to allow the survey sample to be used to describe the whole population resident in New Zealand. Weights for this survey are at the person level only.

### **Confidentiality and suppression**

Estimates with very few contributors are deemed a risk to respondents' confidentiality. Estimates based on an estimated population of less than 1,000 are suppressed. This is indicated in tables by an 'S'.

Estimates with high relative sample errors (RSE) are suspect in quality. Therefore all estimates with an RSE of 50 percent or greater are suppressed. Estimates with an RSE of 30 percent to 49.9 percent should be viewed with caution (indicated in tables by an asterisk \*), and an error of 50 percent or greater will be indicated by an 'S'.

### **Rounding and percentages**

Estimated counts in this release are rounded to the nearest 1,000 people.

All percentages shown in the text and tables are calculated from unrounded weighted data and then rounded to whole figures. If one of the figures used to calculate a percentage has been suppressed, the percentage will also be suppressed.

Unless otherwise stated, calculation of percentages in this report excludes responses we can't classify (eg 'don't know' and 'refused').

## More information

### Customised data requests

Phone our Information Centre on 0508 525 525 toll-free, or email [info@stats.govt.nz](mailto:info@stats.govt.nz), to discuss options for getting customised data that suits your needs. There may be a charge for a customised request.

See [Disabilities](#) for more information.

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## Tables

The following tables are available in Excel format from the 'Downloads' box. If you have problems viewing the files, see [opening files and PDFs](#).

- 1.01 Disability rate, by year, age group, and sex
- 1.02 Number of disabled people, by year, age group, and sex
- 2.01 Disability rate, by age group, sex, and ethnic group
- 2.02 Number of disabled people, by age group, sex, and ethnic group
- 3.01 Impairment rate (broad), by age group and sex
- 3.02 Number of disabled people with each impairment type (broad), by age group and sex
- 4.01 Impairment rate (detailed), by age group and sex
- 4.02 Number of disabled people with each impairment type (detailed), by age group and sex
- 5.01 Impairment rate (broad), by ethnic group and sex
- 5.02 Number of disabled people with each impairment type (broad), by ethnic group and sex
- 6.01 Cause of impairment for disabled people (percentages), by age group and sex
- 6.02 Cause of impairment for disabled people (numbers), by age group and sex
- 7.01 Single / multiple impairments for disabled people (percentages), by age group, sex, and selected ethnic group
- 7.02 Single / multiple impairments for disabled people (numbers), by age group, sex, and selected ethnic group
- 8.01 Main impairment of disabled people (percentages), by age
- 8.02 Main impairment of disabled people (numbers), by age
- 9.01 Selected measures of disability for disabled adults (percentages), by residence type
- 9.02 Selected measures of disability for disabled adults (numbers), by residence type
- 10.01 Māori impairment rate (broad), by age group and sex
- 10.02 Number of disabled Māori with each impairment type (broad), by age group and sex
- 11.01 Māori impairment rate (detailed), by age group and sex
- 11.02 Number of disabled Māori with each impairment type (detailed), by age group and sex
- 12.01 Cause of impairment for disabled Māori (percentages), by age group and sex
- 12.02 Cause of impairment for disabled Māori (numbers), by age group and sex
- 13.01 Selected measures of disability for people in private households (percentages), by region
- 13.02 Selected measures of disability for people in private households (numbers), by region

### 2013 Disability Survey variable list

The 2013 Disability Survey variable list details what is available in the 2013 Disability Survey dataset.

[See topics included in the 2013 Disability Survey](#).

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