

# 2016 New Zealand Mental Health Survey Methodology Report

December 2016

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December 2016

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# 1. INTRODUCTION

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The New Zealand Mental Health Survey (NZMHS) is a nationally-representative survey of New Zealand adults aged 15 years and over, aimed at providing regular and robust quantitative data on key mental health issues in New Zealand. The NZMHS is managed by the Health Promotion Agency (HPA) and aims to assess depression rates, monitor community-based stigma towards those suffering mental distress, measure psychological distress rates, gauge social connectedness, and appraise societal knowledge of mental health illnesses. 2016 was the second year the NZMHS was in field. In 2015 the HPA sought to develop a new nationally-representative survey aimed at providing regular and robust quantitative data on key mental issues in New Zealand. The NZMHS was run for the first time in 2015 and for the second time in 2016. The survey forms part of HPA's delivery of a research programme that among other things, provides advice and research on issues related to mental health.

## 1.1 BACKGROUND

The Health Promotion Agency (HPA) has an overall function to lead and support activities to:

1. Promote health and wellbeing and encourage healthy lifestyles.
2. Prevent disease, illness and injury.
3. Enable environments which support health, wellbeing and healthy lifestyles.
4. Reduce personal, social and economic harm.

In the Statement of Intent (2014-2018), HPA states that it aims to minimise the impact of mental health issues on New Zealanders in the context of a broader approach to wellbeing. It does this through two main programmes:

- The National Depression Initiative (NDI), through its websites ([depression.org.nz](http://depression.org.nz) and [thelowdown.org.nz](http://thelowdown.org.nz)) and campaign messages, aims to reduce the impact of depression and anxiety on the lives of those in New Zealand by aiding early recognition, appropriate help-seeking, treatment, and recovery.
- 'Like Minds, Like Mine' aims to reduce the discrimination faced by people with experience of mental distress as a major barrier to their recovery. 'Like Minds, Like Mine' seeks to create a socially inclusive nation in which all people in New Zealand treat those with experience of mental distress respectfully and as equals.

## 1.2 ETHICS

The 2016 NZMHS was voluntary and this was clearly explained to potential participants in the survey pamphlet, as well as on HPA website. The voluntary nature of the survey was also verbally explained by the interviewer and detailed on the consent form which was signed by all respondents prior to the survey being conducted.

The 2016 NZMHS was approved by the New Zealand Ethics Committee.

The survey methodology needed to take into consideration that the very issue of mental health is a subject area that some people find highly sensitive. Further, it is at least a topic that some people may not necessarily be keen to address. Of particular concern were respondents that may be more vulnerable, such as young people aged 15 to 17 years. This group was identified by the Health and Disabilities Ethics Committee, as a population requiring a more careful approach, with respect to surveys around mental health. Respondents were assured that their responses would be kept confidential and were protected by the Privacy Act 1993. The final, stored electronic records contained no identification of the participating respondents and responses will only be analysed as overall or grouped data.

## 2. SURVEY METHODOLOGY

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### 2.1 RATIONALE FOR THE APPROACH

There were a number of requirements of the survey that influenced the approach:

- The need to scientifically sample not just general members of the public, but very specific audiences of young people, and people of Māori and Pacific ethnicities.
- The need for the method to be repeatable as a monitor.
- The approach needed to take into consideration the fact that the issue of mental health for some people, was a subject area highly sensitive in nature.
- The need to maximise public participation.
- The approach needed to adhere to budget constraints.

Large scale New Zealand government surveys with similar requirements (e.g. NZ Health Survey, NZ Crime and Safety Survey, International Survey of Adult Skills) commonly make use of the face-to-face method of interviewing, using meshblocks as primary sampling units. Accordingly, this survey merited a similar approach. As is common with such surveys, booster samples were used to increase the numbers of young people and people of Māori and Pacific ethnicities.

CAPI (Computer Assisted Personal Interview) was chosen as the survey mode, based on previous experience with similar topic surveys. The advantages of CAPI over paper-based methods include: better protection of confidentiality in recording and storing of responses, standardisation of delivery and better control over routing and piping.

### 2.2 SURVEY METHODOLOGY SUMMARY

The survey was designed to be nationally representative of the New Zealand population aged 15 and over. In addition, certain groups were boosted to adequately represent Māori and Pacific peoples, and young people aged 15 to 24. Meshblocks were the primary sampling frame, these being the smallest geographical unit of statistical data collected by Statistics New Zealand. The meshblock definitions (boundaries) from the last census (2013) were used. As of the 2013 Census, there were 46,637 meshblocks in New Zealand.

A known probability sampling method was used where each meshblock (with some exclusions) had a chance (greater than zero) of being selected. The PPS (probability proportional to size) sampling method was employed as it uses the size (number of permanent private dwellings) of meshblocks to determine the likelihood of being included in the sample. Within each meshblock, homes are sampled and also the people within these homes. At each stage, the probability of selection is known, allowing results to be weighted back to population estimates. Interviews were

conducted in respondents' homes. Interviewers entered responses directly into laptop computers, although the option was provided for questions to be completed by the respondents independently. Show cards with predetermined response categories were used to assist respondents where appropriate.

## 2.3 SAMPLE SIZE

The agreed target sample composition was:

**Table 2-1: Sample composition**

Group	Number
Māori	300
Pacific	300
Other	700
Total	1300

A target of 300 young people interviews (aged 15-24) was also present in the above sample composition.

## 2.4 QUESTIONNAIRE CONTENT

### 2.4.1 Questionnaire Development

The NZMHS questionnaire was largely based on the 2015 survey. It was supplied by HPA and developed further by CBG Health Research in consultation with HPA. Printed showcards, presenting the response options for each question, were developed to assist interviewers in administering the questionnaire and also the respondents in providing their answers. Instructions for the interviewer regarding which showcards to display were incorporated within each relevant question. A section specifically for those identifying as Māori was included. For these questions, two sets of showcards were used; one in English and the other in Te Reo. These were shown together in the interview with the respondent having the choice to use either.

The questionnaire was programmed into computer-assisted personal interviewing (CAPI) software and rigorously tested by both CBG and HPA prior to the pilot and main study commencing. Testing included checking question/answer wording and routing/navigation for consistency with the paper questionnaire. To assess the suitability of the questionnaire, a pilot survey was first conducted with 60 respondents. Results from the pilot survey demonstrated that the questionnaire was performing to task and only minor changes in wording were made to the full-scale survey.



## 2.4.2 Psychometric scales

The questionnaire was designed to capture demographic information such as employment status, age, gender and ethnicity. The instrument also contained various internationally validated measures designed to monitor community-based stigma towards those suffering mental distress, measure psychological distress rates, gauge social connectedness and appraise societal knowledge of mental illness. The psychometric scales included in the questionnaire are listed below.

### ***Reported and Intended Behaviour Scale (RIBS)***

The RIBS (Evans-Lacko et al., 2011) is designed to assess past, current, and intended behaviours as they relate to mental distress, stigma and discrimination. It comprises two sections:

- The first section assesses whether a participant is or has ever been living with, working with, living nearby, or continuing a relationship with someone with mental illness. It was assessed with a series of four yes/no questions. As these items calculate the prevalence of behaviours and respondents may or may not have engaged in those behaviours, they were not given a score value.
- The second section is a scale that reflects participants' intentions to interact with people with experience of mental distress in the future. This was a 4-item subscale asking whether a participant would be willing to live with or to work with someone with mental illness.

Participants rated themselves on a 5-point scale from 1 (strongly disagree) to 5 (strongly agree). Response values from each participant were added to calculate the total score and 'refused' or 'don't know' was coded as neutral (3) and possible scores ranged from 4 to 20. The higher scores are associated with greater intention to interact with people with mental distress. The scale (questions D5 to D8 in the questionnaire) had a high internal consistency, with a Cronbach's alpha of 0.84.

### ***Mental Health Knowledge Schedule (MAKS)***

The MAKS (Evans-Lacko et al., 2010) is designed to assess two aspects of mental health knowledge, with six items in each. The first part of this scale, is designed to be an instrument that measures stigma-related mental health knowledge. The second part is designed to measure the degree of recognition and familiarity of mental health conditions. Since only the first section of the MAKS forms the instrument, only the first section was included in 2016 and the second section was not, (it was however included in the 2015 NZMHS). An example of an item in the MAKS is: "Most people with mental illness want to have paid employment."

Participants rated themselves on a 5-point scale from 1 (strongly disagree) to 5 (strongly agree). Response values from each participant were added to calculate the total score. 'Don't know' or 'refused' were coded as neutral (3) and one item was negatively keyed (C13; see questionnaire). Possible scores ranged from 6 to 30 with higher scores being indicative of greater self-reported mental health knowledge and associated with more positive views of people with experience of mental distress. The instrument had a poor internal consistency value, indicated by the low value

of the Cronbach's alpha of 0.42 (questions C8 to C13 in the questionnaire). Nevertheless, as stated in Evans-Lacko et al. (2010), the MAKS was not developed to function as a scale. This is because the MAKS intentionally includes items of a multidimensional structure aimed at testing various types of mental health-related knowledge. Because the MAKS is designed to measure a heterogeneous group of items it is not be expected to have a high internal consistency. This reflects people having knowledge in certain domains but lacking knowledge in other domains.

### ***New Zealand Community Attitudes towards the Mentally Ill Scale (NZCAMI)***

The NZCAMI is a new scale, based on the 'Community Attitudes towards the Mentally Ill Scale' (Taylor & Dear, 1981). It is designed to assess attitudes towards people with mental distress in the community, as opposed to within mental health services. It was developed using results of CAMI questions in the 2015 NZMHS, and was used for the first time in 2016. It was introduced because some of the language and concepts of the original CAMI have changed significantly since it was developed. The NZCAMI comprises of two subscales:

- The community mental health ideology (CMHI) subscale, which assesses attitudes relating to the inclusion of people experiencing mental distress in the community. The items in this sub-scale are based on the original CMHI items in the CAMI, although all negatively keyed items and some other items were removed. Cronbach's alpha for this sub-scale was 0.83 (questions E1 to E9 in the questionnaire).
- The second sub-scale measures attitudes towards people with mental illness in the workplace. The items were all newly developed within HPA and used for the first time in the 2016 NZMHS. Cronbach's alpha for this sub-scale was 0.72 (questions E10 to E15 in the questionnaire).

Participants rated themselves on a 5-point scale from 1 (strongly disagree) to 5 (strongly agree). Response values from each of the participants were added to calculate the total score and 'refused' or 'don't know' was coded as neutral (3). Possible scores range from 15 to 75, with higher scores being indicative of a more positive self-reported attitude towards people with mental distress in the community. This 15-item scale had a high internal consistency value with a Cronbach's alpha of 0.87 (questions E1 to E15 in the questionnaire).

### ***Patient Health Questionnaire (PHQ-9)***

The PHQ-9 (Kroencke, Spitzer, & Williams, 2001) was used to assess the prevalence of depression and its severity in the general New Zealand population. One questionnaire item example is: "Over the last two weeks, how often have you been bothered by feeling down depressed or hopeless?"

Participants rated themselves on a 4-point scale from 0 (not at all) to 3 (nearly every day). Response values from each participant were added to calculate the total score and 'refused' or 'don't know' was coded as 'not at all' (0). Possible scores range from 0 to 27 with higher scores being indicative of greater self-reporting of depressive symptoms. This 9-item scale had a high

internal consistency value with the Cronbach's alpha of 0.86 (questions F1 to F9 in the questionnaire).

### ***Generalized anxiety disorder (GAD-7)***

The GAD-7 (Spitzer, Kroenke, Williams, & Löwe, 2006) is a 7-item scale used to assess the severity of the generalized anxiety disorder symptoms over the previous four weeks. These symptoms include: nervousness, inability to stop worrying, and fear of something bad happening. An example of an item on the questionnaire is: 'Over the last two weeks, how often have you been bothered by becoming easily annoyed or irritable?'

Participants rated themselves on a 4-point scale from 0 (not at all) to 3 (nearly every day). Response values from each participant were added to calculate the total score and 'refused' or 'don't know' was coded as 'not at all' (0). Possible scores range from 0 to 21 with higher scores being indicative of greater self-reporting of generalized anxiety symptoms. The 7-item scale had a high internal consistency value with the Cronbach's alpha of 0.89 (questions H1 to H7 in the questionnaire).

### ***Kessler psychological distress (K-10)***

The K-10 (Kessler et al., 2002) is designed as a screening tool for mental health disorders present during the previous four weeks. An example of an item on the questionnaire is: 'In the past four weeks, about how often did you feel tired out for no good reason?'

Participants rated themselves on a 5-point scale from 1 (none of the time) to 5 (all of the time). Response values from each participant were added to calculate the total score and 'refused' or 'don't know' was coded as 'none of the time' (1). The scale scores ranged from 10 to 50 with higher scores being indicative of greater self-reporting of psychological distress. The 10-item scale had a high internal consistency value with the Cronbach's alpha of 0.92 (questions G1 to G10 in the questionnaire).

## 2.5 SAMPLING AND RECRUITMENT

### 2.5.1 Summary

The following section provides a description of the sample design and was largely a replication of the approach used in 2015. In order to achieve the target sample and subsample numbers, 150 meshblocks were selected using PPS sampling (described in Table 2-2). Of these, 30 were meshblocks with a high density of Pacific peoples, necessary to be able to achieve the desired number of Pacific respondents. Pacific-dense meshblocks were defined as those which contained 20 per cent or more, residents of Pacific ethnicity. The density figures were produced by Statistics New Zealand based on the 2013 Census using total-response ethnicity. The other subsample targets were achievable within the 120 remaining 'core meshblocks'.

In each of the 120 core meshblocks, 13 homes, randomly selected, were 'core homes' from which anyone aged 15 and over, could be recruited to do the survey. A further 22 homes (unless the size of the meshblock limited this) were then screened and anyone aged 15 and over, who identified as being Māori or Pacific, or who were aged between 15 and 24 years were determined as eligible to participate. In the 30 Pacific-dense meshblocks, 32 homes were screened just for Pacific people aged 15 years and over. Note that in addition to the above, in order to reach the target number of interviews for the Pacific subgroup, an additional 15 houses were selected in the 19 Pacific-dense meshblocks which were large enough to allow the additional houses to be selected.

The respondent within each sampled dwelling was selected by the interviewer requesting the person who answered the door for a list of the initials, ages and genders of all eligible occupants in the dwelling, aged 15 years and over. The interviewer then asked the person at the door to identify the ethnic groups each person belonged to. Each person was therefore coded as either Māori, Pacific or Other (or any combination of the three groups). Subsequent to this information being captured, CBG's sample management software randomly selected one respondent to take part from all eligible occupants.

### 2.5.2 Sampling and Recruitment Procedure

The following provides a more detailed description of the sampling and recruitment procedures. The expression 'core' in each meshblock refers to homes where all ethnicities and age groups were eligible. The expression 'screened' refers to homes where only individuals screened as belonging to one of the boosted samples (Māori, Pacific or Young people) were eligible.

**Table 2-2: Recruitment procedures**

Procedure/Item	Description
Survey Frame:	Meshblocks as defined by Statistics NZ and as enumerated in the 2013 Census were the primary sampling units.
Geographic Coverage:	All New Zealand, including small offshore islands.
Qualifying Meshblocks:	<p>Meshblocks with fewer than 30 homes were removed. Coverage of all NZ private dwellings was 80%.</p> <p>The coverage was higher than in 2015 (66%) as dwellings in remote areas were included in the survey frame in 2016.</p>
Stratification:	<p>The sequence for stratification proceeded as follows. The frame of Qualifying Meshblocks was first separated into two major strata: Pacific-dense meshblocks and Others. The Others stratum was then further stratified into the four urban categories: Major Urban, Secondary Urban, Minor Urban and Rural. These are referred to as the Core strata.</p> <p>Note - the Pacific-dense meshblocks contained meshblocks from all the urban categories however these categories were mainly Major Urban. There was no overlapping with meshblocks contained in any of the Core strata.</p>
Sample Sizes From Strata:	<p>The following number of meshblocks were systematically sampled from each stratum. The number taken from each particular Core stratum reflected the number of dwellings within that stratum across the whole of the country.</p> <p>Main Urban: 85  Secondary Urban: 7  Minor Urban: 11  Rural: 17</p> <p>The number taken from the Pacific-dense stratum reflected the requirement for a particular minimum of Pasifika respondents and also the requirement to adequately cover the variation.  Pacific-dense: 30</p>

**Table 2-2: Recruitment procedures (continued)**

Procedure/Item	Description																																																																																												
Sample Size Distribution:	<p>The final sample of meshblocks (MBs) were distributed across the District Health Boards as follows.</p> <table><thead><tr><th>DHB Name</th><th>Core MBs</th><th>Pacific-dense MBs</th><th>Total MBs</th></tr></thead><tbody><tr><td>Northland</td><td>11</td><td>0</td><td>11</td></tr><tr><td>Waitemata</td><td>19</td><td>4</td><td>23</td></tr><tr><td>Auckland</td><td>7</td><td>11</td><td>18</td></tr><tr><td>Counties Manukau</td><td>7</td><td>11</td><td>18</td></tr><tr><td>Waikato</td><td>14</td><td>1</td><td>15</td></tr><tr><td>Lakes</td><td>3</td><td>0</td><td>3</td></tr><tr><td>Bay of Plenty</td><td>5</td><td>0</td><td>5</td></tr><tr><td>Tairawhiti</td><td>0</td><td>0</td><td>0</td></tr><tr><td>Taranaki</td><td>3</td><td>0</td><td>3</td></tr><tr><td>Hawke's Bay</td><td>5</td><td>0</td><td>5</td></tr><tr><td>Whanganui</td><td>4</td><td>0</td><td>4</td></tr><tr><td>MidCentral</td><td>6</td><td>1</td><td>7</td></tr><tr><td>Hutt Valley</td><td>3</td><td>1</td><td>4</td></tr><tr><td>Capital and Coast</td><td>3</td><td>1</td><td>4</td></tr><tr><td>Wairarapa</td><td>0</td><td>0</td><td>0</td></tr><tr><td>Nelson</td><td></td><td></td><td></td></tr><tr><td>Marlborough</td><td>1</td><td>0</td><td>1</td></tr><tr><td>West Coast</td><td>1</td><td>0</td><td>1</td></tr><tr><td>Canterbury</td><td>20</td><td>0</td><td>20</td></tr><tr><td>South Canterbury</td><td>1</td><td>0</td><td>1</td></tr><tr><td>Southern</td><td>7</td><td>0</td><td>7</td></tr><tr><td><b>Total</b></td><td><b>120</b></td><td><b>30</b></td><td><b>150</b></td></tr></tbody></table>	DHB Name	Core MBs	Pacific-dense MBs	Total MBs	Northland	11	0	11	Waitemata	19	4	23	Auckland	7	11	18	Counties Manukau	7	11	18	Waikato	14	1	15	Lakes	3	0	3	Bay of Plenty	5	0	5	Tairawhiti	0	0	0	Taranaki	3	0	3	Hawke's Bay	5	0	5	Whanganui	4	0	4	MidCentral	6	1	7	Hutt Valley	3	1	4	Capital and Coast	3	1	4	Wairarapa	0	0	0	Nelson				Marlborough	1	0	1	West Coast	1	0	1	Canterbury	20	0	20	South Canterbury	1	0	1	Southern	7	0	7	<b>Total</b>	<b>120</b>	<b>30</b>	<b>150</b>
DHB Name	Core MBs	Pacific-dense MBs	Total MBs																																																																																										
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<b>Total</b>	<b>120</b>	<b>30</b>	<b>150</b>																																																																																										
NZPost Postal Address File (PAF):	CBG applied to NZPost to obtain lists of residential postal delivery points within the selected meshblocks.																																																																																												
Random Starting point:	All addresses within a meshblock are listed in street, then street-number order. A random start-point within each meshblock was chosen prior to the commencement of fieldwork. The start-point is randomly selected between 0 and the sampling interval.																																																																																												

**Table 2-2: Recruitment procedures (continued)**

Procedure/ Item	Description
Household Selection:	The total number of dwellings in each meshblock is divided by the sample size to get the sampling interval (skip). The first house selected was determined by the random start-point. The skip was then used to select subsequent households. From the random start-point, every $n^{\text{th}}$ household was selected.
Core Sample Homes:	13 core households were selected from each of the 120 Core meshblocks according to the meshblock skip.
Screened Homes:	In the 120 Core meshblocks (after the 13 Core Main sampled homes) a further 22 homes were selected, where meshblock size permitted. These homes were Core Screened and only boosted groups were eligible. This enabled the numbers of Māori, Pacific and young people to be boosted in the final sample. In the 30 Pacific-dense meshblocks, 32 homes were screened for Pacific ethnicity only (15 years plus).
Advance Letter:	Selected households were sent a letter of invitation on HPA letterhead (with slightly different wording for core and screened addresses) along with a copy of the survey information pamphlet (appended). These were sent 7 to 10 days prior to the interviewer beginning work in the area.
In-field Enumeration:	Interviewers completed a check of the enumeration of each block in the field as the NZPost PAF was not a complete listing of all private dwellings. During this process, the interviewer added any houses that were not included in the original list of houses from the PAF. Added dwellings were selected on-the-fly in field, according to the specific skip for the meshblock concerned. Occasionally, addresses in the PAF did not contain a private dwelling (e.g. empty sections, businesses). In these cases, the interviewer recorded this outcome so that these addresses could be removed from the sample frame.
Respondent Selection:	CBG's electronic sample management software was used to randomly select one respondent from each dwelling containing eligible occupants.

**Table 2-2: Recruitment procedures (continued)**

Procedure/Item	Description
Respondent Substitution:	No substitution of any refusing or uncontactable respondent was permitted.
Call-backs:	A total of up to ten visits were made at each sampled home to attempt to contact the respondent. Days of week and times of day for these visits were varied to maximise successful contact.
Auditing:	CBG supervisors called by phone or visited a minimum of 10% of interviewees to confirm the interview was completed at the sampled address, to check that survey protocols were followed and to gauge the respondent's satisfaction with the survey and associated processes.
Outcome Coding:	Following each visit to a sampled address, interviewers were required to record the outcome. Available outcome codes are detailed in the response rate section.



## 2.6 INTERVIEWING PROCESS

The interviewing process and its management was complex. A schematic explains some detail.

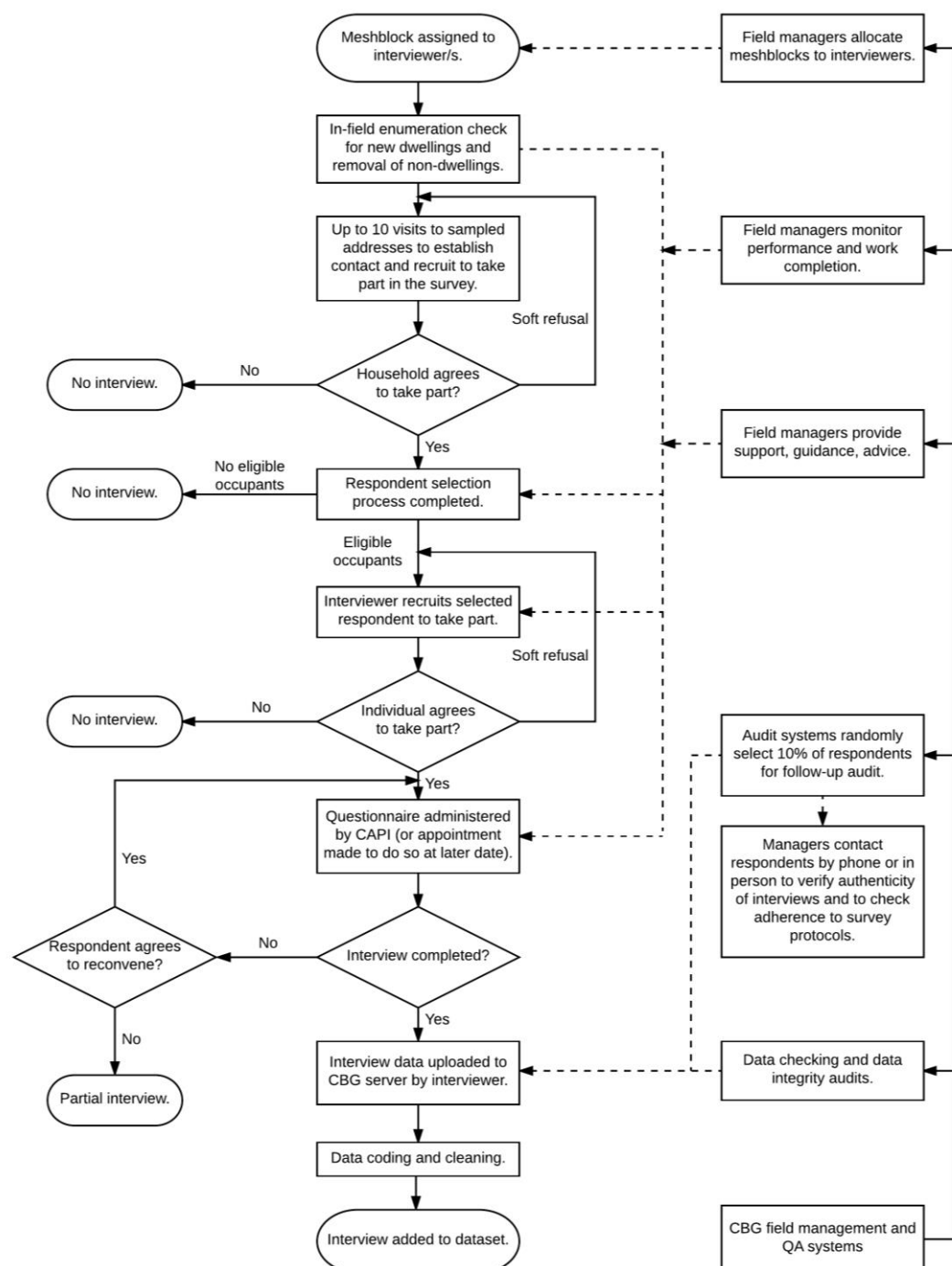


Figure 2-1: Management of Interviewing Process

## 2.7 PILOT SURVEY

A full dress rehearsal (pilot) of the CAPI survey was undertaken in May 2016, with a total of 60 interviews being completed. Five interviewers completed the interviews across 13 meshblocks in five different regions. The purpose of the pilot study was both to mimic the main study as closely as possible and to ensure that the questionnaire and associated survey processes were robust and functioning correctly. In particular, the pilot aimed to answer the following questions:

1. Was the questionnaire routing/logic working as expected, and was it fit for purpose?
2. Based on an analysis of open-ended responses, did additional response categories need to be added (or existing ones modified)?
3. Were there problems with any new questions?
4. Did the CAPI software perform as expected and did the electronic sample management behave as expected?
5. Was the interviewer training appropriate, and did it adequately prepare them for fieldwork?
6. Were the survey communications appropriate?
7. What was the average survey duration?
8. How did respondents engage with the survey?

A summary report documented the findings of the pilot and provided insight into the above areas of interest. There were a number of learnings from the pilot which were used to inform the final main survey. In particular, a number of recommendations were made in relation to the questionnaire content to improve flow, comprehension and respondent engagement.

## 2.8 MAIN SURVEY

Interviewers were trained over a two-week period beginning 25<sup>th</sup> May 2015. Fieldwork commenced on 9<sup>th</sup> June and extended to 13<sup>th</sup> September. A summary of the main tasks of the interviewer follows:

- Performing an enumeration-check of each allocated meshblock. Adding any 'permanent private dwelling' which are not included in the list of houses for the block (as sourced from the NZPost PAF) and removing any non-dwelling from the sample (e.g. empty sections and businesses).
- Visiting each pre-selected home to make contact with the occupants and undertaking the screening process. Following the screening process, trying to obtain interviews or appointments to interview with the selected respondent. Varying calls by time of day and day of week, according to survey protocols. Recording all visits and outcomes.
- At each house, introducing the survey to the door opener and explaining the need to screen to select a potential respondent. Using materials (letter of introduction, brochure, ID badge) to confirm authenticity and survey importance. Where the door-opener was agreeable, conducting the screening procedure.
- After screening, approaching the person selected as the respondent. Again, using materials to confirm authenticity and survey importance. Explaining the interview process, the public good of the survey and also how the results were going to be used. Attempting to either a) get an interview appointment, or b) permission to conduct the interview there and then.
- Conducting the CAPI interview. Using a quiet room if available, away from others. Following all survey protocols in the administration of the interview. Using showcards as directed.
- At completion of the interview, thanking the respondent and providing a thank you card from HPA detailing support organisations and contact numbers for the respondent, should support or information be required following the interview (the material provided to participants is in the Appendix). Providing the CBG feedback postcard to support the respondent in providing anonymous feedback relating to the survey process. Leaving behind the HPA depression brochure. Respondents aged 15-24 who provided a mobile phone number, were also sent a text message the morning following the interview, both thanking them for their participation and also including the Youthline 0800 number should this be required. Content of the text message: "Thanks for participating in the 2016 Mental Health Survey! If you want to talk over any concerns it raised for you or someone you know, call Youthline on 0800 376 633 free text them at 234 or visit [thelowdown.co.nz](http://thelowdown.co.nz)".
- Each night, uploading completed interview and contact data to CBG server.
- Attending weekly field staff meetings and liaising with field managers to discuss progress on each meshblock, raising issues as necessary.

The main survey largely went according to plan, with no major issues arising. One exception however, was the number of houses containing people of Pacific ethnicity, being lower than anticipated. The expected number of Pacific-yielding houses were calculated based on 2013 Census data from Statistics New Zealand, however in many blocks, the expected number was not realised. Low-yielding blocks were subject to a 100% audit, whereby a senior interviewer re-contacted selected addresses to confirm the screening process had been completed accurately by the interviewer. In all cases, the original screening was found to be sound. In order to improve the yield of Pacific respondents, more homes were added for screening. An additional 15 houses were selected in 19 of the Pacific-dense meshblocks, these being large enough to allow these extra houses to be selected. The net result of this strategy, saw the target number of Pacific interviews exceeded.

To check the validity of the interviewers' work and respondent satisfaction with the survey process, 179 (10.9%) homes were audited by CBG supervisors. Results indicated strong adherence to survey protocols. Eighty-six per cent of those interviewed reported that they found the survey interesting and 96 per cent reported being satisfied, or extremely satisfied with the interviewer's conduct. When asked about their motivation for taking part, 65 per cent of respondents chose to take part based on civic duty, or as they had an interest in the subject area (respondents were split evenly between the two reasons).

## 2.9 INTERVIEWS ACHIEVED

The final number of interviews obtained by the methods described in this report was 1,646. A breakdown by the original targets follows:

**Table 2-3: Final number of interviews**

Group	Target	Achieved	% Of Target
Māori	300	340*	113
Pacific	300	345*	115
Young people**	300	414	138
Other***	700	996	142
<b>Total</b>	<b>1,300</b>	<b>1,646</b>	<b>127</b>

Notes: \* Includes 35 respondents of both Māori and Pacific ethnicity; \*\* Young people (aged 15-24 years) is not a mutually exclusive category and are also within the other categories; \*\*\* All other ethnicities

## 2.10 RESPONSE RATE

The main measure used to assess the overall quality of a survey is the response rate. The response rate is a measure of how many people, from those selected to take part in the survey, actually participated. The response rate reflects the proportion of people interviewed from those who were selected for the sample, and describes the success of the study in terms of achieving cooperation from the population being measured. A high response rate means the survey results are more representative of the target population.

The response rate for a PPS survey is calculated according to internationally approved standards (RR3 in The American Association for Public Opinion Research (2016) and the “full response rate” in Lynn et.al, (2001)). The formula is:

$$RR_i = \frac{a_i}{a_i + d_i + e_i}$$

Where  $e_i$  is the estimated number of eligibles from the instances of eligibility not established.

$$e_i = c_i \times \frac{a_i + d_i}{a_i + d_i + b_i}$$

The letters in the formula correspond to the various categories of outcomes from the call attempts of the interviewers. The subscript 'i' refers to the *i*th PSU (meshblock).

The same response rate formula and estimation of the number of eligibles were also used in the NZ Health Survey, the NZ Crime and Safety Survey, and the NZ Alcohol and Drug Use Survey, among others.

**Table 2-4: Response rate calculation components**

Category	Outcomes
Interviews ( $a_i$ )	Interviews
Not eligible ( $b_i$ )	Not Eligible
Eligibility not established ( $c_i$ )	No Reply, Access Denied, Screened Household Refusal, Screened Household Language Issues, Not Visited, Other
Eligible non-response ( $d_i$ )	Respondent Refusal, Not Available, Core Household Refusal, Core Household Language Issues, Partial

The outcomes for all dwellings visited are detailed in the following table:

**Table 2-5: Outcomes for all dwellings visited**

Outcome	Code	Outcome Description	Total Number	Category
Interview	I	Survey fully completed	1,646	Interviews ( $a_i$ )
Not Eligible	NE	No eligible respondent in the dwelling	2,557	Not eligible ( $b_i$ )
Not Occupied (Vacant)	V	Dwelling determined as vacant following all call-back attempts	245	Out of frame
Not a Dwelling/Empty Section	NDE	Selected address is not a residential dwelling or is an empty section	63	
No Reply	NR	Dwelling occupied, but no reply following all call-back attempts	241	Eligibility not established ( $c_i$ )
Screened Household Language Issues	SL	Household members cannot understand the surveyor or any of the translated materials	4	
Not Visited	NV	Address not visited	0	
Other	OTH	Call back, danger, dogs etc.	48	
Screened Household Refusal	SHR	Decline received by someone on behalf of the whole household for a screened household before screening has taken place	101	Eligible non-response ( $d_i$ )
Core Household Refusal	CHR	Decline received by someone on behalf of the whole household for a core household	192	
Respondent Refusal	RR	Decline by an individual respondent after they have been selected	13	
Core Household Language Issues	CL	Household members cannot understand the surveyor or any of the translated materials	9	
Not Available	NA	Respondent selected but not available to complete an interview	245	
Partial	P	Interview only partially completed	5	
<b>Dwellings Visited</b>			<b>5,369</b>	

Unweighted response rates are calculated using the raw counts and reflect the success of the survey in terms of being able to get people selected to participate, whereas weighted response rates take probability of selection into account and reflect the success of the survey in terms of the population being measured. The unweighted and weighted response rates would be the same in the case where every person selected for the survey has the same probability of selection. In the NZMHS, the need to oversample some groups led to people having different chances of selection, and consequently there was a difference in the weighted and unweighted response rate calculations.

### **2.10.1 Unweighted Response Rate**

The unweighted response rate is calculated at the meshblock level first. The result is then averaged using a weighting of the estimated number of eligible respondents selected. Vacant dwellings and selected addresses which turn out not to contain a private dwelling (e.g. empty sections, businesses) are considered 'out of frame' and are not included in the calculations. Using this method, a separate unweighted response rate was calculated for each of the sample components: Core Main (unscreened households in core meshblocks); Core screened (screened households in core meshblocks); and Pacific (screened households in the Pacific stratum).

### **2.10.2 Weighted Response Rate**

The weighted response rate was calculated for each of the sample components (Core Main, Core Screened and Pacific). The weighting variables applied to each PSU of the relevant component were: the inverse of the probability of the PSU selection within the component sample frame; and the inverse of the probability of the dwelling selection within the PSU. The product of these two variables was applied to the estimate of the eligible dwellings within the PSU. The overall response rate within each component was calculated as the average of the PSU response rates, weighted by the estimated number of eligibles within each PSU. The overall weighted response rate is the average of the component response rate, weighted by the total of the weighted estimated eligibles within each component. The weight applied to the estimated eligibles within each PSU, in this case, is the inverse of the probability of the PSU selection within the component sample frame.

As can be seen in Table 2-6, the overall unweighted response rate for the 2016 NZMHS for all components is 71.4%, whilst, the overall weighted response rate for all components is 75.0%.

In 2015, the unweighted response rate for the NZMHS was 58.9% and the weighted response rate was 57.8%.

Table 2-6: Response rate

Component	Response Rate	
	Unweighted	Weighted
Core main	63.9%	63.9%
Core screened	78.9%	78.7%
Pacific	81.6%	81.9%
<b>Overall</b>	<b>71.4%</b>	<b>75.0%</b>

## 2.11 INTERVIEW DURATION

The mean interview duration for the CAPI survey was 27 minutes and the median 24 minutes. This is excluding seven outliers. There was a wide range of completion times, however, as is shown below.

Table 2-7: Interview duration

Minutes	Frequency	Percent	Cumulative Frequency	Cumulative Percent
15 or less	100	6.1	100	6.1
16-20	371	22.5	471	28.6
21-25	452	27.5	923	56.1
26-30	299	18.2	1222	74.2
31-40	271	16.5	1493	90.7
41-100	146	8.9	1639	99.6
Outliers 101+	7	0.4	1646	100.0



### 3. DESIGN EFFECT

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The design effect (DEFF) was used to measure net effect in the 2016 NZMHS. The DEFF is the ratio of the variance (a measure of precision) of an estimate achieved by a complex design relative to the variance of the same estimate that would be achieved by a simple random sample of the same size. The closer the DEFF is to 1, the closer the design is to simple random sampling. Design effects of between 2 and 4 are typical in population health surveys, which means the variance is larger than would have been obtained using a simple random sample. A complex design like that used in the 2016 NZMHS is less precise than a simple random sample with the same sample size, but is much more precise than could be achieved by a simple random sample with the same budget. Nevertheless, DEFFs should not be too large. It is appropriate for weights to vary across the sample, otherwise it would not be possible for Māori and Pacific peoples to have an increased chance of selection in the sample. If the variation in weights is too extreme, the DEFF will be very large, and this would be counter-productive for all statistics, even for Māori and other sub-population groups.

The methods to sample sub-populations for the 2016 NZMHS were used to ensure the sample design was appropriate for achieving adequate precision for national and sub-population estimates within the survey budget. The DEFF was calculated by dividing the variance from the sample weighted proportion by an estimate of the variance of an unrestricted sample with unknown parameters, as estimated from the NZMHS sample:  $\frac{\text{proportion} \times (1 - \text{proportion})}{\text{sample size}}$

Note that the design effects are different for each statistic and for each sub-population. Table 3-1 presents the design effects for several key indicators

**Table 3-1: Design effects for the key indicator from the 2016 NZMHS by prioritised ethnic group**

Indicator	Ethnic group	Design effect
People in New Zealand could identify at least two sources for help with depression	Māori	2.82
	Pacific	3.17
	Asian	2.04
	European/Other	2.46
	Total	3.26
Cultural connectedness: People in New Zealand feel strongly connected and maintain a strong connection to their culture.	Māori	1.46
	Pacific	5.60
	Asian	1.08
	European/Other	1.70
	Total	2.13
Social Isolation: People in New Zealand feel isolated from others most or all of the time over the last four weeks.	Māori	1.52
	Pacific	1.04
	Asian	1.79
	European/Other	0.93
	Total	1.45

## 4. DATA PREPARATION

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### 4.1 MISSING VALUES

The NZMHS uses three key demographic variables (age, gender and ethnicity) for post-stratification weight (addressed in the next section), so it is important for the three key variables to contain no missing values. Replacement values were calculated using various, depending on the type of variables.

- Continuous variable: age data (in years) was imputed for one male participant who worked part time using the mean age of all males who work part time. The imputed age category was 35 to 44 years.
- Categorical variable: ethnicity data was imputed for two people who answered “Don’t know” to the ethnicity question in the main questionnaire, using their selection ethnicity.

### 4.1 DATA CLEANING

Comprehensive data checking procedures were undertaken including checking for unusual codes, patterns of answers, and patterns of system missing values. Data were cleaned and screened for any routing issues. For example, those participants who answered as never hearing about “any New Zealand websites that can assist people to find out about depression” but then also provided a name of a website. The name of the website for these participants was removed from the dataset.

## 5. DATA WEIGHTING PROCEDURES

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Weighting was applied to the 2016 NZMHS to ensure that no specific population was over- or under-represented in the survey sample and to ensure that it reflected the underlying New Zealand population. Estimation weights were used to achieve this, and can be thought of as the number of people in the population represented by a given survey participant. Weights were designed to reflect the probabilities of selection for each respondent, and to make use of benchmarks to the New Zealand estimated resident population, to correct any discrepancies between the sample and the population. This improved the precision of estimates and reduced selection bias. The weighting was performed in Stata, version 13. With reference to Table 5-1, five factors are included in the weight calculation: sampling units, strata, sampling weight, post-strata (benchmark group) and post-stratum weight.

**Table 5-1: Weight variables used in the 2016 NZMHS**

Survey data setting in Stata	Description
Sampling units	An identification of the meshblock where the respondent was interviewed; the smallest geographical unit based on the 2013 New Zealand Census.
Strata	A categorical variable which is composed of five geographical strata and the Pacific stratum.
Sampling weight	The inverse probability of a participant to be selected to participate in the survey. This was adjusted for the response rate and under-coverage of meshblocks.
Post-strata	An identifier of age, gender and ethnicity grouping, also called benchmark groups.
Post-stratum weight	The New Zealand estimated resident population for each post-strata group.

## 5.1 PRIMARY SAMPLING UNIT

The identification number of meshblocks from 2013 census was treated as the sampling unit variable. As mentioned earlier, based on the 2013 census data there were 46,637 eligible meshblocks which met the NZMHS selection criteria (discussed in Section 2). A total of 150 meshblocks were selected into the survey. There were two meshblocks where no participants responded to the survey. These were both in the Pacific stratum and of the households screened, there were no Pacific residents eligible to participate in the survey.

## 5.2 STRATIFICATION

The sample of frame of Qualifying Meshblocks was stratified into four urban categories:

- a) Main Urban Areas
- b) Secondary Urban Areas
- c) Minor Urban Areas
- d) Rural Areas
- e) Pacific-dense Areas

## 5.3 SAMPLING WEIGHT

### 5.3.1 Meshblock selection

Within each of these strata, the probability of a primary sampling unit (PSU) was calculated as follows:

$x_i$ : the Census 2013 count of permanent, private occupied dwellings.

$n$ : the number of PSUs selected from each stratum.

$N$ : the number of PSUs within the stratum frame.

The probability of PSU selection is calculated as follows:

$$\frac{n}{\sum_{i=1}^N x_i} \times x_i$$

The selection weight for a PSU within a stratum is the inverse of the probability of selection of that PSU.

As the frame of qualifying meshblocks did not encompass all meshblocks in NZ, the selection weights in each of the urban strata was extended by a factor which reflected this under-coverage. The factors are the ratios of the count of permanent private dwellings both inside and outside the sample frame compared with the count of such dwellings inside the sample frame. The counts are those from Census 2013.

The factors for each stratum were as follows:

- Main Urban Areas: 1.18
- Secondary Urban Areas: 1.21
- Minor Urban Areas: 1.32
- Rural Areas: 1.64
- Pacific-dense Areas: 1.32

The factors are different to those in 2015 because the sample frame in 2016 did not exclude remote areas.

### 5.3.2 Dwelling selection

Within each PSU, there were up to two ranges of dwellings sampled:

- a. Core Main: where all usual residents aged 15 years and older were eligible.
- b. Core Screened and Pacific Screened: where only usual residents of particular ethnicities or of a particular age range were eligible.

The dwelling weights within a PSU were calculated from the following variables:

- $y_i$ : the number of currently occupied dwellings, identified by in-field enumeration.
- $c_i$ : the number of dwellings approached for a Core Main sample interview.
- $d_i$ : the number of dwellings approached for a either a Core Screened or a Pacific Screened sample interview.

The probability of dwelling selection within the PSU for Core Main respondent is calculated as follows:

$$\frac{c_i}{y_i}$$

The probability of dwelling selection within the PSU for Core Screened or a Pacific Screened respondent is calculated as follows:

$$\frac{(c_i + d_i)}{y_i}$$

Note that in the Pacific-dense meshblocks, dwellings are only approached for Pacific screened interviews and  $c_i = 0$ .

The selection weight for a dwelling within a PSU is the inverse of the probability of selection of that dwelling within the PSU.

### 5.3.3 Respondent selection

The respondent weight within a dwelling is:

$$\frac{1}{e_j}$$

Where  $e_j$  is the number of eligible people in dwelling  $j$ .

The selection weight for a respondent within a dwelling is the inverse of the probability of selection of that respondent within the dwelling.

### 5.3.4 Overall

The overall inclusion probability for a respondent is the product of the above three components.

a. Core Main probability:

$$\frac{n}{\sum_{i=1}^N x_i} \times x_i \times \frac{c_i}{y_i} \times \frac{1}{e_j}$$

b. Core Screened or Pacific Screened:

$$\frac{n}{\sum_{i=1}^N x_i} \times x_i \times \frac{(c_i + d_i)}{y_i} \times \frac{1}{e_j}$$

The overall selection weight for a respondent is the inverse of the overall inclusion probability of selection of that respondent.

### 5.3.5 Response Rate Adjustment to Selection Weights

To allow for the impact of non-response on the sums of selection weights, each overall selection weight was divided by the applicable response rate.

There were three applicable response rates:

- a) The rate calculated for those sampled dwellings in the Core PSU's where no screening took place.
- b) The rate calculated for those sampled dwellings in the Core PSU's where screening did take place.
- c) The rate for all sampled dwellings in the Pacific PSU's.

## 5.4 POST-STRATIFICATION WEIGHT

Benchmarking is a post-stratification adjustment that ensures the proportion of particular groups in the sample match the proportions in the population. Benchmarking refers to an adjustment of the data to ensure they are representative of the New Zealand population after selection weights have been applied. The 2016 NZMHS was benchmarked using the following:

- a) Gender (male and female)
- b) Prioritised ethnicity (Māori, Pacific, and Other/European)
- c) Age Group (15-24 years, 25-34 years, 35-44 years, 45-54 years and 55 and over)

In total, there are 30 gender/age/ethnicity groups.

The survey is designed to represent the resident population of New Zealand aged over 15 years. Projections produced by Statistics New Zealand according to assumptions specified by the Ministry of Health were used to benchmark to the population. These projections have the 2013 Census usually resident population counts as their starting point.

For benchmarking, the gender identity of respondents in the 2016 NZMHS was used. "Gender diverse" was a response option and respondents could choose not to answer the gender identity question. To benchmark the 9 people who chose these options, the interviewer's observation of the respondent's gender as either male or female was used.

The ethnicity criterion in the NZMHS allows for multiple responses, so if the respondent was sampled from the Others stratum, ethnicity was prioritised in order of: Māori, Pacific, and Other/European. If the respondent was from the Pacific-dense stratum, ethnicity was prioritised in the order of: Pacific, Māori, and Other/European.

The magnitude of the post-stratification adjustment for each benchmark group was calculated as the ratio of the 'expected' population (the estimated resident population) to the 'observed'



population (the sum of the response rate and under-coverage adjusted selection weights for each benchmark group). The adjustment ranged from 0.448 to 2.818. The full list of benchmark adjustments is presented in Table 5-2.

**Table 5-2: Benchmark adjustments in the 2016 NZMHS**

Age group	Māori		Pacific		Other/European	
	Female	Male	Female	Male	Female	Male
15-24	1.696	1.081	1.121	1.042	0.448	0.448
25-34	2.818	2.168	1.088	1.599	1.032	1.956
35-44	0.831	1.080	1.552	2.297	1.480	1.649
45-54	1.256	1.600	0.866	2.781	1.217	1.522
55+	1.326	1.292	1.845	1.931	1.129	1.369

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## APPENDIX: MATERIAL PROVIDED TO PARTICIPANTS

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### Letters of invitation



Level 4 | ASB House | 101 The Terrace | Wellington 6011  
PO Box 2142 | Wellington 6140 | New Zealand  
Ph +64 4 917 0060  
F +64 4 473 0890

[Date]

[Address]

[Address]

[Address]

#### **Invitation to participate in the New Zealand Mental Health Survey**

We would like to invite your household to take part in the New Zealand Mental Health Survey, which is being completed on behalf of the Health Promotion Agency. This important survey collects information about New Zealanders' views and experiences in relation to mental health. This survey is the only way that we obtain vital information needed to understand issues relating to mental health in New Zealand.

This is the second time that the survey has been conducted and about 1,300 people will take part from across the country. Your household has been randomly chosen to participate. We rely on the goodwill and voluntary cooperation of those invited to take part to make the survey a success. Any information provided as part of the survey is confidential.

In the next few weeks, [interviewer's name], an interviewer from CBG Health Research Limited, will visit your address to invite your household to take part. They will be wearing an identification badge. The interviewer will explain more about the survey when they visit and they will be able to answer any questions that you might have. If the interviewer visits at a time that does not suit you, please let them know and they will arrange to visit at a better time.

The enclosed pamphlet provides further information about the survey. If you have questions or would prefer to arrange a time for the interviewer to visit you, please do not hesitate to call the survey helpline between 8.30am and 9pm seven days per week on 0800 478 783, or email [info@cbg.co.nz](mailto:info@cbg.co.nz). Alternatively, txt 'SURVEY' + your name + address to 875 and a representative will call you to arrange a time (txts cost 20c).

Thank you in advance for your help with this important work.

A handwritten signature in black ink, appearing to read 'Karen McBride-Henry', is written above the printed name.

Karen McBride-Henry  
**Principal Researcher**

571643v1



Level 4 | ASB House | 101 The Terrace | Wellington 6011  
PO Box 2142 | Wellington 6140 | New Zealand  
Ph +64 4 917 0060  
F +64 4 473 0890

[Date]

[Address]

[Address]

[Address]

### **Invitation to participate in the New Zealand Mental Health Survey**

We would like to inform you that someone from your household might be invited to take part in the New Zealand Mental Health Survey, which is being completed on behalf of the Health Promotion Agency. This important survey collects information about New Zealanders' views and experiences in relation to mental health. This survey is the only way that we obtain vital information needed to understand issues relating to mental health in New Zealand.

This is the second time that the survey has been conducted and about 1,300 people will take part from across the country. Your household has been randomly chosen to participate. We rely on the goodwill and voluntary cooperation of those invited to take part to make the survey a success. Any information provided as part of the survey is confidential.

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Thank you in advance for your help with this important work.

A handwritten signature in black ink, appearing to read 'Karen McBride-Henry', written over a horizontal line.

Karen McBride-Henry  
**Principal Researcher**

571644v1

## Pamphlet accompanying letter of invitation

**When we visit**

If you are out when we visit, we would still like to interview someone in your household for the 2016 New Zealand Mental Health Survey.

Our interviewer will visit again shortly to arrange a time that suits you. If you prefer, you can call the survey helpline on **0800 478 783** or email **info@cbg.co.nz** to arrange a time that suits you.

**Your rights**

If you have any questions about your rights as a participant in this survey you can contact an independent health and disability advocate for free advice.

Telephone **0800 555 050**  
or email **advocacy@hdc.org.nz**


**More information**

If you want to know more about this survey, please call CBG Health Research on **0800 478 783** or visit HPA's website at **hpa.org.nz**

**We appreciate your help.**

HPA is a New Zealand government agency that promotes health and encourages healthy lifestyles. For more information visit **hpa.org.nz**



MH077 | MAY 2016



*Improve New Zealanders' mental health*

# Take part in the 2016 New Zealand Mental Health Survey

A nationwide survey for the Health Promotion Agency





### **What is the New Zealand Mental Health Survey?**

This survey is about New Zealanders' views and experiences relating to mental health. This is the second time the New Zealand Mental Health Survey will be run, but we plan to conduct it every year for at least the next two years.

### **Who is carrying out the survey?**

CBG Health Research Ltd, an independent New Zealand research company, is carrying out the survey for the Health Promotion Agency (HPA).

HPA is a New Zealand government agency that promotes health and encourages healthy lifestyles by developing and delivering health promotion programmes for the Ministry of Health.

The New Zealand Mental Health Survey has been approved by the New Zealand Ethics Committee.

### **Why should I take part?**

Your views and experiences are important, even if you do not have a mental illness or don't know anyone who does. Your answers will help identify any changes in people's views and experiences since the last survey in 2015.

This survey is voluntary, however we really appreciate your participation.

### **How are people chosen to take part?**

Addresses from throughout New Zealand are randomly selected. One person (aged 15-years-and-over) from your household will be chosen at random by the interviewer and asked to take part in the survey.

About 1,300 people will take part in this survey.

### **Where and when will I be interviewed?**

In your own home, by an interviewer wearing photo identification. If you are busy when the interviewer visits, please ask them to come back at a day and time that suits you.

### **What sort of questions will I be asked?**

You will be asked questions on different topics related to mental health. If you don't want to answer a question, you don't have to; just tell the interviewer.

### **How long will it take?**

The interview will take about 30 minutes. The interviewer will be happy to arrange a day and time that suits you.

### **Can I have an interpreter?**

Yes, if you would like an interpreter for any language, including New Zealand Sign Language, please let your interviewer know or call the free survey information line on **0800 478 783**.

### **What happens to my answers?**

Your information will always be kept confidential and is protected by the Privacy Act 1993. This means the interviewer will not disclose your information with anyone else, and no-one will know that you have taken part in this survey. No person's name or address is connected to the answers they give. Everyone's answers will be grouped to report on the survey results.

### **What will the information be used for?**

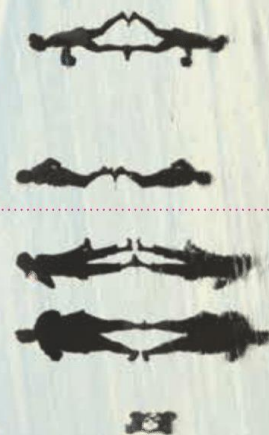
The information collected from the survey will be used by HPA to:

- develop advice and information about mental health
- find practical ways to help New Zealanders better understand issues relating to mental health.

### **Can I find out about the results from the survey?**

Some of the results from the survey will be available by the end of 2016 on HPA's website at [hpa.org.nz](http://hpa.org.nz).

**Thank you for your time.**



## Thank you card

Provided to all participants following the interview.

# Thank you

for participating in  
the 2016 Mental  
Health Survey



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## Support options

If you would like further information or advice about any issues raised in the survey, you can contact a helpline or support organisation. Some that may be useful to you are listed below:

### Help for parents, family and friends

#### Supporting Families In Mental Illness

0800 732 825 (for families and whānau supporting a loved one who has a mental illness).

#### Websites

**The Lowdown**  
thelowdown.co.nz  
Or free text 5626

**depression.org.nz**

### Helplines

**Anxiety Helpline**  
0800 269 4389

**Depression Helpline**  
0800 111 757

**Lifeline**  
0800 543 354

**Suicide Crisis Helpline**  
0508 828 865

**If you need urgent help now, ring 111.**

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## Additional support card

Provided at the interviewer's discretion to participants who may benefit from additional support.



**If you are worried**  
about yourself or are  
having thoughts about  
hurting yourself, you  
need to reach out and  
**talk** to someone who's  
trained to help you  
**straight away.**

**Talk to someone who  
can help right now:**  
**The Depression Helpline**  
is available 24 hours a day  
on 0800 111 757

Once you are confident  
you are OK there are  
some things you can  
do to help yourself get  
through depression or  
anxiety, talk to a friend  
or check out these  
websites:  
[depression.org.nz](http://depression.org.nz) or  
[thelowdown.co.nz](http://thelowdown.co.nz)

**Call 111 if you need urgent help now**

**Other support options**

If you would like further information or advice about anything covered in this survey, you can contact one of the helplines or support organisations listed below:

**Helplines**

<b>Anxiety Helpline</b>	0800 269 4389
<b>Lifeline</b>	0800 543 354
<b>Suicide Crisis Helpline</b>	0508 828 865

**Help for children and young people**

**What's Up**

0800 942 8787  
(for 5–18 year olds).  
Phone counselling is  
available Monday to  
Friday, 1pm–10pm and  
weekends, 3pm–10pm.  
Online chat is available  
5pm–10pm daily  
([whatsup.co.nz](http://whatsup.co.nz)).

**Youthline**

0800 376 633, free text  
234 or email  
[talk@youthline.co.nz](mailto:talk@youthline.co.nz)

**The Lowdown**

[thelowdown.co.nz](http://thelowdown.co.nz) or email  
[team@thelowdown.co.nz](mailto:team@thelowdown.co.nz)  
or free txt 5626

**Help for parents, family and friends**

**Skylight**

0800 299 100  
(for support through  
trauma, loss and grief;  
9am–5pm weekdays).

**Supporting Families  
In Mental Illness**

0800 732 825  
(for families and whānau  
supporting a loved one  
who has experience of  
mental illness)

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