

2018 Mental Health and Wellbeing Survey

Methodology Report

August 2019

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EXECUTIVE SUMMARY

The following table provides a summary of the key methodological elements of the New Zealand Mental Health Monitor (NZMHM) 2018.

Overview	Nationwide, face-to-face interviews
Objective	<p>To measure progress against HPA's existing programme plans and to provide quality measures for Statement of Intent reporting requirements</p> <p>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</p>
Target population	Adults aged 15 years and over living in New Zealand
Frequency	2015, 2016 and 2018
Primary sampling unit (PSU)	<p>Using 2013 Census data, meshblocks with 30 or more were included in the sampling frame. The meshblocks were divided into two categories:</p> <ul style="list-style-type: none">• Core (15 years and over of any ethnicity)• Screened (belonging to the boosted samples: Maori, Pacific or young people)
Sampling method	Multi-stage sampling: meshblock selection, household selection, and individual selection
Interview period	30 May to 6 November 2018
Sample size	1,296 participants
Unweighted response rates	81.2%

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GLOSSARY OF ABBREVIATIONS AND TERMS

CBG	CBG Health Research Ltd, the research provider for the HLS
CAPI	Computer Assisted Personal Interviewing
DEFF	Design Effect
HLS	Health and Lifestyles Survey
HPA	Health Promotion Agency/Te Hiringa Hauora
MHWS	Mental Health and Wellbeing Survey
NDI	National Depression Initiative
PAF	NZ Post Postal Address File
PPS	Probability Proportional to Size
PSU	Primary Sampling Units

1. INTRODUCTION

The Mental Health and Wellbeing Survey (MHWS) is a nationally-representative monitor 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 MHWS 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. In 2015 the HPA sought to develop a new nationally-representative monitor aimed at providing regular and robust quantitative data on key mental issues in New Zealand. Since then, the survey has been repeated in 2016 and 2018. The monitor 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/Te Hiringa Hauora (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 (2017-2021, page 13), 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 and thelowdown.org.nz) and campaign messages. The NDI aims to reduce the impact of depression and anxiety on the lives of those in New Zealand by aiding early recognition, appropriate help-seeking including self-help, and providing reliable information to influence the community to support people who experience depression and anxiety.
- 'Like Minds, Like Mine' aims to reduce the discrimination faced by people with experience of mental distress as a major barrier to their recovery. The programme 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 2018 MHWS was voluntary and this was clearly explained to potential participants in the Monitor pamphlet, as well as on HPA website. The voluntary nature of the monitor was also verbally explained by the interviewer and detailed on the consent form which was signed by all

respondents prior to the monitor being conducted. Respondents could withdraw from the survey at any stage or choose to not answer specific questions. The 2018 MHWS was approved by the New Zealand Ethics Committee.

The monitor methodology needed to take into consideration that the 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 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 monitors 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

2.1 RATIONALE FOR THE APPROACH

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

- Scientifically sample not just general members of the public, but representative samples of Māori, Pacific peoples, and those aged 15 to 19.
- The survey method needs to be repeatable.
- Take into consideration that the issue of mental health for some people is highly sensitive.
- Maximise public participation.
- Needs to adhere to budget constraints.

Large scale New Zealand government surveys with similar requirements (eg. NZ Health Survey, NZ Crime and Victims Survey, International Survey of Adult Skills) commonly make use of face-to-face interviewing, and use probability proportional to size (PPS) sampling (described below). 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.

Computer Assisted Personal Interviewing (CAPI) 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 question 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, households were sampled and also the people within these households. 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. Showcards 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	Sample size
Māori	268
Pacific	245
Other	783
Total	1,296

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

2.4 QUESTIONNAIRE CONTENT

2.4.1 Questionnaire Development

The MHWS questionnaire was largely based on the 2015 monitor. 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 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 monitor was first conducted with 60 respondents. Results from the pilot monitor demonstrated that the questionnaire was performing to task and only minor changes in wording were made to the full-scale monitor.

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 who 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 0.83.

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.

The 2015 survey included both sections, while the 2016 and 2018 surveys only included the first section. 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 0.39 (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 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 data from the CAMI items in the 2015 MHWS, 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 three subscales:

- The benevolence subscale which assesses paternalistic, sympathetic attitudes towards people with mental illnesses. Cronbach’s alpha for this sub-scale was 0.72 (questions E1, E3, E5 and E7 in the questionnaire).
- The community mental health ideology (CMHI) subscale, which assesses attitudes relating to the inclusion of people experiencing mental distress in the community. Cronbach’s alpha for this sub-scale was 0.80 (questions E2, E4, E6, E8 and E9 in the questionnaire).
- The workplace inclusiveness subscale 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 MHWS. Cronbach’s alpha for this sub-scale was 0.77 (questions E10, E11, E12, E13 and E15 in the questionnaire).

The NZCAMI can be used as a single 14 item scale or by using the subscales individually. The entire NZCAMI scale had high internal consistency with Cronbach’s alpha of 0.89.

Participants rated themselves on a 5-point scale from 1 (strongly disagree) to 5 (strongly agree) for each item. 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 NZCAMI scores range from 14 to 70, with higher scores being indicative of a more positive self-reported attitude towards people with mental distress in the community.

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. 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 0.88 (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. 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 0.90 (questions H1 to H7 in the questionnaire).

Kessler psychological distress (K-10)

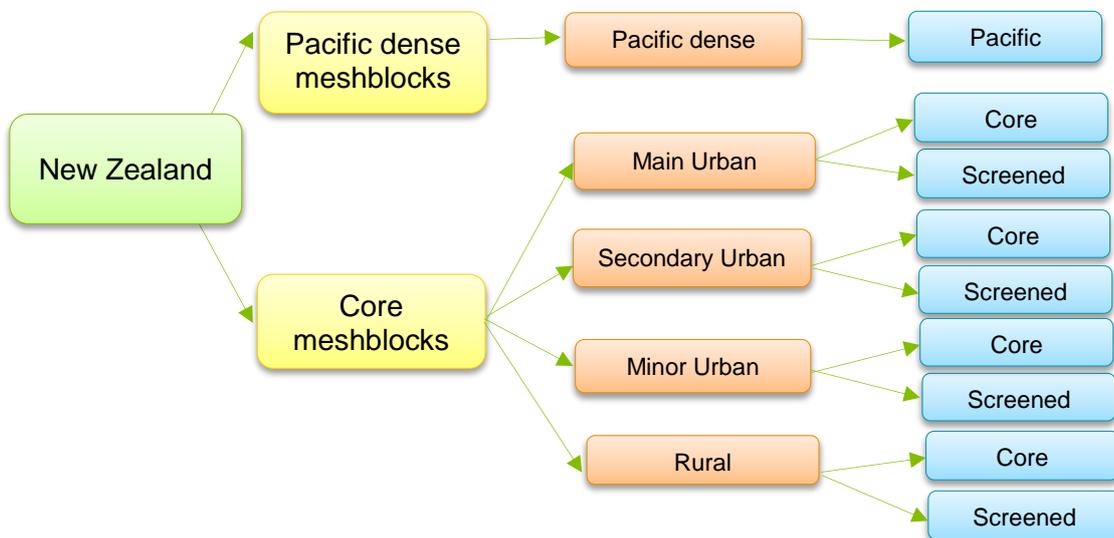
The K-10 (Kessler et al., 2002) is designed as a screening tool for mental health disorders present during the previous four weeks. An example of an item on the questionnaire is: ‘In the past four weeks, about how often did you feel tired out for no good reason?’

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. 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 SAMPLE SELECTION PROCEDURE

The 2018 survey sample design was based on the approach used in 2016. The survey used a three-stage selection procedure. As illustrated in Figure 2-1 below this was: stratifying and selecting meshblocks; selecting households from each meshblock; and selecting an individual from within each household to complete the questionnaire. The following provides a more detailed description of the sampling and recruitment procedures. The expression 'core' in each meshblock refers to households where occupants aged 15 years and over of any eligible ethnicity. The expression 'screened' refers to households where only individuals screened as belonging to one of the boosted samples (Māori, Pacific or young people) were eligible.

Figure 2-1: Multi-stage selection procedure



Stage 1: Stratifying and selecting meshblocks

In order to achieve the target sample and subsample numbers, 155 meshblocks were selected using PPS sampling (described in Table 2-2). Of these, 35 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 comprised 20 per cent or more houses containing one of more residents aged 15 years and over 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 designed to be achievable within the 120 remaining ‘core meshblocks’.

Table 2-2: Meshblock selection

Procedure	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:	Meshblocks with fewer than 30 dwellings were removed. Coverage of all NZ private dwellings was 80%.
Stratification:	<p>The sequence for stratification proceeded as follows.</p> <p>The frame of Qualifying Meshblocks was first separated into two major strata: Pacific-dense meshblocks and Others.</p> <p>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.</p> <p>There was no overlapping with meshblocks contained in any of the Core 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: Main Urban (85); Secondary Urban (7); Minor Urban (11); Rural: (17). The number taken from the Pacific-dense stratum was 35. This reflected the requirement for a particular minimum of Pasifika respondents and also the requirement to adequately cover the variation.

CBG applied to NZPost to obtain lists of residential postal delivery points within the selected meshblocks. All addresses within a meshblock were 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 was randomly selected between 0 and the sampling interval. The final sample of meshblocks (MBs) were distributed across the District Health Boards and can be viewed in Table 2-3.

Table 2-3: Final sample of meshblocks by District Health Boards

DHB name	Core	Pacific dense	Total
Northland	5	-	5
Waitemata	13	4	17
Auckland	13	9	22
Counties Manukau	10	15	25
Waikato	12	1	13
Lakes	2	-	2
Bay of Plenty	7	-	7
Tairāwhiti	1	-	1
Taranaki	3	-	3
Hawke's Bay	5	-	5
Whanganui	2	-	2
MidCentral	3	-	3
Hutt Valley	-	2	2
Capital and Coast	9	4	13
Wairarapa	1	-	1
Nelson	5	-	5
Marlborough	5	-	5
West Coast	2	-	2
Canterbury	15	-	15
South Canterbury	2	-	2
Southern	10	-	10
Total	120	35	155

Stage 2: Selecting households within meshblocks

In each of the 120 core meshblocks, 10 randomly selected addresses were assigned as 'core households' from which anyone aged 15 and over could be recruited to do the survey. A further 22 addresses (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 35 Pacific-dense meshblocks, 32 addresses were screened just for Pacific people aged 15 years and over¹. Further details of household selection procedures are presented in Table 2-4.

¹ In 2016, 150 meshblocks were selected in total, of which 30 were Pacific-dense. In core meshblocks, 13 core and 22 screened houses were selected, whilst in Pacific-dense meshblocks, 32 houses were selected. This change in sampling design was intended to more-efficiently collect the target number of interviews, compared with the approach in 2016 which yielded more than required.

Table 2-4: Household selection

Procedure	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 th household was selected.
Core Sample Households:	10 core households were selected from each of the 120 Core meshblocks according to the meshblock skip.
Screened Households:	In the 120 Core meshblocks (after the 10 Core Main sampled addresses) a further 22 addresses were selected, where meshblock size permitted. These addresses 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 35 Pacific-dense meshblocks, 32 addresses 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.

The MHWS's time in field (May to November 2018) overlapped with another HPA monitor, the Health and Lifestyles Survey (HLS), which had the same methodology for meshblock selection. This meant that the same meshblock could be chosen for both surveys and the household selection technique described above may have resulted in the same household being selected into both HLS and MHWS. This could increase the chance of a household declining to be involved in one or both surveys. To avoid this issue, panel selection was implemented in the two meshblocks using the following steps.

First the addresses were sorted by street name and house number. This ordered list of houses were then given a number from 1 to total number of households in the meshblock. The households were then assigned to a panel. The number of panels was pre-determined by proportions of screened households desired. Households were assigned to a panel using the formula below, where the remainder was the panel number.

$$\text{Remainder} = \frac{\text{assigned household number in meshblock}}{\text{number of panels}}$$

Panels were randomly assigned to survey groups in the HLS (Maori/Pacific screened, Pacific screened and core) and MHWS (Pacific Screened or Māori/Pacific/Youth Screened and core). As the shared HLS and MHWS meshblocks were small, sample size was sacrificed to ensure that no households were selected for both surveys. Interested readers for a hypothetical example of how the panel selection was calculated are directed to the HLS methodology report (Health Promotion Agency, 2018, page 13).

Stage 3: Select respondents within households

A respondent from within each sampled dwelling was selected by the interviewer, after 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 subsequently coded as either Māori, Pacific or Other (or any combination of the three groups). CBG's sample management software then randomly selected one respondent to take part from all eligible occupants, see Table 2-5 for details.

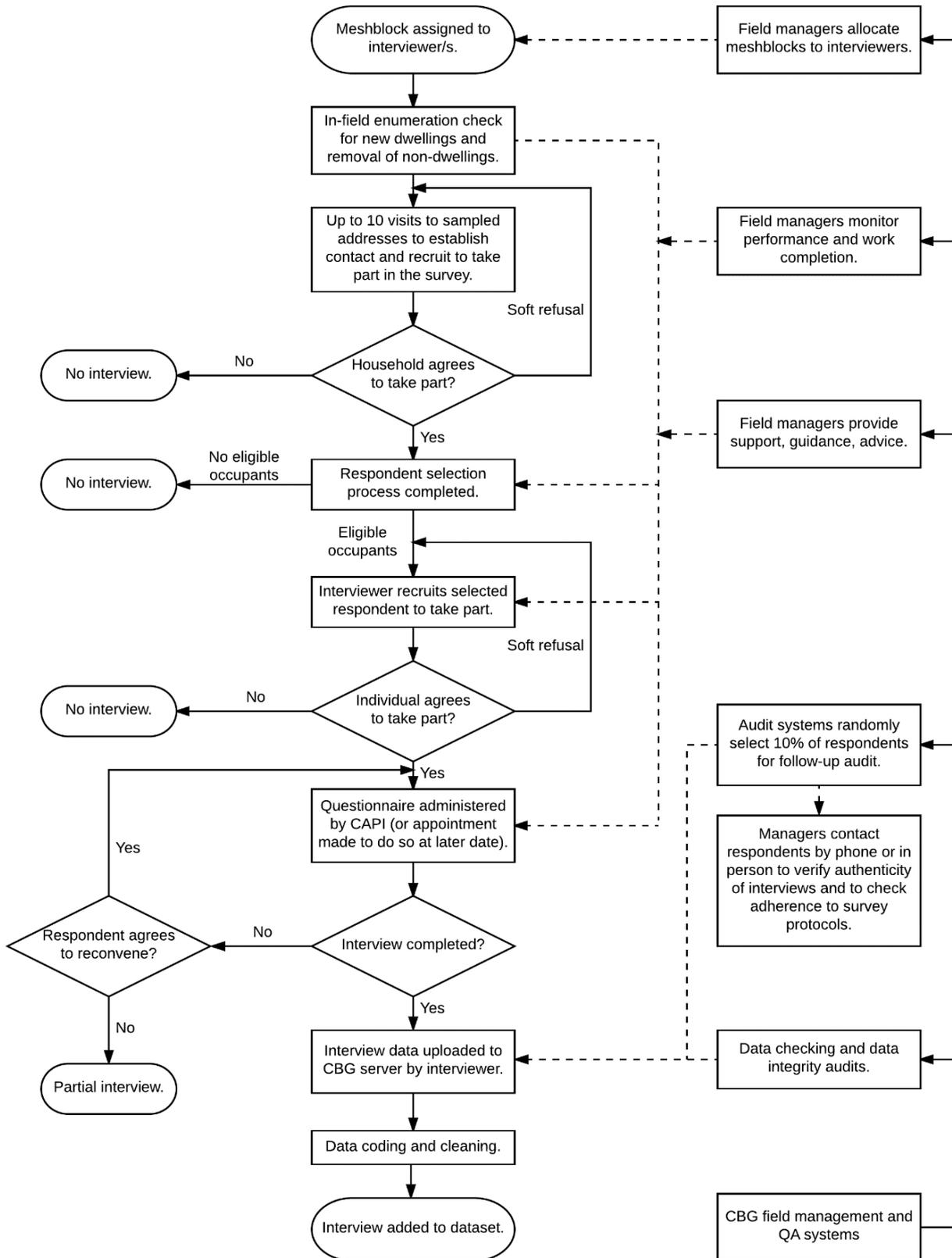
Table 2-5: Respondent selection

Procedure	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 household 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 15% 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. Figure 2-2, a schematic explains some detail.

Figure 2-2: Management of Interviewing Process



2.7 PILOT SURVEY

A full dress rehearsal (pilot) of the CAPI survey was undertaken in April 2018, with a total of 60 interviews being completed. Three interviewers completed the interviews across eight meshblocks in three 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. Is the questionnaire routing/logic working as expected, and is it fit for purpose?
2. Based on an analysis of open-ended responses, do additional response categories need to be added (or existing ones modified)?
3. Are there problems with any new questions?
4. Does the CAPI software perform as expected and does the electronic sample management behave as expected?
5. Is the interviewer training appropriate, and does it adequately prepare them for fieldwork?
6. Are the survey communications appropriate?
7. What is the average survey duration?
8. How do 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 17 May 2018. Fieldwork commenced on 30 May 2018 and extended to 6th November 2018. A summary of the main tasks of the interviewer follows:

- Performing an enumeration-check of each allocated meshblock. Adding any 'permanent private dwellings' which were 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 address to make contact with the occupants, and undertake the selection process. Following the selection process, trying to obtain interviews or appointments to interview with the selected respondent. Varying visits by time of day and day of week, according to survey protocols, in order to maximise the chance of making contact. Recording all visits and outcomes.

- At each house, introducing the survey to the door opener, and explaining the selection process. Using materials (letter of introduction, brochure, ID badge) to confirm authenticity and survey importance. Where the door-opener was agreeable, conducting the selection procedure.
- After completing the selection process, 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 and anxiety information sheets. Respondents aged 15 to 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 2018 Mental Health and Wellbeing 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".
- Each night, uploading completed interview and contact data to the CBG server.
- Attending weekly field staff meetings and liaising with field managers to discuss progress on each meshblock, raising issues as necessary.

To check the validity of the interviewers' work and respondent satisfaction with the survey process, 263 (19.7%) respondents were audited by CBG supervisors. Results indicated strong adherence to survey protocols. Ninety-five per cent of those interviewed reported that did not encounter any issues with participation and 99 per cent reported being satisfied, or extremely satisfied with the interviewer's conduct. When asked about their motivation for taking part, 59% of respondents chose to take part based on civic duty, or because they had an interest in the subject area.

2.9 INTERVIEWS ACHIEVED

The final number of interviews obtained by the methods described in this report was 1,333. A breakdown by the original targets follows in Table 2-6:

Table 2-6: Final number of interviews

Group	Target	Achieved	% Of Target
Māori	300	270*	90
Pacific	300	294*	98
Young people**	300	298	99
Other***	700	789	113
Total	1,300	1,333	103

Notes: * Includes 20 respondents of both Māori and Pacific ethnicity;

** Young people (aged 15 to 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 (see Table 2-7). 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 Health and Lifestyles Survey, NZ Health Survey, the NZ Crime and Victims Survey, and the NZ Alcohol and Drug Use Survey.

Table 2-7: 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 Table 2-8.

Table 2-8: Outcomes for all dwellings visited

Outcome	Code	Outcome Description	Total Number	Category
Interview	I	Survey fully completed	1,333	Interviews (a_i)
Not Eligible	NE	No eligible respondent in the dwelling	2,794	Not eligible (b_i)
Not Occupied (Vacant)	V	Dwelling determined as vacant following all call-back attempts	259	Out of frame
Not a Dwelling/Empty Section	NDE	Selected address is not a residential dwelling or is an empty section	122	
No Reply	NR	Dwelling occupied, but no reply following all call-back attempts	80	Eligibility not established (c_i)
Screened Household Language Issues	SL	Household members cannot understand the survey or any of the translated materials	0	
Not Visited	NV	Address not visited	0	
Other	OTH	Call back, danger, dogs etc.	34	
Screened Household Refusal	SHR	Decline received by someone on behalf of the whole household for a screened household before screening has taken place	59	
Core Household Refusal	CHR	Decline received by someone on behalf of the whole household for a core household	103	Eligible non-response (d_i)
Respondent Refusal	RR	Decline by an individual respondent after they have been selected	8	
Core Household Language Issues	CL	Household members cannot understand the survey or any of the translated materials	4	
Not Available	NA	Respondent selected but not available to complete an interview	126	
Partial	P	Interview only partially completed	11	
Dwellings Visited			4,933	

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 reflects 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 survey, 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 2-9, the overall unweighted response rate for the 2018 NZMHWS for all components is 81.2%, whilst, the overall weighted response rate for all components is 86%. The response rate was considerably higher compared to previous surveys. In 2016, the unweighted response rate for the survey was 71.4% and the weighted response rate was 75.0%. Whilst in 2015, the unweighted response rate was 58.9% and the weighted response rate was 57.8%.

Table 2-9: Response rate

Component	Response Rate	
	Unweighted	Weighted
Core main	75%	75%
Core screened	90.5%	90.5%
Pacific	81.7%	81.8%
Overall	81.2%	86%

2.11 INTERVIEW DURATION

The mean interview duration for the CAPI survey was 26 minutes and the median 24 minutes. There was a wide range of completion times, however, as is shown below.

Table 2-10: Interview duration

Minutes	Frequency	Percent
15 or less	111	8.3
16-20	263	19.7
21-25	344	25.8
26-30	286	21.5
31-40	202	15.2
41-100	127	9.5

3. DESIGN EFFECT

The design effect (DEFF) was used to measure net effect in the 2018 MHWS. The DEFF is the ratio of the variance (a measure of precision) of an estimate achieved with a complex survey 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 monitors, which means the variance is larger than would have been obtained using a simple random sample.

A complex design like that used in the 2018 MHWS 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 2018 MHWS were used to ensure the sample design was appropriate for achieving adequate precision for national and sub-population estimates within the Monitor 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 MHWS 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 2018 MHWS by prioritised ethnic group

Indicator	Ethnic group	Design effect
People in New Zealand could identify at least two sources for help with depression	Māori	1.83
	Pacific	2.01
	Asian	2.44
	European/Other	1.61
	Total	2.00
People in New Zealand feel strongly connected and maintain a strong connection to their culture.	Māori	2.32
	Pacific	1.80
	Asian	1.13
	European/Other	1.27
	Total	1.59
People in New Zealand feel isolated from others most or all of the time over the last four weeks.	Māori	2.30
	Pacific	1.24
	Asian	0.87
	European/Other	0.91
	Total	1.22

4. DATA PREPARATION

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

Weighting was applied to the 2018 MHWS to ensure that no specific population was over- or under-represented in the Monitor 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 15. 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: Survey weight variables

Monitor 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 Monitor. 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 MHWS selection criteria (discussed in Section 2). A total of 155 meshblocks were selected into the Monitor. There were two meshblocks where no participants responded to the monitor. These were both in the Pacific stratum and of the households screened, there were no Pacific residents eligible to participate in the monitor.

5.2 STRATIFICATION

The sample of frame of qualifying meshblocks was stratified into the following 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 are presented in Table 5-2.

Table 5-2: Factors for each stratum

Area	Factor
Main Urban	1.19
Secondary Urban	1.22
Minor Urban	1.32
Rural	1.64
Pacific-dense	1.22

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:

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

a. 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 2018 MHWS was benchmarked using the following:

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

The monitor 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 2018 MHWS 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 MHWS 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 0.50 to 4.83. The full list of benchmark adjustments is presented in Table 5-3.

Table 5-3: Benchmark adjustment

Age group	Māori		Pacific		Other/European	
	Female	Male	Female	Male	Female	Male
15 to 24	1.55	1.82	2.20	2.28	0.55	0.50
25 to 34	1.76	2.12	1.14	2.89	1.42	1.53
35 to 44	1.33	4.83	3.39	1.46	1.14	2.24
45 to 54	1.40	1.86	2.40	2.57	1.31	1.56
55+	1.82	2.24	1.33	2.64	1.32	1.52

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APPENDIX: MATERIALS PROVIDED TO PARTICIPANTS

Letters of invitation



Level 16 | 101 The Terrace | Wellington 6011
PO Box 2142 | Wellington 6140 | New Zealand

[Date]

[Address]

[Address]

[Address]

Dear Householder

I would like to invite your household to take part in the New Zealand Mental Health and Wellbeing Survey. About 1,300 people will take part from across the country, and your household has been randomly chosen to participate.

This important survey collects information about New Zealanders' views and experiences in relation to mental health and wellbeing. This survey is one of the ways that we obtain vital information needed to understand issues relating to mental health and wellbeing in New Zealand. This is the third time that the survey has been conducted.

In the next few weeks, [interviewer's name], an interviewer from CBG Health Research, 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.

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. Alternatively, txt 'SURVEY' + your name + address to 875 and a representative will call you to arrange a time (txts cost 20c).

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.

Please share this information with other members of your household.

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

A handwritten signature in black ink that reads 'Charles Sullivan'.

Charles Sullivan
Manager Research
Health Promotion Agency



Level 16 | 101 The Terrace | Wellington 6011
PO Box 2142 | Wellington 6140 | New Zealand

[Date]

[Address]

[Address]

[Address]

Dear Householder

I would like to inform you that someone from your household might be invited to take part in the New Zealand Mental Health and Wellbeing Survey. About 1,300 people will take part from across the country, and your household has been randomly chosen to participate.

This important survey collects information about New Zealanders' views and experiences in relation to mental health and wellbeing. This survey is one of the ways that we obtain vital information needed to understand issues relating to mental health and wellbeing in New Zealand. This is the third time that the survey has been conducted.

In the next few weeks, [interviewer's name], an interviewer from CBG Health Research, 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.

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. Alternatively, txt 'SURVEY' + your name + address to 875 and a representative will call you to arrange a time (txts cost 20c).

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.

Please share this information with other members of your household.

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

A handwritten signature in black ink that reads 'Charles Sullivan'.

Charles Sullivan
Manager Research
Health Promotion Agency

Pamphlet accompanying letter of invitation



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). This survey has been approved by the New Zealand Ethics Committee.

When we visit
If you are out when we visit, we would still like to interview someone in your household for this 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. Alternatively, **txt 'SURVEY' + your name + address to 875** and a representative will call you to arrange a time (texts cost 20c).

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.
The Health Promotion Agency is a Crown Entity that leads and delivers innovative, high quality and cost-effective programmes and activities that promote health, wellbeing and healthy lifestyles and prevent disease, illness and injury. The Health Promotion Agency also enables environments that support health and wellbeing and healthy lifestyles and reduce personal, social and economic harm.
For more information visit **hpa.org.nz**

MM40771 | MAY 2016

Improve New Zealanders' mental health
**Take part in the
2018 New Zealand
Mental Health and
Wellbeing Survey**
A nationwide survey for the
Health Promotion Agency

hpa health promotion
agency

CBG
HEALTH RESEARCH LIMITED



What is the New Zealand Mental Health and Wellbeing Survey?

This survey is about New Zealanders' views and experiences relating to mental health. This is the third 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.

Why should I take part?

Your views and experiences are important, even if you have not experienced mental distress 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 2016.

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 and wellbeing. 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 personal 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 and wellbeing
- find practical ways to help New Zealanders better understand issues relating to mental health and wellbeing.

Can I find out about the results from the survey?

Some of the results from the survey will be available by the end of 2018 on HPA's website at hpa.org.nz.

Thank you for your time.

Thank you card

Provided to all participants following the interview.

Thank you



*for participating in
the 2018 Mental Health
and Wellbeing Survey*

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:

Supporting Families in Mental Illness 0800 732 825 For families, friends and whānau supporting a loved one who has a mental illness.	People to talk to Depression Helpline 0800 111 757 Anxiety Helpline 0800 269 4389 Lifeline 0800 543 354 Suicide Crisis Helpline 0508 828 865 Youthline 0800 376 633 Or free txt 234
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Websites
The Lowdown
For young people:
thelowdown.co.nz
Or free txt 5626
depression.org.nz

If you need urgent help now, ring 111.

MH078 | MAY 2018

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

Need to talk?

Free call or text 1737 any time for support from a trained counsellor

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 or thelowdown.co.nz

Call 111 if you need urgent help now

Anxiety and depression fact sheets

Provided to all participants following the interview.

Fact Sheet 3

Understanding anxiety

Your body's response to stress affects your health

Everyone gets anxious from time to time – it's a normal response to stressful situations like having a job interview. This kind of anxiety is just a normal part of life. But for some people, the feelings of anxiety can be a lot more extreme and become what's known as an anxiety disorder.

Anxiety disorders are even more common than depression. One in four New Zealanders will experience some kind of anxiety disorder during their lifetime.

+ what is the difference?

Anxiety is a normal and healthy response to a stressful or difficult event in your life. It usually lasts a few hours or a few days at most, and it doesn't affect your health or other parts of your life.

Too much anxiety, however, can be totally overwhelming.

Anxiety disorder is different because the feelings:

- Are quite intense.
- Last for weeks, months or more.
- Negatively affect your thoughts, behaviour, and general health.
- Leave you feeling distressed and not enjoying life.

It can impact on other areas of your life – like your ability to perform at work, or your relationships with friends and family.

People with anxiety disorders may also be depressed, and often become worried or upset about their problem, and may try to help themselves by drinking too much which makes it worse.

If you want to talk to someone who can help:

Call the Depression Helpline on **0800 111 757**

Text The Lowdown team for free on **5626**

Or talk to your doctor

+ the warning signs

Behaviours

- Avoiding socialising or going out.
- Finding ways to reduce anxiety (e.g having someone with you all the time).
- Avoiding eye contact with others.
- Using alcohol or drugs to calm down.

Thoughts

- 'I'm going crazy'.
- 'I won't have anything interesting to say'.
- 'I can't control my worry'.
- 'I have a serious illness that the doctors can't detect'.
- 'What if germs get on my hands and I get sick?'.

Feelings

Confused, anxious, tense all the time, constantly nervous, panicky, terrified, on edge.

Physical

Blushing, trembling, heart racing, numbness, tingling, nausea, sweating, shaking, shortness of breath, dizziness.

For more information and fact sheets visit
www.depression.org.nz

 hpa health promotion
agency
newzealand.govt.nz

+ types of anxiety

There are a number of anxiety disorders, but the most common are:

- **Generalised Anxiety Disorder** - where the person feels anxious about a number of things on most days over a long period of time – six months or more.
- **Phobias, including social phobia** – when a person feels very fearful about a particular object or situation and it interferes with life. Examples are fear of attending social events, driving over bridges, or travelling on planes.
- **Obsessive Compulsive Disorder** – this refers to experiencing ongoing intrusive thoughts and fears which cause anxiety (obsessions). These obsessions lead to the person carrying out behaviours or rituals (compulsions). An example is a fear of germs which leads to constant washing of hands or clothes.
- **Post-Traumatic Stress Disorder** – this can occur any time after a person has experienced a traumatic event, such as an assault, or serious accident. The symptoms last for at least a month and include difficulty in relaxing, bad dreams or flashbacks of the incident, and the avoidance of anything related to the event.
- **Panic Disorder** – a person with panic disorder has panic attacks, which are intense feelings of anxiety and the kind of physical symptoms you would have if you were in great danger. During a panic attack, you can feel like you've lost control of your body and emotions. You may feel sick, dizzy and short of breath.

+ what you can do

Anxiety disorders can be managed and overcome with help. It's important to recognize and treat them as soon as possible. This can avoid a lifetime of battling with anxiety and maybe depression too. Some forms of talking therapy, such as cognitive behaviour therapy (CBT), are very effective for some people. For most people, talking therapy is the first choice in treating anxiety disorders, because it helps people change their thought patterns and the way they react to certain situations. This can also prevent further problems (See Fact Sheet 16). Learning relaxation techniques can be helpful.

Most people need to seek professional help – either from a doctor, counsellor or psychologist to help decide which is the best way through for them.

+ getting help

If you want to talk to a trained counsellor about how you're feeling, or you've got any questions, you can:

- **Call the Depression Helpline on 0800 111 757**
- **Text The Lowdown team for free on 5626**

They can listen to your story, and come up with ideas about what might help. They can also put you in touch with health professionals close to where you live, if that's what you want.

Or for more information you can visit:

**www.depression.org.nz or www.thelowdown.co.nz
www.nzgg.org.nz – Consumer Resources**

The Ministry of Health would like to acknowledge information sourced from: NZ Mental Health Survey 2006, NZ Guidelines Group, Royal Australian and NZ College of Psychiatrists, MaGPIe Research Group, Beyond Blue (Australia).

For more information and fact sheets visit
www.depression.org.nz

 **hpa** health promotion
agency
newzealand.govt.nz

Depression is more than just a low mood

Everyone feels a bit down now and then, especially when things are going wrong.

But depression is more than just a low mood; it can be a serious illness. (The medical name for this is major depressive disorder). An episode of depression is serious if it lasts for more than two weeks – when the person feels miserable most of the day, nearly every day.

Depression can vary in how severe it is, and it affects everyone differently. People with severe depression often find it really hard to cope from day-to-day. Milder forms of depression will reduce a person's quality of life, and without support, may become more serious. Depression can affect both physical and mental health.

+ the warning signs

The experience of depression is different for each person, but there are common symptoms.

A person may be depressed if they have:

Felt sad, down or miserable most of the time, or lost interest or pleasure in most of their usual activities, for **more than two weeks**.

Other signs of depression include:

- Irritability and grumpiness.
- Loss of energy and feeling tired.
- Sleep problems – too much or not enough.
- Changes in appetite and weight – losing or gaining weight.
- Blaming yourself and feeling worthless.
- Problems with concentration and making decisions.
- Loss of interest in sex.
- Feelings of emptiness or loneliness.
- Thinking about death.

If you want to talk to someone who can help:

Call the Depression Helpline on **0800 111 757**

Text The Lowdown team for free on **5626**

Or talk to your doctor

Often people with depression also experience constant worry (anxiety). This can cause physical symptoms like pain, a pounding heart or stomach cramps. In some people these physical symptoms are their main concern. Some people may feel so bad they wish they were dead.

How long does it last?

In most cases, severe episodes of depression will go on for weeks or months if left untreated. Depression is also highly likely to happen again if it isn't properly treated and it may happen again anyway. It's important to find the right help.

How common is depression?

It's very common. One in six New Zealanders will experience a major depressive disorder at some time in their life. It's more common among females (one in five females, compared to one in eight males). One in seven young New Zealanders experience a major depressive disorder before the age of 24. Depression increases the risk of suicide by 20 times.

+ what can cause it

There's no simple answer to this – usually it's a combination of things that happen to a person. Research indicates that ongoing difficulties, such as long term unemployment, alcohol problems, chronic illness, or living in an abusive or uncaring relationship, are more likely to cause depression than recent stressful situations. Sometimes there's no obvious reason. But certain factors can put you at higher risk. These include:

Family

- A family or personal history of depression.
- Conflict or violence within your family.
- Bad things that happened when you were a child. ➤

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www.depression.org.nz

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➤ Events

- Death or loss of someone close.
- Breaking up with a partner.
- Falling out with someone you care about.
- Traumatic or life threatening events.
- Too much pressure and stress at work, school or university.
- Feeling you're being bullied or undermined.
- Losing your job or being unemployed for a long time.
- Having a head injury or other trauma, epilepsy, or a long term or serious illness.
- Some women experience depression during or after childbirth.

Lifestyle

- Drinking too much alcohol.
- Using a lot of recreational drugs such as cannabis.
- Social isolation.
- Lack of sleep.
- Poor diet and lack of exercise.

+ finding a way through

Different types of depression require different types of treatments and it's important to find out what works for you. For mild depression, self-help strategies (things like regular physical exercise) can be really helpful. (See Fact Sheets 11 and 13.)

For more severe depression your GP can help decide whether medication and/or psychological therapies can help. (See Fact Sheet 15.)

+ protecting yourself from depression

There are many things you can do that can help protect you from getting depressed. These include:

- Staying fit and healthy.
- Reducing alcohol use.
- Getting enough sleep.
- Having balance in your life – identifying and managing stress.
- Spending time with people you like and trust, and doing things you usually enjoy.
- Developing skills like problem-solving and communication.

+ getting help

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