



MANATŪ HAUORA

PUBLIC HEALTH INTELLIGENCE

## **2006/07 New Zealand Health Survey**

### **CONTENT GUIDE**

---

**FINAL VERSION**  
**September 2006**

# 2006/07 NZ HEALTH SURVEY FINAL CONTENT GUIDE

## *Introduction*

This content guide details the content of the 2006/07 New Zealand Health Survey (NZHS) final questionnaires – adult and child. The guide begins with the objectives of the NZHS, a summary of the sample design methodology, and then outlines the constraints and criteria used by the NZHS team when assessing the content of the questionnaires. The guide then details the framework and background to each NZHS module and gives the history of each question. A glossary at the end of the guide explains some of the technical terms used in the NZHS.

## *Table of Contents*

Introduction to the New Zealand Health Survey .....	3
Design and methodology .....	3
Constraints on topics included in the NZHS .....	6
Criteria for new topic inclusion in the NZHS .....	7
Key monitoring variables in the NZHS .....	7
ADULT COMPONENT OF THE NZHS .....	14
Sociodemographics (A5).....	14
Risk and protective factors (A3) .....	19
Chronic conditions (A1).....	23
Health status (A4) .....	26
Health service utilisation (A2).....	29
Health measurements (AM) .....	34
Recontact information (AR).....	34
CHILD COMPONENT OF THE NZHS .....	36
Sociodemographics (C4).....	37
Risk and protective factors (C3).....	39
Health and development (C1) .....	41
Health service utilisation (C2) .....	43
Health measurements (CM) .....	46
Glossary of terms in the 2006/07 NZ Health Survey .....	46
References.....	50

## ***Introduction to the New Zealand Health Survey***

The New Zealand Health Survey (NZHS) is a key component of the New Zealand Health Monitor, an integrated programme of household surveys and cohort studies managed by Public Health Intelligence, and is a key element of the cross sector programme of Official Social Statistics. The 2006/07 New Zealand Health Survey (NZHS) will be the fourth national population-based health survey (early NZHS were conducted in 1992/93, 1996/97 and 2002/03).

Public Health Intelligence develops the objectives and content of the NZHS, in consultation with stakeholders and an Independent Monitoring Group. The fielding of the NZHS is outsourced to a specialist survey provider, National Research Bureau (NRB) for 2006/07, and then Public Health Intelligence analyses and disseminates the data.

As a signatory to the Protocols of Official Statistics (Statistics NZ 1998), the Ministry of Health employs best-practice survey techniques to produce high quality data through the NZHS. Standard frameworks and classifications with validated questions are utilised where possible, to allow for the integration of NZHS data with data from other sources.

The five objectives of the NZHS are to:

1. measure the health status of New Zealanders, and the prevalence of selected health conditions
2. measure the prevalence of risk and protective factors associated with these health conditions
3. measure the use of health services, including barriers to accessing health services
4. examine differences between population groups (as defined by age, gender, ethnicity, and socio-economic position)
5. examine changes in key NZHS data over time.

## ***Design and methodology***

The sample design and methodology for the 2006/07 New Zealand Health Survey was developed by Dr. Robert Clark of the Centre for Statistical & Survey Methodology, University of Wollongong, New South Wales, Australia.

The mode of data collection is a face-to-face computer-assisted (CAPI) survey, which includes an interview and a short health measurements section for each respondent. The NZHS collects information about the New Zealand civilian population of all ages living in permanent private dwellings. Every second NZHS also collects data on persons living in health-related residential institutions. In the 2002/03 NZHS, institutions were included in the survey, and it is intended that this will be repeated every second NZHS, next in 2009/10.

### **Objectives of the 2006/07 NZHS sample design**

The methodology and sample design were developed with six main objectives:

- The design should support analysis of the survey data by multiple users, and therefore, should avoid great variation in estimation weights
- Estimates for all ages are required, preferably by the following age groups, 0-4, 5-9, 10-14, 15-24, 25-44, 45-64, 65+ years

- Estimates by ethnic group are required (Māori, Pacific, Asian, Other), with Māori estimates having approximately the same relative standard error/accuracy as the population estimates (Equal Explanatory Power)
- Sufficient data to allow for small area estimation at DHB level is required
- A range of population-level prevalences are to be estimated (eg, asthma, diabetes, stroke, obesity, tobacco use, GP visits in past 12 months, problem gambling) with sufficient accuracy – see Table 6 in Final Design Report for more information.
- The 2006/07 NZHS design should not vary too much from the design in 2002/03 NZHS, so that comparisons can be made between NZHS.

### **Frame**

An area-based frame of Statistics New Zealand's meshblocks was used, based on NZ 2001 Census meshblocks.

### **Sample selection**

There is a 3-step selection process to achieve the NZHS sample:

#### *1. Selection of meshblocks*

Meshblocks vary considerably in size and are therefore selected by probability proportional to size, ie, larger meshblocks have an increased chance of selection in the design. Those DHBs with higher concentrations of Māori will have a slightly increased chance of meshblock selection. Approximately 1400 meshblocks will be selected throughout the country for inclusion in the 2006/07 New Zealand Health Survey.

#### *2. Selection of households within meshblocks*

Within each meshblock, some households are selected to form the *core* sample, and some households are selected to form the *screened* or "booster" sample. A minimum of 100 households from each DHB will be included in the sample. Households in the core sample are selected by a systematic procedure of beginning at a random point in the meshblock and knocking on the door of every 'x'th house. Households in the screened sample are selected by knocking on every 'x'th house in the same meshblock, and only included if the householder reports that the household contains a person who identifies as Māori, Pacific or Asian ethnicity. Approximately 12,000 households will be approached for the core sample and approximately 23,000 households will be approached for the screened sample.

#### *3. Selection of respondents within households*

One adult (aged 15 years or over), and one child if there are any in the household, of each selected household will be randomly chosen to participate in the New Zealand Health Survey. Approximately 17,000 adults and 7000 children will be selected to participate in the survey, resulting in 12,000 completed adult interviews and 5,000 completed child interviews (given a 70% response rate).

Table 1: Approximate age distribution of sample

Age Group	Sample Size
0-4	1568
5-9	1618
10-14	1733
<b>All Children 0-14</b>	<b>4920</b>
15-24	2271
25-44	4520
45-64	3624
65+	1880
<b>All Adults 15+</b>	<b>12295</b>
<i>All People</i>	<i>17215</i>

Table 2: Approximate sample sizes by ethnicity  
(based on 40% of households with children)

Population group	Sample Size	
	Children	Adults
Māori	1204	3010
Asian	544	1360
Pacific	452	1130
European/Other	2720	6795
<b>Total</b>	<b>4920</b>	<b>12295</b>

Table 3: Sample design information by DHB

DHB Name	Population (15 years+)	% Māori	Total no. of MBs	MBs in Sample	Sample (Adults)	Sample (Children)	Adult Sample Fraction
Northland	111511	22.2	1425	76	745	298	0.67%
Waitemata	349273	7.1	2953	134	1204	482	0.35%
Auckland	308902	6.4	2826	112	1146	458	0.37%
Count. Manukau	292302	12.7	2421	150	1488	595	0.51%
Waikato	251644	15.6	3200	144	1328	531	0.53%
Lakes	76907	24.6	844	55	554	222	0.72%
Bay of Plenty	142933	18.3	1387	88	835	334	0.58%
Tairāwhiti	34093	35.5	425	30	328	131	0.96%
Taranaki	80520	10.9	1244	39	325	130	0.40%
Hawke's Bay	113671	17.5	1389	69	620	248	0.55%
Whanganui	50130	16.9	806	30	270	108	0.54%
Midcentral	125042	11.4	1551	61	519	208	0.42%
Hutt	105248	11.5	1212	51	494	198	0.47%
Cap. & Coast	203633	7.6	2228	81	749	300	0.37%
Wairarapa	30494	10.5	454	14	122	49	0.40%
Nelson Marl.	98141	6.2	1075	35	283	113	0.29%
West Coast	23639	6.2	407	9	100	40	0.42%
Canterbury	348219	5.1	3690	114	929	372	0.27%
Sth. Canterbury	41733	4.2	631	12	100	40	0.24%
Otago	139572	4.5	2005	43	340	136	0.24%
Southland	81458	8	1459	34	276	110	0.34%
Outside DHB	-	2	8	0	0	0	0%
<b>Total</b>	<b>3009065</b>			<b>1381</b>	<b>12755</b>	<b>5102</b>	<b>0.42%</b>

MB = Meshblocks

### **Rationale for the 2006/07 NZ Health Survey design**

This sample design was selected from multiple options as the best possible way to meet the objectives of the NZ Health Survey, while producing limited variation in the *weights* and the lowest possible *design effects*.

A **weight** is the number of people that each respondent represents in the target population. A **design effect** (or DEFF) is a summary number which represents the loss of effectiveness of the sample design, compared with simple random sampling. The closer the DEFF is to '1', the closer the design is to a simple random sample. Design effects of over '2' are expected in population health surveys, as the cost of conducting a simple random sample would be exorbitant.

The design effect for the 2006/07 NZ Health Survey national estimates is calculated at approximately '3', and approximately '2' for Māori estimates. This includes the effect of *clustering* (using meshblocks as the frame), *targeting* (unequal probabilities caused by the design), and selection of one adult per household.

### **Dress rehearsal sample design**

A dress rehearsal to test the above design, and refine the NZHS instruments, operations and processes was undertaken from 15 May to 9 June 2006 by National Research Bureau in 16 meshblocks randomly selected throughout New Zealand. Subsequent changes were made to the NZHS questionnaire, interviewer training and operations; however the original sample design was retained.

## ***Constraints on topics included in the NZHS***

The following constraints have been taken into account when assessing topics and questions for inclusion in the NZHS.

### **1. Questionnaire limitations**

Questionnaires are not able to gather complex, detailed information. They are best designed with closed questions and predetermined tick-box responses.

### **2. Respondent burden and resistance**

The questionnaire has to be designed so that New Zealanders are willing to participate in the survey. In order to achieve compliance, the questionnaire must be able to be completed in a reasonable amount of time (approximately one hour). Topics that offend or annoy, that people cannot answer easily, or questions that are complex and difficult to comprehend are avoided.

### **3. Continuity and relevance**

The NZHS needs to continue to monitor population health over time (by comparing data from one NZHS to the next) and, at the same time, be able to remain relevant to the information needs of the Ministry of Health. New topics are assessed by the criteria listed below.

### **4. Integration**

The NZHS uses standard frameworks and classifications with validated questions where possible, to allow for the integration of NZHS data with data from other sources.

## **Criteria for new topic inclusion in the NZHS**

All new topics and questions for the 2006/07 NZHS were assessed against the following criteria before inclusion in the questionnaire:

### **1. The NZHS is the most appropriate source for the information**

The data cannot be collected more effectively and efficiently by other means (eg, an epidemiological study). The information is required for monitoring over time (as opposed to a one-off research project).

### **2. The information collected is needed to inform decisions made by the Ministry of Health or DHBs**

The data should be relevant to the New Zealand Health Strategy and current priority areas for the Ministry of Health.

### **3. Quality information can be collected**

The data collected by the questions will provide information of an acceptable quality.

## **Key monitoring variables in the NZHS**

The NZHS monitors population health over time, and it is therefore important that it retains the ability to compare data from one NZHS to the next. The following NZHS data variables are key to monitoring population health, and will be included in every subsequent NZHS and only modified in consultation with stakeholders.

*Prevalence* = ever diagnosed by a GP/doctor

*Utilisation* = number of visits in past 12 months

<b>Key variables (ages 15+)</b>	<b>NZHS Time series</b>	<b>2006/07 NZHS Questions</b>
Prevalence heart disease	2002/03, 2006/07	1.01 + 1.05 + 1.07 + 1.09
Median age of diagnosis of heart disease	2002/03, 2006/07	1.03 + 1.06 + 1.08
Current treatment for heart disease	2002/03, 2006/07	1.10
Current use of statins for heart disease	2006/07	1.10b
Ever had bypass surgery or angioplasty	2002/03, 2006/07	1.11
Prevalence heart attack	2006/07	1.02
Median age of first heart attack	2006/07	1.03
Prevalence angina	2006/07	1.05
Median age of diagnosis of angina	2006/07	1.06
Prevalence heart failure	2002/03, 2006/07	1.07
Median age of diagnosis of heart failure	2006/07	1.08
Prevalence other heart disease	2006/07	1.09
Prevalence stroke	2002/03, 2006/07	1.12
Median age of first stroke	2002/03, 2006/07	1.13
Stroke in past 12 months	2002/03, 2006/07	1.14
Current treatment for stroke	2002/03, 2006/07	1.15
Prevalence diabetes	1996/97, 2002/03, 2006/07	1.16
Median age of diagnosis diabetes	1996/97, 2002/03, 2006/07	1.17
Current treatment for diabetes	1996/97, 2002/03, 2006/07	1.18

Key variables (ages 15+)	NZHS Time series	2006/07 NZHS Questions
Had free diabetes check in past 12 months	2006/07	1.19
Prevalence asthma	1996/97, 2002/03, 2006/07	1.20 (1.22 + 1.23 for severity)
Median age of diagnosis of asthma	1996/97, 2002/03, 2006/07	1.21
Current treatment for asthma	1996/97, 2002/03, 2006/07	1.24
Prevalence COPD (45 years+)	2002/03, 2006/07	1.25
Median age of diagnosis of COPD	2002/03, 2006/07	1.26
Current treatment for COPD	2002/03, 2006/07	1.27
Prevalence arthritis by type (rheumatoid, osteoarthritis, other)	2002/03, 2006/07	1.28 (1.29 + 1.30 for type)
Median age of diagnosis of arthritis by type (rheumatoid, osteoarthritis, other)	2002/03, 2006/07	1.31
Current treatment for arthritis	2002/03, 2006/07	1.32
Ever had surgery for arthritis	2002/03, 2006/07	1.33
Prevalence spinal disorders	2002/03, 2006/07	1.34
Median age of diagnosis of spinal disorders	2002/03, 2006/07	1.35
Current treatment for spinal disorders	2006/07	1.36
Ever had surgery for spinal disorders	2002/03, 2006/07	1.37
Prevalence osteoporosis	2002/03, 2006/07	1.38
Median age of diagnosis of osteoporosis	2002/03, 2006/07	1.40
Current treatment for osteoporosis	2002/03, 2006/07	1.41
Prevalence of mood disorders (major depressive disorder, dysthymia, bipolar disorder)	2006/07	1.45
Current treatment for mood disorders	2006/07	1.46
Prevalence of anxiety disorders (panic disorder, agoraphobia without panic, specific phobia, social phobia, GAD, PTSD and OCD)	2006/07	1.45
Current treatment for anxiety disorders	2006/07	1.46
Prevalence of substance use disorders (alcohol abuse and/or dependence, drug abuse and/or dependence, marijuana abuse and/or dependence)	2006/07	1.45
Current treatment for substance use disorders	2006/07	1.46
Prevalence of any chronic mental health conditions (incl. mood, anxiety, substance, other)	2006/07	1.45
Prevalence of any other chronic physical health condition (eg. epilepsy, irritable bowel syndrome)	2006/07	1.47
Prevalence of chronic pain by site (head, neck, face or jaw, teeth or gums, back, chest, stomach, pelvic region, joints, other)	2006/07	1.49 + 1.50
Current treatment for chronic pain	2006/07	1.52
Reason for chronic pain (injury, health condition, operation, ageing, other)	2006/07	1.53
Prevalence high blood pressure	1996/97, 2002/03, 2006/07	3.01
Current medication for high blood pressure	1996/97, 2002/03, 2006/07	3.02
Prevalence high blood cholesterol	2002/03, 2006/07	3.03
Current medication for high blood cholesterol	2002/03, 2006/07	3.04
Current use of statins for high cholesterol	2006/07	3.05
Total current use of statins (incl high cholesterol	2006/07	3.05 + 1.10b

Key variables (ages 15+)	NZHS Time series	2006/07 NZHS Questions
and heart disease use)		
Body Mass Index	2002/03, 2006/07	M.02 and M.03
Height	2002/03, 2006/07	M.02
Weight	2002/03, 2006/07	M.03
Waist circumference	2002/03, 2006/07	M.04
Mammogram utilisation (past 2 years)	2006/07 (2002/03 past 3 years)	3.06 for females 45 years+
Utilisation of cervical screening service (past 3 and 5 years)	2002/03 (only past 3 years), 2006/07	3.07 and 3.08 (minus 3.09 had a hysterectomy)
Ever had hysterectomy (females)	2006/07	3.09
Prostate cancer PSA test in past 12 months	2006/07	3.10
Reason for PSA test in past 12 months	2006/07	3.11
Total minutes a week of physical activity = brisk walking + moderate activity + (2x) vigorous activity	2002/03, 2006/07	3.12 to 3.18
Meeting SPARC guidelines for physical activity (duration only)	2002/03, 2006/07	3.12 to 3.18
Meeting SPARC guidelines for physical activity (duration and frequency)	2002/03, 2006/07	3.12 to 3.18
Ever smoker	1996/97, 2002/03, 2006/07	3.19 and 3.20
Ex-smoker	1996/97, 2002/03, 2006/07	3.20 and 3.21
Duration as ex-smoker	2006/07	3.22
Current smoker (daily/non-daily and light/heavy/moderate)	1996/97, 2002/03, 2006/07	3.21 and 3.24
Type of tobacco product for current smokers	2002/03, 2006/07	3.23
Consumption for current smokers	2002/03, 2006/07	3.24
State of change for current smokers (intention to quit etc)	1996/97, 2002/03, 2006/07	3.25
Exposure to passive smoke in home (by smoking status)	1996/97, 2002/03, 2006/07	3.26
Exposure to passive smoke in car (by smoking status)	2006/07	3.27
Consumption of fruit per day (recommended 2+ servings/day)	2002/03, 2006/07	3.28
Consumption of vegetables per day (recommended 3+ servings/day)	2002/03, 2006/07	3.29
Meeting recommended intake of fruit and vegetables per day	2002/03, 2006/07	3.28 and 3.29
Prevalence of drinking alcohol in past year	1996/97, 2002/03, 2006/07	3.30
Alcohol consumption (frequency)	1996/97, 2002/03, 2006/07	3.31
Alcohol consumption (no. of drinks on typical day when drinking)	1996/97, 2002/03, 2006/07	3.32
Alcohol consumption (freq of binge episodes)	1996/97, 2002/03, 2006/07	3.33
Hazardous drinking AUDIT Alcohol Disorder Test score of 8+	1996/97, 2002/03, 2006/07	3.31 to 3.40
Gambling prevalence (gambling in past year)	2002/03, 2006/07	3.41
Prevalence of gambling activity (by type)	2002/03, 2006/07	3.41
CPGI Problem Gambling Index	2006/07	3.42 to 3.50
Problems due to someone's gambling (by type of gambling)	2006/07	3.51 and 3.52

Key variables (ages 15+)	NZHS Time series	2006/07 NZHS Questions
Self-rated general health (Good, Very Good, Excellent)	1996/97, 2002/03, 2006/07	4.01
Self-rated health transition	1996/97, 2002/03, 2006/07	4.02
SF36 summary measures (physical component score and mental component score)	1996/97, 2002/03, 2006/07	See content guide pages 26-29
SF36 eight scales (physical functioning, role limitations due to physical health, bodily pain, general health perceptions, vitality, social functioning, role limitations due to emotional health, general mental health)	1996/97, 2002/03, 2006/07	See content guide pages 26-29
WHO LF-NZ domains SF-36 domains + vision, hearing, sleep, understanding & remembering, communicating, and self-care	2002/03	[next in 2009/10]
K10 Mental Health score	2006/07	4.37 to 4.46
Racism – ever victim of ethnically motivated attack (verbal, physical)	2002/03, 2006/07	5.09
Racism – ethnically motivated attacks (verbal, physical) in past 12 months	2002/03, 2006/07	5.09
Racism – treated unfairly by health professional because of ethnicity	2002/03, 2006/07	5.10
Racism – treated unfairly at work or refused job because of ethnicity	2002/03, 2006/07	5.11
Racism – treated unfairly when renting or buying a house because of ethnicity	2002/03, 2006/07	5.12
Have usual primary health care provider by type (GP clinic, after-hours or 24 hour clinic, nurse clinic, pharmacy, other)	2002/03, 2006/07	2.01 and 2.02
Utilisation of primary health care workers at usual provider	2006/07	2.04 and 2.05
Type of PHO and provider	2006/07	2.03 (data linkage with PHO datamart)
Māori and Pacific providers as usual primary health care providers	2006/07	2.03 (data linkage with PHO datamart)
Accessibility of primary health care providers	2006/07	2.15
Comprehensiveness of service at primary health care providers	2006/07	2.08 and 2.09
Continuity and coordination of care at primary health care providers	2006/07	2.06, 2.07, 2.16, 2.17 and 2.43
Cultural competence of primary health care providers	2006/07	2.12 and 2.13
Quality of care at primary health care providers	2006/07	2.10 and 2.11
General reason for visiting that primary health care provider	2006/07 (2002/03 for Māori and Pacific providers)	2.14
Utilisation of GPs	1996/97, 2002/03, 2006/07	2.19 and 2.05
Reason for visiting GP outside PHCP	2006/07	2.20
Reason for last visit to GP	1996/97, 2002/03, 2006/07	2.23
Cost of last visit to GP (by time period)	1996/97, 2002/03, 2006/07	2.24 (by 2.22), adjusted using 2.25 and 2.26
Unmet need for GP services in past 12 months for any reason	1996/97, 2002/03, 2006/07	2.27

<b>Key variables (ages 15+)</b>	<b>NZHS Time series</b>	<b>2006/07 NZHS Questions</b>
Unmet need for GP services in past 12 months by reason	1996/97, 2002/03, 2006/07	2.29
Frequency of unmet need in past 12 months	2006/07	2.28
Utilisation of primary health care nurses (by appointment type)	1996/97, 2002/03, 2006/07	2.31 and 2.05
Reason for visiting nurse outside PHCP	2006/07	2.32
Reason for last visit to primary health care nurses (by appointment type)	2002/03, 2006/07	2.34 and 2.37
Cost of last visit to primary health care nurse (by time period)	2006/07	2.38 (by 2.36)
Utilisation of medical specialists (by type: public or private)	1996/97, 2002/03, 2006/07	2.40, 2.41 and 2.42
Number of teeth removed due to decay	2006/07	2.44
Utilisation of oral health care workers	2006/07	2.45
Unmet need for oral health care in past 12 months by reason and if urgent need	1996/97, 2002/03, 2006/07	2.46, 2.47 and 2.48
Oral health regularity of care	2006/07	2.49
Health professionals who prescribed medication in past 12 months	2002/03, 2006/07	2.50
Unmet need for prescriptions (written but not collected) in past 12 months by reason	1996/97, 2002/03, 2006/07	2.51 and 2.52
Utilisation of complementary and alternative health care workers by type	2002/03, 2006/07	2.53 and 2.54
Reason for last visit to complementary and alternative health care workers by type	2002/03, 2006/07	2.55
Use of complementary and alternative health care worker in addition to GP for same condition	2002/03, 2006/07	2.56
Utilisation of other nurses	2002/03, 2006/07	2.57 and 2.58
Utilisation of Pharmacists	2002/03, 2006/07	2.57 and 2.58
Utilisation of Physiotherapists	1996/97, 2002/03, 2006/07	2.57 and 2.58
Utilisation of Chiropractors	2002/03, 2006/07	2.57 and 2.58
Utilisation of Osteopaths	2002/03, 2006/07	2.57 and 2.58
Utilisation of Dietitians	1996/97, 2002/03, 2006/07	2.57 and 2.58
Utilisation of Opticians and Optometrists	2002/03, 2006/07	2.57 and 2.58
Utilisation of Occupation therapists	1996/97, 2002/03, 2006/07	2.57 and 2.58
Utilisation of Speech-Language therapists	1996/97, 2002/03, 2006/07	2.57 and 2.58
Utilisation of Midwives	1996/97, 2002/03, 2006/07	2.57 and 2.58
Utilisation of Community Mental Health Care workers, eg, psychologist, counsellor, social worker	2002/03, 2006/07	2.57 and 2.58
Utilisation of other health professionals	1996/97, 2002/03, 2006/07	2.57 and 2.58
Utilisation of health care workers over the phone	2002/03, 2006/07	2.59 and 2.60
Utilisation of public hospitals by admission type	1996/97, 2002/03, 2006/07	2.62 and 2.63
Utilisation of private hospitals by admission type	1996/97, 2002/03, 2006/07	2.64 and 2.65
Medical/health insurance cover by type	1996/97, 2002/03, 2006/07 (type only available in 2006/07 data)	5.20, 5.21 and 5.22

Key variables (ages 0-14)	NZHS Time series	2006/07 NZHS Questions
Prevalence of chronic conditions (unspecified condition)	1996/97, 2006/07	C1.01
Utilisation of medicines for chronic conditions	2006/07	C1.02
Prevalence asthma in 5-14 year olds	2006/07	C1.03 to 1.07
Prevalence eczema in 5-14 year olds	2006/07	C1.08 to 1.10
Prevalence rhinitis in 5-14 year olds	2006/07	C1.11 to 1.13
Caregiver-rated child general health (Excellent, Very Good, Good, Fair, Poor) all ages	1996/97, 2006/07	C1.14
Caregiver-rated family cohesion all ages	2006/07	C1.28
Child Health Questionnaire (CHQ) summary scores [5-14 year olds] Physical and psychosocial summaries	2006/07	C1.14 to 1.28
Child Health Questionnaire (CHQ) domain scores [5-14 year olds] Physical functioning, role/social limitations (emotional/behavioural and physical), bodily pain/discomfort, behaviour, mental health, self esteem, general health perceptions, change in health, parental impact (emotional and time), family activities	2006/07	C1.14 to 1.28
Prevalence of use of discipline (by type)	2006/07	C1.29
Caregiver attitude toward discipline by type	2006/07	C1.30
Height [2-14 year olds]	CNS 2002 for 5+ years, 2006/07	CM.01
Weight [2-14 year olds]	CNS 2002 for 5+ years, 2006/07	CM.02
Waist girth [5-14 year olds]	2006/07	CM.03
Body Mass Index [2-14 year olds]	CNS 2002 for 5+ years, 2006/07	CM.01 and CM.02
Exposure to passive smoke in home	2006/07	C4.10
Exposure to passive smoke in car	2006/07	C4.11
Caregiver's perception of child's weight	2006/07	C3.01
Prevalence of ever breastfed [all ages]	2006/07	C3.02
Prevalence of breastfeeding (exclusive, full, partial using WHO definitions) [<5 years old]	2006/07	C3.02, 3.04, 3.07, 3.09
Age stopped breastfeeding [all ages]	2006/07	C3.03
Prevalence of regular infant formula use [0-4 years]	2006/07	C3.06
Age first given infant formula regularly [0-4 years]	2006/07	C3.07
Age first given solids [0-4 years]	2006/07	C3.09
Type of food weaned onto [0-4 years]	2006/07	C3.05
Eating breakfast at home past 7 days [2-14 years]	2006/07	C3.10
Lunch from home in past 5 schooldays [5-14 years]	2006/07	C3.11
Typical consumption of fizzy drinks in a week [2-14 years]	2006/07	C3.12
Consumption of fizzy drinks in past week [2-14 years]	2006/07	C3.13
Typical consumption of takeaway / fast foods in a week [2-14 years]	2006/07	C3.14
Consumption of takeaway / fast foods in past	2006/07	C3.15

Key variables (ages 0-14)	NZHS Time series	2006/07 NZHS Questions
week [2-14 years]		
Typical behaviour walk/bike to school [5-14 years]	2006/07	C3.16
Barriers to walking/cycling to school [5-14 years]	2006/07	C3.17
Transportation to school walk/bike in past week [5-14 years]	2006/07	C3.18
TV watching in past 5 weekdays [all ages]	2006/07	C3.19
TV watching last weekend [all ages]	2006/07	C3.20
Has usual primary health care provider by type (GP clinic, after-hours or 24 hour clinic, nurse clinic, pharmacy, other)	2006/07	C2.01, 2.02
Primary health care provider same as primary caregiver [family continuity]	2006/07	C2.03
Utilisation of GPs	1996/97, 2006/07	C2.04
Reason for last visit to GP	1996/97, 2006/07	C2.05
Cost of last visit to GP	1996/97, 2006/07	C2.06
Unmet need for GP services in past 12 months by reason for unmet need	1996/97, 2006/07	C2.07 and 2.09
Unmet need for GP severity (no. of times in past 12 months)	2006/07	C2.08
Health issue related to unmet need	2006/07	C2.10
What did instead of seeing GP	2006/07	C2.11
Utilisation of primary health care nurses (by type of consultation with nurse)	2006/07	C2.13 and 2.16
Reason for visit to primary health care nurse (by type of consultation)	2006/07	C2.14 and 2.17
Cost of visit to primary health care nurse	2006/07	C2.18
Utilisation of medical specialists (by type)	1996/97, 2006/07	C2.19 and 2.20
Prevalence of fillings in teeth	CNS* 2002, 2006/07	C2.21
Prevalence of pain in teeth	CNS 2002, 2006/07	C2.22
Prevalence of teeth removed due to decay	CNS 2002, 2006/07	C2.23
Number of times brushes teeth per day	CNS 2002, 2006/07	C2.24
Regularity of use of oral health care workers	2006/07	C2.25
Unmet need for oral health care in past 12 months by reason	1996/97, 2006/07	C2.26 + 2.27
Utilisation of Wellchild nurses (Plunket, Karitane etc)	2006/07	C2.28 + 2.29
Utilisation of other nurses (diabetes nurses, district health nurses etc)	1996/97, 2002/03	C2.28 + 2.29
Utilisation of other health care workers by type (eg physiotherapists, dietitians etc)	1996/97, 2002/03	C2.28 + 2.29
Utilisation of health care workers over the phone	2006/07	C2.33 + 2.34
Utilisation of public hospitals by admission type	1996/97, 2006/07	C2.35 + 2.36
Utilisation of private hospitals by admission type	1996/97, 2006/07	C2.37 + 2.38
Reason for admission to private hospital	2006/07	C2.39
Unmet need for prescriptions (written but not collected) in past 12 months by reason	1996/97, 2006/07	C2.31 + 2.32
Medical/health insurance cover	1996/97, 2006/07	C4.09

\* CNS = New Zealand Child Nutrition Survey

## ADULT COMPONENT OF THE NZHS

Where possible the adult component for the 2006/07 NZHS has not been altered from earlier NZ Health Surveys (1992/93, 1996/97 and 2002/03) as the Ministry of Health is interested to monitor changes in the data over time. Some sections have been added or altered for the 2006/07 NZ Health Survey to account for changes in policy or to monitor emerging issues, most significantly:

- *Oral Health* section added (to monitor use of services and level of unmet need for oral health services, and regularity of care)
- *Mental Health* section improved (to monitor diagnosed mental health conditions and levels of non-specific psychological distress in the population).
- *Primary Health Care* section improved (to monitor accessibility, comprehensiveness of care, continuity and coordination of care, cultural competence, and quality of care of primary health care providers).

The 2006/07 NZHS questionnaire takes a median time of 1 hour to complete.

The adult component contains the same modules as 2002/03 NZHS, presented in this content guide in the following order:

- Sociodemographics (A5)
- Risk and protective factors (A3)
- Chronic conditions (A1)
- Health status (A4)
- Health service utilisation (A2)
- Health measurements (AM)
- Recontact section (AR)

Modules are ordered in the questionnaire as in brackets above, ie, A1 first.

### ***Sociodemographics (A5)***

Socio-demographic information about respondents is vital in order to assist with analysis of the various determinants of health outcomes, and to monitor inequality and changes in health disparities.

A short household module is included in the adult questionnaire for 2006/07 NZHS to capture basic demographic information on each member of the household participating in the NZHS. Information on household composition, family type, housing tenure/ownership, household income, number of bedrooms and household crowding (when analysed with number of bedrooms data) is collected.

In addition to these self-reported variables, the NZHS also records area deprivation (NZDep) and rurality, which is derived from the census area unit/meshblock of the household.

2006/07 NZHS is the first to collect detailed information on personal living standards and deprivation.

The 1996/97 NZHS asked questions on gender, age, ethnicity (self-identified, Māori ancestry), employment, income, and medical insurance.

In 2002/03, questions on ethnicity (country of birth, year moved to NZ, languages, perceived ethnicity, racism), household living arrangements, education, income support, and phone access were added to the 1996/97 questions.

In 2006/07 employment questions have been reduced to only those variables of primary interest to health: labour market status, current or previous main occupation and unpaid work activities. Additional questions have been added to capture economic living standards (ELSI-SF and NZiDep). Some existing socio-demographic questions have been reworded for 2006/07 to match Statistics NZ standards.

### **Why include a direct measure of living standards in the NZHS?**

The socio-demographic module of the NZHS has in the past included a number of items relating to socio-economic position (income, education, occupation), deprivation of neighbourhood of residence (NZDep, via meshblock), and pathways linking socio-economic position to health outcomes (labour market status, housing tenure).

All of these measures have limitations. In particular, household equivalised disposable income is missing for a significant proportion of respondents and even when available is often inaccurately recalled. Numerous studies have shown fairly low correlations (generally around 0.5) between income as recorded in surveys and consumption – not only because of the data quality problems alluded to above but also because income is highly volatile whereas patterns of consumption are more stable over time.

In fact, consumption is both easier to measure and more directly related to health outcomes than is (current) income. Including a brief living standards / individual deprivation instrument in the NZHS would improve our ability to measure both socio-economic position and the material pathway linking socio-economic position to health. Given the policy importance of monitoring and reducing social inequalities in health, inclusion of such a scale is warranted.

### **Which measure should be included: WHO permanent income scale, ELSI-SF or NZiDep?**

The World Health Organisation's permanent income scale has never been used in New Zealand, is much longer than the others listed above, and many of the items lack face validity for the New Zealand population (being more suitable for low income developing countries).

The Ministry of Social Development's ELSI-SF (Economic Living Standards Index Short Form) is well validated, New Zealand norms are available, and covers all three subscales conventionally included within the construct of living standards (economising behaviours, ownership of durable assets, social participation restrictions). However it is relatively long, comprising 25 items and taking approximately 4 to 6 minutes to complete.

The Wellington School of Medicine's NZiDep (New Zealand Index of Socioeconomic Deprivation for Individuals) is an individual level deprivation measure rather than a measure of living standards. That is, it is equivalent to only one of the three ELSI subscales (economising behaviours) and covers only the deprived end of the scale (although there is little health interest in the privileged end). It has been less thoroughly validated than ELSI-SF and NZ norms are not available. However, it comprises only 8 items, of which 2 are already included in the NZHS, and takes less

than 2 minutes to complete. Furthermore, it resonates with the neighbourhood level deprivation measure routinely used in NZ (ie the NZDep), permitting multi level analysis.

Given these contrasting strengths and weaknesses, the Ministry of Health has concluded that a head to head comparison of the two candidate instruments is necessary – and the 2006/07 NZHS provides just such an opportunity. Depending on the results, one or the other instrument may be chosen for inclusion in the NZHS thereafter.

### How to score ELSI-SF

See Jensen J, Spittal M, and Krishnan V (2005) *ELSI Short Form: User Manual for a Direct Measure of Living Standards*. Centre for Social Research and Evaluation, Ministry of Social Development, Wellington. <http://www.msd.govt.nz/work-areas/social-research/living-standards/elsi-short-form.html>

### How to score NZiDep

See Salmond C, King P, Crampton P, Waldegrave C (2005) *NZiDep: A New Zealand Index of Socioeconomic Deprivation for Individuals*. Department of Public Health, Wellington School of Medicine, Otago University. <http://www.wnmeds.ac.nz/academic/dph/staff/pcrampton.html>

### Question details

2006/07 NZHS	Topic	Source of question	Previous NZHS	Notes
AD.01	Gender		1996/97 2002/03	These two questions are asked at the start of the NZHS to assist with routing in the questionnaire.
AD.02	Age group		1996/97 2002/03	
A5.01	Date of birth	Based on Census indiv 2001 Q. 4	1996/97	Allows for anonymous data record linkage.
A5.01b	Age		2002/03	Asked if refused date of birth
A5.02	Ethnicity – general	Census indiv 2001 Q.11	1996/97 2002/03	
A5.03	Ethnicity – Māori descent	Census indiv 2001 Q.16	1996/97 2002/03	
A5.04	Ethnicity – Country of birth	Census indiv 2001 Q.9	2002/03	
A5.05	Ethnicity – Year arrived in NZ	Census indiv 2001 Q.10	2002/03	Only asked to those not born in New Zealand
A5.06	Ethnicity – Languages	Census indiv 2001 Q.13	2002/03	
A5.07	Ethnicity - discrimination	Qs based on the UK Fourth National Survey of Minorities and the US Behavioral Risk Factor Surveillance System research.	2002/03	Last question in this set used in the 2002/03 NZHS has been removed for 2006/07. Found to be difficult to interpret in analysis.
A5.08	Ethnicity - discrimination		2002/03	
A5.09	Ethnicity - discrimination		2002/03	
A5.10	Ethnicity - discrimination		2002/03	
A5.11	Ethnicity - discrimination		2002/03	
A5.12	Ethnicity - discrimination		2002/03	
A5.13	Education – secondary	Census indiv 2001 Q. 23	2002/03	

2006/07 NZ HEALTH SURVEY FINAL CONTENT GUIDE – September 2006

2006/07 NZHS	Topic	Source of question	Previous NZHS	Notes
A5.14	Education – tertiary	Census indiv 2001 Q. 24	2002/03	
A5.15	Income support – past 12 months	Based on Stats NZ question but modified for NZHS	2002/03	Categories expanded for 2006/07 to separate Sickness Beneficiaries and Invalid Beneficiaries and to include ACC as a source of income. Used for NZiDep score.
A5.16	Income support – current	Based on Stats NZ question but modified for NZHS	new	Only asked to those who answered A5.15 in affirmative
A5.17	Employment – Unemployment in past 12 months	NZiDep Cognitively tested by PHI in 2006	new	Used for NZiDep score.
A5.18	Employment – Current labour force status	Based on Stats NZ question but modified for NZHS Cognitively tested by PHI in 2006	new	
A5.18b	Employment – usual hours/week in paid work		new	
A5.19	Unpaid activities in past 4 weeks	Census indiv. 2001 Q. 41	1996/97 2002/03	
A5.20	Medical insurance		1996/97 2002/03	
A5.21	Medical insurance – type		new	Only asked to respondents with medical insurance
A5.22	Medical insurance – who pays		1996/97 2002/03	Only asked to respondents with medical insurance
A5.23	Income – personal	Census indiv 2001 Q. 26 Cognitively tested by PHI in 2006	1996/97 2002/03	
A5.24	Income – household	Based on Census indiv. 2001 Q. 26 Cognitively tested by PHI in 2006	1996/97 2002/03	
A5.25	Total number of people living in dwelling	All questions in this section based on Statistics NZ standard classifications and question wording	2002/03	Computer prompts until answer to Q 5.25 minus 1 is reached
A5.26a	Person 1 - Gender		new	
A5.27a	Person 1 – Age on last birthday		new	
A5.28a	Person 1– Relationship to adult respondent		new	
A5.26b	Person 2 - Gender		new	
A5.27b	Person 2 – Age on last birthday		new	
A5.28b	Person 2 – Relationship to adult respondent		new	
A5.26c	Person 3 - Gender		new	
A5.27c	Person 3 – Age on last birthday		new	
A5.28c	Person 3 – Relationship to adult respondent		new	
...	...			

2006/07 NZHS	Topic	Source of question	Previous NZHS	Notes
A5.29	Tenure/ownership of dwelling		new	
A5.30	Number of bedrooms in dwelling		2002/03	
A5.31	ELSI-SF	Economic Living Standards Index developed by the Ministry of Social Development, see Jensen et al (2005)	new	Ownership of durable assets
A5.32	ELSI-SF		new	
A5.33	ELSI-SF		new	
A5.34	ELSI-SF		new	
A5.35	ELSI-SF		new	
A5.36	ELSI-SF		new	
A5.37	ELSI-SF		new	
A5.38	ELSI-SF		new	Social participation restrictions
A5.39	ELSI-SF		new	
A5.40	ELSI-SF		new	
A5.41	ELSI-SF		new	
A5.42	ELSI-SF		new	
A5.43	ELSI-SF		new	
A5.44	ELSI-SF		new	
A5.45	ELSI-SF		new	Economising behaviours
A5.46	ELSI-SF		new	
A5.47	ELSI-SF		new	
A5.48	ELSI-SF		new	
A5.49	ELSI-SF		new	
A5.50	ELSI-SF		new	
A5.51	ELSI-SF	new		
A5.52	ELSI-SF	new		
A5.53	ELSI-SF	new	Self-rated standard of living	
A5.54	ELSI-SF	new		
A5.55	ELSI-SF	new		
A5.56	NZiDep	New Zealand Index of Socio-economic Deprivation for Individuals, see Salmond et al (2005)	new	
A5.57	NZiDep		new	
A5.58	NZiDep		new	
A5.59	NZiDep		new	
A5.60	NZiDep		new	
A5.61	NZiDep		new	

**Number of questions in module A5:**

All respondents answer	58
Respondents not born in NZ	1
Respondents with medical insurance	2
Total number of questions in module	61

**Median time to complete module A5 in testing: 13 minutes**

## ***Risk and protective factors (A3)***

Most of this module is based on the World Health Organization's STEPwise Approach to Surveillance of risk factors for non-communicable diseases (STEPS). This is a three-step approach to the monitoring of risk factors for population health by collecting the following core items. Step 1 (*behavioural*) is a self-report questionnaire of tobacco use, alcohol consumption, physical inactivity and fruit and vegetable consumption. Step 2 is the collection of the *physical measurements* of weight, height, waist circumference and blood pressure. Step 3 is the collection of *biochemical measures* of fasting blood sugar and fasting total cholesterol. The NZHS includes STEP 1 and 2 of this approach at present – Step 1 in this module and Step 2 in the health examination section of the NZHS.

In addition to STEPS, questions on problem gambling and cancer testing (breast, cervical and prostate) are included in this module. The Ministry of Health is responsible for the integrated problem gambling strategy focused on public health, referred to in the Gambling Act 2003. Among other things, the Ministry's strategy calls for population surveys to monitor the prevalence and incidence of problem gambling, that is, patterns of gambling behaviour that comprise, disrupt or damage health, personal, family or vocational pursuits. The Ministry of Health runs two cancer screening programmes: the National Cervical Screening programme and BreastScreen Aotearoa. There are currently no screening programmes for males; however the Ministry is interested in monitoring the utilisation of prostate cancer testing among New Zealand men.

### **How to score AUDIT (Alcohol Use Disorders Identification Test)**

See Babor TF, Higgins-Biddle JC, Saunders JB, and Monteiro MG. 2001. *AUDIT: The Alcohol Use Disorders Identification Test: Guidelines for Use in Primary Care*. 2<sup>nd</sup> edition. Department of Mental Health and Substance Dependence, World Health Organisation, Geneva. p.19.

### **How to score CPGI (Canadian Problem Gambling Index)**

See Wynne HJ. 2003. *Introducing the Canadian Problem Gambling Index*. Wynne Resources, Alberta.

1996/97 NZHS asked questions on physical activity, tobacco, high blood pressure, and alcohol use.

In 2002/03, questions on cholesterol, weight cycling, adult weight gain, marijuana and gambling were added to the above sections.

For 2006/07 the problem gambling questions have been modified following consultation with problem gambling experts. The 2002/03 questions have been replaced with the internationally comparable and validated Canadian Problem Gambling Index. The marijuana questions have been moved to the NZ Alcohol and Drug Use Survey (occurs every two years from 2007). The tobacco questions have been changed to maintain consistency with the NZ Tobacco Use Survey questions.

### Question details

2006/07 NZHS	Topic	Source of question	Previous NZHS	Notes
A3.01	High blood pressure – prevalence		2002/03	Screen for ever high blood pressure
A3.02	High blood pressure – medication current		1996/97 2002/03	Only answered by those with ever diagnosed high blood pressure (Ever taken medication for high blood pressure question from 2002/03 NZHS removed – not important)
A3.03	Cholesterol – prevalence		2002/03	Screen for ever high blood cholesterol.
A3.04	Cholesterol – medication current		2002/03	Only answered by those with ever high blood cholesterol. Showcard for 3.05 has names of currently subsidised meds. Statins are response answers: 02, 08, 11, 12.
A3.05	Cholesterol – medication name	Constructed in consultation with Pharmac	2002/03	
A3.06	Screening programme utilisation	Questions based on wording from 2002/03 NZHS – constructed in consultation with Ministry of Health National Screening Unit.	2002/03 revised	Females only. Mammogram last 2 years – was last 3 years in 2002/03 questionnaire
A3.07	Screening programme utilisation		2002/03	Females only. Cervical smear last 3 years (policy).
A3.08	Screening programme utilisation		2002/03 revised	Females only. Cervical smear last 5 years (enrolment in programme)
A3.09	Screening programme utilisation		2002/03 revised	Females only. Ever had hysterectomy.
A3.10	Prostate cancer testing in past 12 months	Constructed in consultation with Ministry of Health Clinical Services and Public Health Directorate.	new	Males only. Screen question
A3.11	Prostate cancer test - reason		new	Males only, if had test in past year.
A3.12	Physical activity	NZPAQ – Short form	2002/03 revised	NZPAQ short form was developed by Sport and Recreation NZ and the Ministry of Health, based on IPAQ (International Physical Activity Questionnaire). Question wording and showcards have been slightly reworded for 2006/07 from 2002/03 following the NZPAQ-SF validation study (SPARC 2004). Last question from NZPAQ-SF was dropped for 2006/07 NZHS as optional and not of policy importance at this time.
A3.13	Physical activity		2002/03 revised	
A3.14	Physical activity		2002/03 revised	
A3.15	Physical activity		2002/03 revised	
A3.16	Physical activity		2002/03 revised	
A3.17	Physical activity		2002/03 revised	
A3.18	Physical activity		2002/03 revised	
A3.19	Tobacco smoking – prevalence	NZHS Tobacco Qs are a shortened instrument taken from NZTUS (2005) to assist with tobacco monitoring in the years when NZTUS is not in the field – see NZTUS Content	1996/97 2002/03 revised	Ever-used tobacco screening questions
A3.20a	Tobacco smoking – prevalence		new	For under 20 year olds: smoked more than 10 cigarettes in lifetime (this is WHO definition of 'youth smoker')
A3.20b	Tobacco smoking – prevalence		new	For under 20 year olds: smoked more than 100 cigarettes in lifetime
A3.20c	Tobacco smoking – prevalence		new	Smoked more than 100 cigarettes in lifetime (this is WHO definition of 'smoker')

2006/07 NZHS	Topic	Source of question	Previous NZHS	Notes
A3.21	Tobacco smoking – prevalence	Guide for more information on question origin.	1996/97 2002/03 revised	Daily, non-daily, ex current smoker categorisation
A3.22	Tobacco smoking – time elapsed for ex-smoker		new	Time since last quit for ex-smokers
A3.23	Tobacco smoking – Type of smoking		1996/97 2002/03 revised	Current smokers answer
A3.24	Tobacco smoking – intensity of smoking		1996/97 2002/03 revised	Current smokers answer
A3.25	Tobacco smoking – state of change		1996/97 2002/03 revised	Current smokers answer
A3.26	Tobacco smoking – exposure to passive smoke in home		1996/97 2002/03 revised	All respondents answer
A3.27	Tobacco smoking – exposure to passive smoke in car		new	All respondents answer
A3.28	Nutrition – fruit intake		2002/03	Also in NNS 1997.
A3.29	Nutrition – vege intake		2002/03	
A3.30	Alcohol		1996/97 2002/03	Screen for had a drink containing alcohol in last year.
A3.31	Alcohol	WHO AUDIT Alcohol Use Disorders Identification Test. (Saunders et al 1993)	1996/97 2002/03	Only respondents who have had a drink containing alcohol in last year answer these 10 Qs.  Definition of a 'drink' = standard drink size 10g of alcohol (pamphlets with definition are supplied by ALAC)
A3.32	Alcohol		1996/97 2002/03	
A3.33	Alcohol		1996/97 2002/03	
A3.34	Alcohol		1996/97 2002/03	
A3.35	Alcohol		1996/97 2002/03	
A3.36	Alcohol		1996/97 2002/03	
A3.37	Alcohol		1996/97 2002/03	
A3.38	Alcohol		1996/97 2002/03	
A3.39	Alcohol		1996/97 2002/03	
A3.40	Alcohol		1996/97 2002/03	
A3.41	Gambling		2002/03	Screen for participation in gambling in past 12 months
A3.42	Gambling	Canadian Problem Gambling Index (Ferris, Wynne and Single 1999) 9 items to identify 'at risk' gamblers in population.	2002/03 revised	Answered by respondents that have taken part in any gambling activity in past 12 months.
A3.43	Gambling		2002/03 revised	
A3.44	Gambling		2002/03 revised	
A3.45	Gambling		2002/03 revised	
A3.46	Gambling		2002/03 revised	
A3.47	Gambling		2002/03 revised	

2006/07 NZHS	Topic	Source of question	Previous NZHS	Notes
A3.48	Gambling		2002/03 revised	
A3.49	Gambling		2002/03 revised	
A3.50	Gambling		2002/03 revised	
A3.51	Gambling – other people		2002/03	All respondents answer – slight change in wording from 2002/03
A3.52	Gambling – other people		2002/03	Answered if experienced problems due to someone else's gambling

**Number of questions in module A3:**

All respondents answer	17
Women answer extra questions re cancer screening	4
Men answer extra questions re cancer testing	2
Extra questions for those with specific risk and protective factors	29
Total number of questions in module	52

**Median time to complete module A3 in testing: 10 minutes**

## Chronic conditions (A1)

This module collects information on the prevalence, age of diagnosis and treatments utilised for major chronic health conditions. A chronic condition is defined as a physical or mental illness that has lasted, or is expected to last, for more than six months. The symptoms may come and go or be present all the time.

Chronic health conditions included in this module have been chosen based on Ministry of Health priority areas, with emphasis on conditions with a high prevalence in the population.

1996/97 NZHS asked questions on diabetes and asthma. A module on injuries and poisonings in the 1996/97 NZHS was discarded in the 2002/03 NZHS because more reliable administrative data exists.

In 2002/03 questions on heart disease, heart failure, stroke, COPD, arthritis, osteoporosis, spinal disorders, and cancer were added to the above sections.

The 2006/07 NZHS will include two new sections: mental health conditions and chronic pain (with questions on pain moved from the 2002/03 health status module). The disability question has been removed, as this data is more accurately collected in the health status module of the NZHS. Heart disease questions have been separated so that prevalence of heart attack, angina, heart failure and other heart disease can be distinguished in analysis.

### Question details

2006/07 NZHS	Topic	Source of question	Previous NZHS	Notes
A1.01	Heart disease – prevalence of heart attack	Questions based on others in this module for consistency	2002/03 revised	Reworded for 2006/07 separating heart attack, angina, heart failure and other heart disease to help with analysis (ischemic heart disease monitoring) and make this section easier for respondents to answer – has resulted in 6 extra questions than 2002/03. 4 screening Qs answered by all respondents.
A1.02	Heart disease – ever admitted to hospital		new	
A1.03	Heart disease – age of admission to hospital		new	
A1.04	Heart disease - admission to hospital in past 12 months		new	
A1.05	Heart disease – prevalence of angina		2002/03 revised	
A1.06	Heart disease – age of diagnosis of angina		2002/03 revised	
A1.07	Heart disease – prevalence of heart failure		2002/03	
A1.08	Heart disease – age of diagnosis of heart failure		new	
A1.09	Heart disease – prevalence of other heart disease		2002/03 revised	
A1.10a	Heart disease – current treatment for heart disease	2002/03 NZHS	2002/03 revised	Asked to respondents that answered yes to 1.01, 1.05, 1.07 or 1.09 (any heart disease)

2006/07 NZHS	Topic	Source of question	Previous NZHS	Notes
A1.10b	Heart disease – current treatment for heart disease	Constructed in consultation with Pharmac	new	Checking for statin use (if answers : 02, 08, 11, 12)
A1.11	Heart disease – surgery for heart disease	2002/03 NZHS	2002/03	Asked to respondents that answered yes to 1.01, 1.05, 1.07 or 1.09 (any heart disease)
A1.12	Stroke - prevalence	Questions based on others in this module for consistency	2002/03	Screen answered by all respondents
A1.13	Stroke – age of diagnosis		2002/03	Only answered by ever diagnosed with stroke
A1.14	Stroke – stroke in past year		2002/03	
A1.15	Stroke – current treatment		2002/03	
A1.16	Diabetes - prevalence	Workforce Diabetes Survey (Scragg et al 1991)	1996/97 2002/03	Screen answered by all respondents – excludes diabetes during pregnancy
A1.17	Diabetes – age of diagnosis		1996/97 2002/03	Only answered by ever diagnosed with diabetes
A1.18	Diabetes – current treatment		2002/03	
A1.19	Diabetes – ‘Get Checked’ check		new	
A1.20	Asthma - prevalence	Standard international questionnaire (Burney et al 1994)	2002/03	Screen answered by all respondents (doctor diagnosed)
A1.21	Asthma – age of diagnosis		2002/03	Asthma Qs only asked to under 45 years in 2002/03. Will be asked to all in 2006/07 (taking asthma out of the COPD section below which was confusing for respondents).
A1.22	Asthma – attack in last 12 months		1996/97 2002/03	
A1.23	Asthma - severity		1996/97 2002/03	
A1.24	Asthma – current treatment		1996/97 2002/03	
A1.25	COPD - prevalence	Questions based on others in this module for consistency	2002/03 revised	Screen for COPD only asked to 45 years and over
A1.26	COPD – age of diagnosis		2002/03 revised	Only answered by those ever diagnosed with COPD
A1.27	COPD – current treatment		2002/03 revised	
A1.28	Arthritis - prevalence	Questions based on others in this module for consistency	2002/03	Screen answered by all respondents
A1.29	Arthritis – type		2002/03	Only answered by respondents ever diagnosed with arthritis
A1.30	Arthritis – type		2002/03	
A1.31	Arthritis – age of diagnosis		2002/03	
A1.32	Arthritis – current treatment		2002/03	
A1.33	Arthritis - surgery	2002/03		
A1.34	Spinal disorders – prevalence	Questions based on others in this module for consistency	2002/03	Screen answered by all respondents
A1.35	Spinal disorders – age of diagnosis		2002/03	Only answered by respondents ever diagnosed with spinal disorder. Treatments question split in two for 2006/07 – not comparable with 2002/03 data.
A1.36	Spinal disorders – current treatment		2002/03 revised	
A1.37	Spinal disorders – ever operation		new	
A1.38	Osteoporosis – prevalence	Questions based on others in this module for consistency	2002/03	Screen answered by all respondents
A1.39	Osteoporosis – fracture		2002/03	Only answered by respondents ever diagnosed with osteoporosis
A1.40	Osteoporosis – age of diagnosis		2002/03	

2006/07 NZHS	Topic	Source of question	Previous NZHS	Notes
A1.41	Osteoporosis – current treatment		2002/03	
A1.42	Cancer – prevalence	Questions based on others in this module for consistency	2002/03	Screen answered by all respondents
A1.43	Cancer – type		2002/03	Only answered by those ever diagnosed with cancer.
A1.44	Cancer – age of diagnosis		2002/03	Reworded for 2006/07 as can have more than one type of cancer in lifetime. Table records this information better. Added colon and rectal to bowel cancer listing.
A1.45	Mental health conditions – prevalence by type	Questions based on others in this module for consistency	2002/03 revised	New section in 2006/07. Screen for all respondents. Answers can be compared with coded answers to Q.42 in 2002/03 (Other long-term illness)
A1.46	Mental illness – treatments		new	Only answered by those ever diagnosed with mental illness. Multiple treatments coded for multiple conditions.
A1.47	Other chronic conditions – prevalence by type	Questions based on others in this module for consistency	2002/03	Screen for other chronic conditions not already covered – answered by all respondents.
A1.48	Other physical long-term conditions – age of diagnosis		new	
A1.49	Chronic pain – prevalence	Questions based on others in this module for consistency	new	Screen for chronic pain
A1.50	Chronic pain – site of pain		2002/03 revised	Only answered by respondents with chronic pain. Qs moved from Health Status section (2002/03) as respondents were confusing chronic pain with acute pain.
A1.51	Chronic pain – age pain started (by site if necc.)		2002/03 revised	
A1.52	Chronic pain – current treatment		2002/03 revised	
A1.53	Chronic pain – reason if known		new	

**Number of questions in module A1:**

All respondents answer	14
Respondents aged 45yrs and over	1
Extra questions for those with specific chronic conditions	up to 38
Total number of questions in module	53

**Median time to complete module A1 in testing:****4.5 minutes**

## **Health status (A4)**

This module measures health status based on the individual respondent's perception of their wellbeing and functioning over the past 4 weeks. These questions provide valuable information on population health and are often used in the analysis of other modules in the NZHS, such as chronic disease. Questions in this module are mostly derived from the Medical Outcomes Study Short Form (SF-36). In addition, an internationally validated instrument for measuring non-specific psychological distress in the population, the Kessler 10 (K10) has been included at the end of this module. Responses to the K10 questions are scored to produce a three-point summary measure: low or no risk, medium risk or high risk of anxiety or depressive disorder.

The SF-36 consists of eight physical and mental health domains: physical functioning, role limitation (physical), bodily pain, general health perceptions, vitality (energy/fatigue), social functioning, role limitation (emotional), and general mental health. Responses to each of the SF-36 items are scored, and expressed on a 0-100 scale for each of the eight health domains. As well as the eight domains, two summary measures may be calculated: a physical component summary score and a mental component summary score.

A NZ-adapted version of the World Health Organisation's Long form (WHO LF-NZ) was included in the 2002/03 NZHS and is planned for inclusion every 2<sup>nd</sup> NZHS, next in 2009/10 (to align with the institutions module of the NZHS and a focus on the older persons population group). The WHO LF-NZ includes the SF-36 and an additional six health domains: vision, hearing, self-care, understanding and remembering, communication, and sleep. The WHO long-form was originally based on the *International Classification of Functioning, Disability and Health* (ICF), allowing for international comparisons to be drawn from the data collected. Two ICF domains are not included in the NZHS (that is, fertility, skin and disfigurement); fertility data is collected in the NZ Sexual and Reproductive Health Survey, and skin and disfigurement data is not considered to be significant from a policy perspective. The ICF domains of digestion and bodily excretions, and breathing, were included in the 2002/03 NZHS, but the scales did not perform satisfactorily in psychometric testing, and were therefore removed.

In some cases, similar questions have had to be asked twice (once with the SF-36 wording and once with the K-10 wording) in order to maintain the instruments. Where this occurs, an explanation is provided to the participants. Subsequent analyses of the SF-36 and K-10 responses will determine if one question can be asked instead of two for some of the variables, thereby possibly shortening this module for 2009/10.

### **How to score SF-36 (version 2)**

See Ware JE, Kosinski M, and Dewey JE. 2000. *How To Score Version 2 of the SF-36 Health Survey*. Lincoln, RI: QualityMetric Incorporated.

### **For WHO LF-NZ norms and more information**

See forthcoming Public Health Intelligence Occasional Bulletin and article.

### **How to score K10**

See Andrews G. and Slade T. 2001. Interpreting scores on the Kessler Psychological Distress Scale (K10). *Australian and New Zealand Journal of Public Health*, 25, p494-497.

SF-36 has been included in all past NZHS, with the extra WHO LF-NZ domains added in 2002/03.

In 2006/07, Version 2 of the SF-36 will be used, which changes the response categories from six to five responses in most questions. This assists with analysis and makes it easier for respondents to answer these questions. The Kessler (K10) mental health instrument has been added to capture anxiety and depression.

### Question details

2006/07 NZHS	Topic	Source of question	Previous NZHS	Notes
A4.1	General health	SF-36 Q.1	1996/07 2002/03	
A4.2	General health	SF-36 Q.2	1996/07 2002/03	
A4.3	General health	SF-36 Q.11a	1996/07 2002/03	
A4.4	General health	SF-36 Q.11b	1996/07 2002/03	
A4.5	General health	SF-36 Q.11c	1996/07 2002/03	
A4.6	General health	SF-36 Q.11d	1996/07 2002/03	
A4.7	Mental health	SF-36 Q.9h	1996/07 2002/03	Similar to WHO LF Q.2100
A4.8	Mental health	SF-36 Q.9d	1996/07 2002/03	
A4.9	Mental health	SF-36 Q.9c	1996/07 2002/03	
A4.10	Mental health	SF-36 Q.9f	1996/07 2002/03	
A4.11	Mental health	SF-36 Q.9b	1996/07 2002/03	
A4.12	Pain and discomfort	SF-36 Q.7	1996/07 2002/03	Similar to WHO LF Q.2090
A4.13	Pain and discomfort	SF-36 Q.8	1996/07 2002/03	
A4.14	Energy and vitality	SF-36 Q.9a,	1996/07 2002/03	Similar to WHO LF Q.2120
A4.15	Energy and vitality	SF-36 Q.9e	1996/07 2002/03	
A4.16	Energy and vitality	SF-36 Q.9g	1996/07 2002/03	
A4.17	Energy and vitality	SF-36 Q.9i	1996/07 2002/03	Similar to WHO LF Q.2121
A4.18	Physical functioning	SF-36 Q.3a	1996/97 2002/03	Similar to WHO LF Q.2153
A4.19	Physical functioning	SF-36 Q.3b	1996/97 2002/03	
A4.20	Physical functioning	SF-36 Q.3c	1996/97 2002/03	
A4.21	Physical functioning	SF-36 Q.3d	1996/97 2002/03	Similar to WHO LF Q.2152
A4.22	Physical functioning	SF-36 Q.3e	1996/97 2002/03	
A4.23	Physical functioning	SF-36 Q.3g	1996/97 2002/03	
A4.24	Physical functioning	SF-36 Q.3h	1996/97 2002/03	
A4.25	Physical functioning	SF-36 Q.3i	1996/97 2002/03	
A4.26	Physical functioning	SF-36 Q.3f	1996/97 2002/03	

2006/07 NZHS	Topic	Source of question	Previous NZHS	Notes
A4.27	Self-care	SF-36 Q.3j	1996/97 2002/03	
A4.28	Usual activities	SF-36 Q.4a	1996/97 2002/03	
A4.29	Usual activities	SF-36 Q.4b	1996/97 2002/03	
A4.30	Usual activities	SF-36 Q.4c	1996/97 2002/03	
A4.31	Usual activities	SF-36 Q.4d	1996/97 2002/03	
A4.32	Usual activities	SF-36 Q.5a	1996/97 2002/03	
A4.33	Usual activities	SF-36 Q.5b	1996/97 2002/03	
A4.34	Usual activities	SF-36 Q.5c	1996/97 2002/03	
A4.35	Social functioning	SF-36 Q.6	1996/97 2002/03	Similar to WHO LF Q.2201
A4.36	Social functioning	SF-36 Q.10	1996/97 2002/03	
A4.37	Mental health	Kessler Psychological Distress Scale (K10)	New	
A4.38	Mental health		New	
A4.39	Mental health		New	Only answered by those who 'felt nervous' in past 30 days
A4.40	Mental health		New	
A4.41	Mental health		New	
A4.42	Mental health		New	Only answered by those who 'felt restless or fidgety' in past 30 days
A4.43	Mental health		New	
A4.44	Mental health		New	Only answered by those who 'felt depressed' in past 30 days
A4.45	Mental health		New	
A4.46	Mental health		New	

**Number of questions in module A4:**

All respondents answer	43
Respondents with specific K10 symptoms answer	3
Total number of questions in module	46

**Median time to complete module A4 in testing:****8 minutes**

## **Health service utilisation (A2)**

This module has been informed by the Primary Care approach to population health (Starfield 1998), and the Ministry of Health's overarching strategies for the health and disability sector, specifically the *New Zealand Health Strategy* (2000) and the *Primary Health Care Strategy* (2001). This framework places emphasis on primary health care providers holding responsibility for the care of a given population over time, as the usual point of first contact with the health system except in serious emergencies. Questions in the Primary Health Care Provider section of the Health Services Utilisation module provide data to monitor the success of changes to Primary Health Care in New Zealand.

The following components of Primary Health Care are measured in the NZHS:

- **Accessibility:** Primary health care providers are accessible to the populations they serve; appointments are available when they are open and other arrangements exist for when they are closed. Patients are able to go to their primary health care provider when they have a health need.
- **Comprehensiveness of service:** Arrangements are made for patients to receive the full range of health care services, whether at their primary health care provider or through referrals. This includes preventative services, specialist diagnostic services, and wider social services.
- **Continuity and coordination of care:** Primary health care providers give regular care over time (regardless of the presence or absence of disease or injury). Patients are able to see the same practitioner for all/most visits to their primary care provider and a relationship is built over time. There is follow-up if a patient is referred to another health care worker or specialist.
- **Cultural competence:** Health care workers at primary health care providers respect the beliefs, attitudes and behaviours of their patients. Primary health care providers have a diverse range of people with skills that help to translate beliefs, attitudes and orientation into action and behaviour.

Many of the questions in the Primary Health Care Provider section of the questionnaire also measure general **quality of care** and consumer experience in Primary Health Care. However, the quality of clinical service in Primary Health Care Providers is monitored through a variety of quality assurance processes (outlined in the *Primary Health Care Strategy*, p24), not in the NZHS.

In addition to the above components of Primary Health Care, this module of the NZHS collects data on the types of health professionals used (GP/nurse/pharmacists etc), the reasons for visiting these health professionals, the unmet need for GPs and oral health care workers, and the use of secondary health care providers (public and private hospitals).

The 1996/97 NZHS asked questions on GPs, medical specialists, prescriptions and pharmacists, hospital use and general health service utilisation.

In 2002/03, questions on the respondent's usual health provider, Māori, Pacific and complementary and alternative health providers, nurses and helplines were added to the above sections.

For 2006/07 NZHS, oral health care workers have been added, and the Primary Health Care Provider section (previously called 'usual provider') has expanded. Some questions from 2002/03 have not been included. Please refer to the discontinued questions document for more information.

### Question details

2006/07 NZHS	Topic	Source of question	Previous NZHS	Notes
A2.01	Primary Health Care Provider – 'usual' provider	2002/03 NZHS Cognitively tested by PHI 2006	2002/03	Screening question asked to all respondents
A2.02	Primary Health Care Provider – type of provider	Cognitively tested by PHI 2006	2002/03 revised	Reworded for 2006/07 to capture GP clinics, Nurse clinics and other types of provider.
A2.03	Primary Health Care Provider – name (or location)	Constructed to reflect NZ health system	2002/03 revised	Used to check linkage to PHO Datamart
A2.04	Primary Health Care Provider – utilisation of PHC workers	Cognitively tested by PHI 2006	new	PHC workers seen at Primary Health Care Provider (PHCP) in past 12 months
A2.05	Primary Health Care Provider– utilisation of PHC workers	Based on similar 2002/03 NZHS Question. Cognitively tested 2006	new	Number of times seen each worker in past 12 months
A2.06	Primary Health Care Provider – continuity of care for GPs	Starfield's (1998) Primary Care Assessment Tool (PCAT)	new	Usually same doctor every time
A2.07	Primary Health Care Provider – continuity of care for nurses	Based on Starfield's (1998) PCAT	new	Usually same nurse every time
A2.08	Primary Health Care Provider – comprehensiveness of service	2002/03 NZHS with additions	2002/03 revised	Tests/immunisations/weight measurement in past 12 months at PHCP
A2.09	Primary Health Care Provider – comprehensiveness of service	Based on 2002/03 NZHS Q above	2002/03 revised	Discussed health topics in past 12 months with PHCP
A2.10	Primary Health Care Provider – quality of care	UK NHS Local Health Services PCT Core (2004) Q.C2	new	PHCP workers listen carefully
A2.11	Primary Health Care Provider – quality of care	Based on UK NHS Local Health Services PCT Core (2004)	new	PHCP workers discuss (as much as want) health care and treatment
A2.12	Primary Health Care Provider – cultural competence	UK NHS Local Health Services PCT Core (2004) Q.C7	new	Treated with respect and dignity
A2.13	Primary Health Care Provider – cultural competence	Statistics NZ SoFIE Health Q.P10	new	Advice was sensitive to respondent's culture
A2.14	Primary Health Care Provider – accessibility	Based on Starfield's (1998) PCAT Cognitively tested 2006	new	Could get appointment within 24 hours when needed

2006/07 NZHS	Topic	Source of question	Previous NZHS	Notes
A2.15	Primary Health Care Provider – reason for choosing	Based on Māori/Pacific provider question from 2002/03 NZHS	2002/03 but only for Māori/Pacific provider	Reason
A2.16	Primary Health Care Provider – continuity of care	Starfield's (1998) PCAT. Cognitively tested 2006	new	Changed PHCP in past 12 months
A2.17	Primary Health Care Provider – continuity of care	Based on 2002/03 Q re GPs wording. Cognitively tested 2006	2002/03 revised	If respondent changed PHCP, reason for changing
A2.18	Primary Health Care Provider – time since changed provider		new	If respondent changed PHCP, months elapsed since changed (needed for utilisation of workers data)
A2.19a	GPs - utilisation	Based on 2002/03 NZHS Cognitively tested 2006	2002/03 revised	If respondent does not have own PHCP
A2.19b	GPs – utilisation of GPs outside of PHCP	Based on 2002/03 NZHS Cognitively tested 2006	2002/03 revised	If respondent has PHCP and saw GP at PHCP in past 12 months
A2.19c	GPs – utilisation (number of times seen)	Based on 2002/03 NZHS Cognitively tested 2006	2002/03 revised	If answered yes to 19a or b then asked c.
A2.20	GPs - Reason why saw GP outside PHCP	Similar to 1996/67 2002/03 Qs Cognitively tested 2006	2002/03 revised	Only asked to respondents who have seen GP outside of PHCP
A2.21	GPs – last visit to GP		new	
A2.22	GPs – last visit to GP		1996/97 2002/03	How long ago was last visit (used to calculate cost of visit)
A2.23	GPs – last visit to GP (reason)		1996/67 2002/03	
A2.24	GPs – last visit to GP (cost)		1996/67 2002/03	
A2.25	GPs – last visit to GP (cost)		new	Determines if cost of last visit was 'usual'
A2.26	GPs – last visit to GP (cost)	Based on 2002/03 NZHS Q	2002/03	Changed from 2002/03 Q to include more than just ACC as reason for different cost
A2.27	GPs – unmet need	Same as 2002/03 NZHS	2002/03	Screening question for unmet need
A2.28	GPs – unmet need		new	No. of times in past 12 months
A2.29	GPs – unmet need	Based on 2002/03 NZHS	2002/03	Reason for unmet need
A2.30	GPs – unmet need		new	What did instead of seeing GP
A2.31a	Primary Health Care Nurses - utilisation	Based on 2002/03 NZHS	2002/03	If respondent does not have Primary Health Care Provider (PHCP)
A2.31b	Primary Health Care Nurses – utilisation of nurses outside of PHCP	Based on 2002/03 NZHS	new	If respondent has PHCP and saw nurse at PHCP in past 12 months
A2.32	Primary Health Care Nurses – utilisation of nurses outside of	Based on similar GP question	new	Reason why saw nurse outside of PCHP

2006/07 NZHS	Topic	Source of question	Previous NZHS	Notes
	PHCP			
A2.33	Primary Health Care Nurses – utilisation as part of GP consultation	Based on 2002/03 NZHS	2002/03	Number of times seen nurse as part of GP consultation in past 12 months
A2.34	Primary Health Care Nurses – last time saw nurse as part of GP consult	Based on 2002/03 NZHS	2002/03	Health problem discussed
A2.35	Primary Health Care Nurses – utilisation of nurse alone consults	Based on 2002/03 NZHS	2002/03	Number of times seen nurse alone in past 12 months
A2.36	Primary Health Care Nurses – last time saw nurse alone	Based on similar GP Q	new	How long ago was last visit (used to calculate cost of visit)
A2.37	Primary Health Care Nurses – reason saw nurse alone		2002/03	Health problem discussed
A2.38	Primary Health Care Nurses – cost	Based on wording for GP Question	new	Cost to see nurse alone
A2.40	Medical specialists – utilisation by type	1996/97 NZHS	1996/97 2002/03	Questions same as 2002/03 except showcard with types are given to respondent which may increase recall.
A2.41	Medical specialists – utilisation number of times	1996/97 NZHS	1996/97 2002/03	
A2.42	Medical specialists – public/private spec.	1996/97 NZHS	1996/97 2002/03	
A2.43	Medical specialists – PHCP coordination of care	Starfield's (1998) Primary Care Assessment Tool (PCAT)	new	Someone from PHCP spoke to respondent about specialist visit
A2.44	Oral health care – need for oral health care	From USA's Behavioural Risk Factor	1996/67 2002/03 revised	Screening for teeth removed because of tooth decay or gum disease
A2.45	Oral health care – time since last visit	Surveillance System State Questionnaire	new	These questions asked to respondents who have some/all teeth remaining.
A2.46	Oral health care – unmet need	Wording based on unmet need Qs for GPs	1996/67 2002/03 revised	
A2.47	Oral health care – why unmet need		new	
A2.48	Oral health care – considered urgent		new	
A2.49	Oral health care – regularity of care (attitude toward check-up vs when needed)	From EUROHIS project to develop common instruments for health surveys	new	
A2.50	Prescriptions – health care workers prescribing		2002/03	Questions same as 2002/03
A2.51	Prescriptions – unmet need		1996/97 2002/03 revised	
A2.52	Prescriptions – why unmet need		1996/67 2002/03	
A2.53	Comp. or alternative Providers – utilisation by type		1996/97 2002/03	Questions same as 2002/03 except showcard with types are given to respondent which may

2006/07 NZHS	Topic	Source of question	Previous NZHS	Notes
A2.54	Comp. or alternative Providers – no. of visits per type		1996/97 2002/03	increase recall.
A2.55	Comp. or alternative Providers – reason for last visit		2002/03	
A2.56	Comp. or alternative Providers – seeing GP about same condition		2002/03	
A2.57	Other health care workers – utilisation by type		1996/97 2002/03	Screen – more response categories with 'other nurses' captured eg, asthma nurse
A2.58	Other health care workers – no. of visits by type		1996/97 2002/03	
A2.59	Health advice over phone		2002/03	Changed from 2002/03 wording to concentrate on Primary Health Care and Healthline.
A2.60	Health advice over phone		2002/03	
A2.61	Health advice over phone – use of nurses on phone	Q moved from nurse section in 2002/03 NZHS	2002/03	Health condition discussed with nurse on phone last time.
A2.62	Secondary Health Care – public hospital utilisation		1996/97 2002/03	
A2.63	Secondary Health Care – inpatient/ outpatient etc		1996/97 2002/03	Only asked to those who have used public hospital in past 12 months
A2.64	Secondary Health Care – private hospital utilisation		1996/97 2002/03	
A2.65	Secondary Health Care - inpatient/ outpatient etc		1996/97 2002/03	Only asked to those who have used private hospital in past 12 months

**Number of questions in module A2:**

All respondents answer	17
Extra questions for those who have Primary Health Care Provider	15
Extra questions for specific sections	33
Total number of questions in module	65

**Median time to complete module A2 in testing: 16.5 minutes**

## **Health measurements (AM)**

This module attempts to collect information required in Step 2 of the WHO STEPwise Approach to Surveillance of risk factors for non-communicable diseases (STEPS) – anthropometric measurement and blood pressure – as well as other objective measures of health that are needed to monitor population health by the Ministry of Health.

Interviewers undergo detailed training in anthropometry techniques, and a training demonstration video is available on each interviewer's laptop to review throughout the data collection period.

1996/97 NZHS did not have a health examination module.

In 2002/03, height, weight and waist circumference measurements were collected for all respondents.

For the 2006/07 NZHS, height, weight and waist circumference measurements will again be collected for all respondents.

Planning is also underway to include the physical measurement of blood pressure in 2009/10 NZHS, following testing of the instrument in the 2007/08 NZ Adult Nutrition Survey, which would complete Step 2 in WHO STEPS. Step 3, biochemical measures through the collection of blood and urine samples, are unsuitable for inclusion in the NZHS in the near future due to the use of non-medical interviewers, however biochemical samples are collected in the NZ Nutrition Surveys.

### **Question details**

<b>2006/07 NZHS</b>	<b>Topic</b>	<b>Source of question</b>	<b>Previous NZHS</b>	<b>Notes</b>
AM.01	Currently pregnant		2002/03	Screen for pregnancy – improved 2002/03 wording. Pregnant women are not asked for measurements.
AM.02a	1 <sup>st</sup> height measurement		2002/03	
AM.03a	1 <sup>st</sup> weight measurement		2002/03	
AM.04a	1 <sup>st</sup> waist measurement		2002/03	
AM.02b	2 <sup>nd</sup> height measurement		2002/03	
AM.03b	2 <sup>nd</sup> weight measurement		2002/03	
AM.04b	2 <sup>nd</sup> waist measurement		2002/03	
AM.02c	3 <sup>rd</sup> height measurement		2002/03	3 <sup>rd</sup> measurement prompted by computer if first two measurements >1% different
AM.03c	3 <sup>rd</sup> weight measurement		2002/03	
AM.04c	3 <sup>rd</sup> waist measurement		2002/03	

**Median time to complete module AM in testing:**

**5.5 minutes**

## ***Recontact information (AR)***

### **Question details**

<b>2006/07 NZHS</b>	<b>Topic</b>	<b>Source of question</b>	<b>Previous NZHS</b>	<b>Notes</b>
AR.1	Phones – landline contact number		2002/03	
AR.2	Phones – mobile phone number		2002/03	
AR.3	Email – email address		new	
AR.4	Consent for follow-up in 1-2 years time		2002/03	
AR.5	Address for follow-up letter		new	
AR.6	Name of friend or family member in case move house		new	
AR.7	Best contact phone number of AR.8		new	

**Median time to complete module AR in testing:**

**4 minutes**

## CHILD COMPONENT OF THE NZHS

The 2006/07 NZHS collects detailed data about child health status and the risk and protective factors for adult health outcomes. A child health component was included in the 1996/97 NZHS, however this was not repeated in the 2002/03 NZHS. From 2006/07 onwards, it is intended that child health data will be collected in every NZHS. Children are defined for the NZHS as people aged 0-14 years old, and information is collected via the primary caregiver acting as a proxy-respondent for the child. As in previous NZHS, young people aged 15-19 years are included in the adult component of the NZHS, answering the adult questionnaire themselves.

Several population-level indicators for child health currently exist (see Ministry of Social Development, 2004a) and NZHS data will complement these to provide a broader picture of New Zealand children's health and wellbeing. The topic areas for the child component of the NZ Health Survey have been selected for their relevance to key Ministry of Health's policies on child health, for example: *The Wellchild Framework* (2002), *Child Health Strategy* (1998), *Child Health Information Strategy* (2003), *Child and Youth Health Toolkit* (2004). The Child Health Strategy (1998) has four priority populations: tamariki Māori; Pacific children; children with high health and disability support needs; and children from families with multiple social and economic disadvantages. See [www.moh.govt.nz/childhealth](http://www.moh.govt.nz/childhealth) for more information.

Two important child health frameworks used by the Ministry of Health are the life-cycle changes model and a settings-based approach. The life-cycle changes model recognises that all children and young people make life-cycle transitions, the largest being birth and the rapid growth of infancy, followed by toddlerhood and preschool years (home and early childhood education), middle childhood (primary school), adolescence (secondary education), followed by transition to adulthood (ongoing education or employment). Different assessments and interventions for child health become appropriate at different stages of the life cycle. A settings based approach acknowledges that there are key settings in which children live, play and work, that is, homes, schools, communities and society, and that these have a profound impact on health (Ministry of Health 2004, Earls and Carlson 2001). When compiling the NZHS Child Questionnaire, these two frameworks have guided question inclusion.

The NZHS child component has also been informed by *New Zealand's Agenda for Children* (Ministry of Social Development, 2002), in particular the whole child approach to policy and service development for children. Taking a whole child approach means:

- Focusing on the big picture, on the child's whole life and circumstances and the links between individual issues and other aspects of their lives
- Focusing at the outset on what children need for healthy development and wellbeing
- Looking across the whole public service at what can be done to support children's healthy development
- Considering multi-level interventions in the settings of family/whānau, friends and peers, school and wider community
- Viewing children as having valuable knowledge to contribute to developing and evaluating policies and services that affect them
- Considering ways in which children can be involved in decision-making on issues that affect them (Ministry of Social Development 2004b:6).

The Ministry of Health recognises the importance of collecting information directly from children, thereby acknowledging that children are competent participants in society and a source of valuable information on their health and wellbeing (Smith 2000). However, the quantitative methodology employed in the NZHS does not lend itself easily to the inclusion of children in data collection. Child participation in the NZHS will be reviewed following the 2006/07 NZHS, to explore design options for their inclusion in 2009/10 and subsequent NZ Health Surveys.

Some questions within the child component of the NZHS are restricted to specific ages and this is noted below in the content tables on the following pages. The 2006/07 NZHS child component is presented in this content guide in the following order:

- Sociodemographics (C4)
- Risk and protective factors (C3)
- Health and development (C1)
- Health service utilisation (C2)
- Health examination (CE)
- Recontact section (CR)

The child questionnaire takes a median time of 30 minutes to complete and will be interviewer-administered (CAPI). The order of the child questionnaire is represented above in brackets, ie, C1 first.

### ***Sociodemographics (C4)***

Sociodemographic information about each child in the NZHS assists with the analysis of various determinants of health outcomes, and aids the monitoring of inequality and changes in health disparities.

The 1996/97 NZHS asked questions on gender, age, ethnicity, health service utilisation, High Use Health Card and medical insurance for the child.

The 2006/07 child socio-demographics section has been extended to include a wide variety of variables that may impact on child health.

In addition to the data collected in this module, information about the child's household will be available from the adult component of the NZHS (household composition, family type, NZDep, rurality, Economic Living Standards ELSI) and can be linked to the child NZHS data. Birth record data (eg, gestation, birth weight, parental information) may be anonymously linked to the data collected in the NZHS.

#### **Question details**

<b>2006/07 NZHS</b>	<b>Topic</b>	<b>Source of question</b>	<b>Age-specific</b>	<b>Notes</b>
CD.01	Gender		All	These three questions are asked at the start of the Child Questionnaire to assist routing.
CD.02	Age group		All	
CD.03	Primary Caregiver's relationship to child		All	
C4.01	Date of birth	Stats NZ	All	Needed for anonymous probabilistic data linkage
C4.02	Ethnicity	Stats NZ	All	
C4.03	Māori descent	Stats NZ	All	

C4.04	Country of birth	Stats NZ	All	
C4.05	Year of arrival in NZ if migrant	Stats NZ	All	Only asked if child not born in NZ
C4.06	Languages child can speak	Based on Stats NZ question	All	Not applicable response option available for babies/toddlers
C4.07	Languages spoken to child	Based on Stats NZ question	All	
C4.08	Receipt of disability or child disability allowance	Stats NZ	All	
C4.09	Medical insurance	Based on NZHS Adult question	All	
C4.10	Exposure to passive smoke in house	NZHS Adult	All	
C4.11	Exposure to passive smoke in car	NZHS Adult	All	
C4.12	Child household mobility	Youth '07	All	Number of times child moved house in past 5 years
C4.13	Shared-care and/or custody arrangements	Cognitively tested by PHI in 2006	All	
C4.14	Prevalence of regular childcare outside home	Cognitively tested by PHI in 2006	0-4 yrs	
C4.15	Age first in regular care outside home	Cognitively tested by PHI in 2006	0-4 yrs	Only asked if child regularly in care outside home
C4.16	Early Childhood Care – arranged care in past 2 weeks	Cognitively tested by PHI in 2006	0-4 yrs	
C4.17	Early Childhood Care – hours in arranged care over past 2 weeks	Cognitively tested by PHI in 2006	0-4 yrs	
C4.18	Primary caregiver's age on last birthday		All	Answers from C4.18 to C4.27 are taken from adult questionnaire if primary caregiver is the adult respondent (ie, they're not asked twice in the NZHS).
C4.19	Primary caregiver's highest secondary education	NZHS Adult	All	
C4.20	Primary caregiver's highest tertiary education	NZHS Adult	All	
C4.21	Primary caregiver's employment status (incl hours worked per week)	NZHS Adult	All	
C4.22	Household income	NZHS Adult	All	
C4.23	Total number of people living in dwelling	NZHS Adult	All	
C4.24a	Person 1 - Gender	NZHS Adult	All	
C4.25a	Person 1 – Age on last birthday	NZHS Adult	All	
C4.26a	Person 1– Relationship to adult respondent	NZHS Adult	All	
C4.24b	Person 2 - Gender	NZHS Adult	All	
C4.25b	Person 2 – Age on last birthday	NZHS Adult	All	
C4.25b	Person 2 – Relationship to adult respondent	NZHS Adult	All	
...	Etc...			
C4.27	Tenure/ownership of dwelling	NZHS Adult	All	C4.23a

C4.28	Number of bedrooms in dwelling	NZHS Adult	All	C4.24a
-------	--------------------------------	------------	-----	--------

**Number of questions in module C4:**

All respondents answer	12
Child not born in NZ	1
Child aged 0-4 years	3
Child aged 0-4 and regularly in care outside home	1
Primary caregiver is not the NZHS adult respondent	11
Total number of questions in module	28

**Median time to complete module C4 in testing: 2.5 minutes**

***Risk and protective factors (C3)***

This module of the NZHS collects information used to monitor the key risk and protective factors associated with chronic conditions and health outcomes. There are few potentially modifiable risk factors for childhood chronic conditions, however research has identified many risk factors associated with poor adult health outcomes, for example childhood obesity.

The questions in this module have been guided by the Health Eating – Health Action (HEHA) key messages. HEHA is the Ministry of Health’s strategic approach to improving nutrition, aimed at increasing physical activity and achieving a healthy weight for all New Zealanders. The key messages are:

- eat a variety of nutritious foods
- eat less fatty, salty, sugary foods
- eat more vegetables and fruits
- fully breastfeed infants for at least six months
- be active every day for at least 30 minutes in as many ways as possible
- add some vigorous exercise for extra benefit and fitness
- aim to maintain a healthy weight throughout life
- promote and foster the development of environments that support healthy lifestyles.

Breastfeeding prevalence rates in New Zealand are currently monitored through the Royal New Zealand Plunket Society (Inc). Plunket data provide information on the proportion of babies fully breastfed at five to six weeks, at three months, and at four to six months, and fully or partially breastfed at four to six months. Breastfeeding rates are available by ethnic group and District Health Board. The Clinical Services Directorate of the Ministry of Health currently purchases these data from Plunket. The NZHS will allow for detailed analysis of the correlation between breastfeeding and current child health status, and data beyond that which Plunket provides.

No validated instrument currently exists for the measurement of physical activity levels in children. The NZ Sport and Recreation Council (SPARC) are developing an instrument in collaboration with the Ministry of Health and Australian counterparts, however this instrument will not be ready for inclusion in the 2006/07 NZHS. The instrument used in the 2002 Children’s Nutrition Survey is too long for inclusion in the NZHS (32 items) and is not suitable for all age groups 0-14 years. For 2006/07, data on the child’s inactivity (TV watching, computer use etc) will be collected, as this is a

risk factor in itself, and the new physical activity instrument will be included in the NZHS from 2009/10.

The recommended serving guidelines for fruit and vegetable intake for children are currently being reviewed by the Ministry of Health. Questions on this topic will be included in 2009/10 NZ Health Survey to assist with monitoring fruit and vegetable intake among New Zealand children.

The 1996/97 NZHS did not include specific questions on risk and protective factors that may influence health. For 2006/07 NZHS, the caregiver will be asked about their perception of the child's weight, the child's nutrition and physical activity, and breastfeeding for under 5 year olds.

### Question details

2006/07 NZHS	Topic	Source of question	Age-specific	Notes
C3.01	Caregiver's perception of child's weight	Adapted from Australian National Health Survey (2001) Cognitively tested by PHI in 2006	All	
C3.02	Breastfeeding – prevalence	Australian National Health Survey (2001) Cognitively tested by PHI in 2006	All	
C3.03	Breastfeeding – age stopped	Australian National Health Survey (2001)	All	
C3.04	Nutrition – age weaned	Cognitively tested by PHI in 2006	0-4 years	
C3.05	Nutrition – type of food weaned onto	Cognitively tested by PHI in 2006	0-4 years	
C3.06	Nutrition – prevalence of regular formula use	Australian National Health Survey (2001)	0-4 years	Screen for ever given formula regularly
C3.07	Use of formula – age started	Australian National Health Survey (2001)	0-4 years	Only asked to those currently using formula
C3.08	Use of formula – type	Based on Australian National Health Survey (2001)	0-4 years	
C3.09	Solid food – age first given	Australian National Health Survey (2001) Cognitively tested by PHI in 2006	0-4 years	
C3.10	Nutrition – weekly breakfast at home consumption	Based on Youth '07 question	3-14 years	
C3.11	Nutrition – weekly lunch from home	Based on Youth '07 question	5-14 years	
C3.12	Nutrition – typical weekly fizzy/soft drink consumption	Adapted from Youth '07. Cognitively tested by PHI in 2006	2-14 years	
C3.13	Nutrition – past 7 days fizzy/soft drinks consumption	Adapted from Youth '07. Cognitively tested by PHI in 2006	2-14 years	
C3.14	Nutrition – typical weekly fast food/takeaway consumption	Adapted from Youth '07. Cognitively tested by PHI in 2006	2-14 years	
C3.15	Nutrition – past 7 days fast food/takeaway consumption	Adapted from Youth '07. Cognitively tested by PHI in 2006	2-14 years	
C3.16	Activity – usual transport to and from school	Cognitively tested by PHI in 2006	5-14 years	

C3.17	Activity – barriers to walking/biking/skating to school daily	Cognitively tested by PHI in 2006	5-14 years	
C3.18	Activity – past 5 school days how often used each transport to and from school	Cognitively tested by PHI in 2006	5-14 years	
C3.19	Activity – average no. hours spent watching TV on week days	Youth '07/2002 CNS. Cognitively tested by PHI in 2006	All ages	
C3.20	Activity – average no. hours spent watching TV on weekend	Youth '07/2002 CNS. Cognitively tested by PHI in 2006	All ages	

**Number of questions in module C3:**

All ages	9
Child aged 0-4 years	2
Child aged 2-14 years	6
Child ever breastfed but not currently	1
Child currently given formula	2
Total number of questions in module	20

**Median time to complete module C3 in testing: 4.5 minutes**

***Health and development (C1)***

This module collects data on current health status and development trajectories of New Zealand children.

The aim of this module is not to replicate data already collected (eg, through administrative databases), but to monitor the level of health and prevalence of conditions that may not be captured elsewhere.

The main instrument included in this module is the Child Health Questionnaire Parent Form (CHQ-PF28). The CHQ-PF28 is a 28 item questionnaire, collecting data on 12 aspects of children's quality of life and wellbeing: general health perceptions, physical functioning, role physical, bodily pain, change in health, general behaviour, mental health, role social, self-esteem, family activities, family cohesion, and impact of the child's health on parent emotions and time. This produces 2 summary scales: physical wellbeing and psychosocial wellbeing. The longer 50 item CHQ was developed in 1995 and has since been used extensively throughout the world in child health surveys, including in Australia, Ireland, England, United States of America and in many European countries. The shorter 28 item CHQ has been used in the NZHS in order to keep the interview to 20 minutes in total.

For 2006/07 NZHS, the CHQ-PF28 will be used with caregivers of children aged 5-14 years, however, a CHQ version for under 5 year olds is currently being developed, and is planned for inclusion in 2009/10.

Also included in this module is the short-form of the International Study of Asthma and Allergies in Children (ISAAC) questionnaire, as a monitoring tool for the

prevalence of asthma, rhinitis and eczema in New Zealand children (both diagnosed and undiagnosed), and two questions on discipline methods for children.

### How to score CHQ-PF28

See Landgraf JM, Abetz L, and Ware JE. 1999. *Child Health Questionnaire (CHQ): A Users Manual*. 2<sup>nd</sup> edition. Boston, HealthAct.

### Question details

2006/07 NZHS	Topic	Source of question	Age-specific	Notes
C1.01	Diagnosed chronic conditions	New – based on NZHS Adult Q. Cognitively tested by PHI in 2006	All	
C1.02	Treatment for chronic conditions	Based on NZHS Adult question	All	Asks for type/name if on prescribed meds.
C1.03	Asthma – prevalence of whistling or wheezing	International Study of Asthma and Allergies in Children (ISAAC)	5-14 years	
C1.04	Asthma – incidence whistling or wheezing	ISAAC Q1.2 Parent 6-7 years	5-14 years	Only asked to caregiver of child who ever had wheezing
C1.05	Asthma – no. attacks of wheezing in past 12 mnths	ISAAC Q1.3 Parent 6-7 years	5-14 years	
C1.06	Asthma – no. times sleep disturbed in past 12 mnths	ISAAC Q1.4 Parent 6-7 years	5-14 years	
C1.07	Asthma – breathing difficulties in past 12 mnth	ISAAC Q.15 Parent 6-7 years	5-14 years	
C1.08	Rhinitis – prevalence	ISAAC Q2.1 Parent 6-7 years	5-14 years	
C1.09	Rhinitis – incidence	ISAAC Q2.2 Parent 6-7 years	5-14 years	Only asked to caregiver of child who ever had runny nose when did not have cold or flu
C1.10	Rhinitis – accompanied by watery eyes	ISAAC Q2.3 Parent 6-7 years	5-14 years	
C1.11	Eczema – prevalence	ISAAC Q3.1 Parent 6-7 years	5-14 years	
C1.12	Eczema – incidence	ISAAC Q3.2 Parent 6-7 years	5-14 years	Only asked to caregiver of child who ever had itchy rash lasting more than 6 months
C1.13	Eczema – location	ISAAC Q3.3 Parent 6-7 years	5-14 years	
C1.14	General health perception	CHQ-PF28	All	Produces two summary CHQ scores for physical wellbeing and psychosocial wellbeing for ages 5-14 years.
C1.15a	Physical limitation	CHQ-PF28	5-14 years	
C1.15b	Physical limitation	CHQ-PF28	5-14 years	
C1.15c	Physical limitation	CHQ-PF28	5-14 years	
C1.16	Limitations caused by emotional difficulties	CHQ-PF28	5-14 years	
C1.17	Limitations caused by physical health	CHQ-PF28	5-14 years	Two questions are asked to 0-4 year olds (general health question and family cohesion) for independent analyses.
C1.18	Bodily pain	CHQ-PF28	5-14 years	
C1.19a	Behaviour	CHQ-PF28	5-14 years	
C1.19b	Behaviour	CHQ-PF28	5-14 years	
C1.20a	Behaviour	CHQ-PF28	5-14 years	
C1.20b	Behaviour	CHQ-PF28	5-14 years	
C1.21a	Mental health	CHQ-PF28	5-14 years	
C1.21b	Mental health	CHQ-PF28	5-14 years	
C1.21c	Mental health	CHQ-PF28	5-14 years	
C1.22a	Self-esteem	CHQ-PF28	5-14 years	
C1.22b	Self-esteem	CHQ-PF28	5-14 years	
C1.22c	Self-esteem	CHQ-PF28	5-14 years	
C1.23a	General health perception	CHQ-PF28	5-14 years	
C1.23b	General health perception	CHQ-PF28	5-14 years	

2006/07 NZHS	Topic	Source of question	Age-specific	Notes
C1.23c	General health perception	CHQ-PF28	5-14 years	
C1.24	Change in health	CHQ-PF28	5-14 years	
C1.25a	Impact of child's physical health on caregiver	CHQ-PF28	5-14 years	
C1.25b	Impact of child's emotional health on caregiver	CHQ-PF28	5-14 years	
C1.26a	Impact of child's physical health on caregiver's time	CHQ-PF28	5-14 years	
C1.26b	Impact of child's emotional health on caregiver's time	CHQ-PF28	5-14 years	
C1.27a	Impact of child's health on family activities	CHQ-PF28	5-14 years	
C1.27b	Impact of child's health on family activities	CHQ-PF28	5-14 years	
C1.28	Family cohesion	CHQ-PF28	All	
C1.29	Discipline – utilisation of different methods in past month	Based on OCC's research (1994) Cognitively tested by PHI in 2006	All	Respondent reads number for answer
C1.30	Discipline – perceived effectiveness of different methods	Based on 1.29 Cognitively tested by PHI in 2006	All	Respondent reads number for answer

**Number of questions in module C1:**

All respondents answer	5
Child aged 5-14 years	16
Extra question if child has any chronic condition	1
Extra questions if has asthma 5-14 year olds	4
Extra questions if has rhinitis 5-14 year olds	2
Extra questions if has eczema 5-14 year olds	2
 Total number of questions in module	 30

**Median time to complete module C1 in testing: 9 minutes**

***Health service utilisation (C2)***

As in the adult component of the NZHS, the focus for this module is the utilisation of and access to primary health care services in order to complement data already collected by administrative databases on primary and secondary health service utilisation. Access to appropriate primary health care services for children is vital for their health and wellbeing, and the NZHS is an important tool to monitor this access.

It is hoped that NZHS data can be anonymously linked to Wellchild service use data in the future.

The 1996/97 NZHS included questions on utilisation of GPs and medical specialists, cost of last visit to GP, unmet need for GPs, utilisation of other health care workers, unmet need for other health care workers, secondary health care services use, prescriptions and unmet need for prescriptions.

For 2006/07, the focus is on Wellchild Providers for children aged 0-4 and GPs, nurses and oral health care workers for children aged 5-14 years, with questions on need, utilisation, access and unmet need. Questions on the use of hospitals and medical specialists in past 12 months have also been included.

**Question details**

2006/07 NZHS	Topic	Source of question	Age-specific	Notes
C2.01	Primary Health Care Provider – ‘usual’ provider	Based on NZHS Adult Q2.1	All	
C2.02	Primary Health Care Provider – type of provider	Based on NZHS Adult Q2.2	All	
C2.03	Primary Health Care Provider – same as primary caregiver’s	New	All	
C2.04	GPs – no. of visits in past 12 months	1996/97 NZHS Child Q6 and 7	All	
C2.05	GPs - reason for last visit to GP	1996/97 NZHS Child Q9	All	Only asked when have seen GP in past 12 months
C2.06	GPs - cost of last visit	1996/97 NZHS Child Q11	All	
C2.07	GPs – unmet need prevalence	1996/97 NZHS Child Q13	All	
C2.08	GPs – unmet need no. of times in year	Based on NZHS Adult Q	All	Only asked when could not see GP when needed in past 12 months
C2.09	GPs – unmet need reason why	Based on NZHS Adult Q	All	
C2.10	GPs – unmet need health issue	Based on NZHS Adult Q	All	
C2.11	GPs – unmet need what did instead	Based on NZHS Adult Q	All	
C2.12a	Primary Health Care Nurses – utilisation as part of GP consult	Based on NZHS Adult Q	All	
C2.12b	Primary Health Care Nurses – utilisation alone without GP	Based on NZHS Adult Q	All	
C2.13	Primary Health Care Nurses – reason for last visit (a)	Based on NZHS Adult Q	All	Only asked when saw nurse as part of GP consultation
C2.14	Primary Health Care Nurses – reason for last visit (b)	Based on NZHS Adult Q	All	Only asked when saw nurse alone without GP
C2.15	Primary Health Care Nurses – cost	Based on NZHS Adult Q	All	
C2.16	Medical specialists – use in past 12 months	1996/97 NZHS Child Q15	All	
C2.17	Medical specialists – public/private	Based on NZHS Adult Q	All	
C2.18	Oral health care – filling or dressing prevalence	Based on 2002 Children’s Nutrition Survey (CNS) Health Q3	5-14 yrs	
C2.19	Oral health care – pain	Based on 2002 CNS Health Q4	5-14 yrs	
C2.20	Oral health care – decayed tooth removed prevalence	Based on 2002 CNS Health Q5	5-14 yrs	
C2.21	Oral health care – no. of times brushed teeth	Based on 2002 CNS Health Q2	5-14 yrs	
C2.22	Oral health care – regularity of care	EUROHIS	All ages	
C2.23	Oral health care – unmet need prevalence	Based on NZHS Adult Q	All ages	

2006/07 NZHS	Topic	Source of question	Age-specific	Notes
C2.24	Oral health care – unmet need reason	Based on NZHS Adult Q	All ages	Only asked when could not see oral health care worker when needed in past 12 months
C2.25	Other health care workers – utilisation	Based on NZHS Adult Q	All ages	
C2.26	Other health care workers – no. of times in past 12 mnth	Based on NZHS Adult Q	All ages	
C2.27	Prescription medicines – who prescribed in past 12 months	Based on NZHS Adult Q	All	
C2.28	Prescription medicines – unmet need	Based on NZHS Adult Q	All	
C2.29	Prescription medicines – reason why unmet need	Based on NZHS Adult Q	All	Only asked when uncollected prescriptions for child in past 12 months
C2.30	Health advice over the phone – utilisation of different health care workers	Based on NZHS Adult Q	All	
C2.31	Health advice over the phone – no. of times in past 12 mnth	Based on NZHS Adult Q	All	Only asked when spoke to health care worker over phone
C2.32	Secondary Health Care – public hospital utilisation	Based on NZHS Adult Q	All	
C2.33	Secondary Health Care – inpatient/ outpatient etc	Based on NZHS Adult Q	All	Only asked when used public hospital in past 12 months
C2.34	Secondary Health Care – private hospital utilisation	Based on NZHS Adult Q	All	
C2.35	Secondary Health Care - inpatient/ outpatient etc	Based on NZHS Adult Q	All	Only asked when used private hospital in past 12 months
C2.36	Secondary Health Care – reason for admission to private hospital	Responses based on most frequent procedures for children in private hospitals	All	Only asked when used private hospital in past 12 months (as accurate data already exists for public hospitals)

**Number of questions in module C2:**

All respondents answer	17
Child aged 5-14 years	4
Extra questions when seen certain health care workers	6
Extra questions when have unmet need (GP, oral, prescriptions)	6
Extra questions when been in hospital	3

Total number of questions in module 36

**Median time to complete module C2 in testing: 6.5 minutes**

## Health measurements (CM)

This module collects information required in Step 2 of the WHO STEPwise Approach to Surveillance of risk factors for non-communicable diseases (STEPS) – anthropometric measurements – and may include other objective measures of health that are needed at a population level by the Ministry of Health to monitor child health status in future NZHS.

The 1996/97 NZHS did not have a health examination module and the 2002/03 NZHS did not include children, however the data may be comparable to the 2002 Children's Nutrition Survey data which collected height and weight measurements for 5-14 year olds.

For the 2006/07 NZHS, height and weight measurements will be collected for all children participants aged over 2 years old, and waist circumference from children aged 5-14 years.

### Question details

2006/07 NZHS	Topic	Source of question	Age specific	Notes	
CM.01a	1 <sup>st</sup> height measurement	Adult NZHS	2-14 yrs		
CM.02a	1 <sup>st</sup> weight measurement		2-14 yrs		
CM.03a	1 <sup>st</sup> waist measurement		5-14 yrs		
CM.01b	2 <sup>nd</sup> height measurement		2-14 yrs		
CM.02b	2 <sup>nd</sup> weight measurement		2-14 yrs		
CM.03b	2 <sup>nd</sup> waist measurement		5-14 yrs		
CM.01c	3 <sup>rd</sup> height measurement		2-14 yrs		3 <sup>rd</sup> measurement prompted by computer if first two measurements >1% different
CM.02c	3 <sup>rd</sup> weight measurement		2-14 yrs		
CM.03c	3 <sup>rd</sup> waist measurement		5-14 yrs		

**Median time to complete module CM in testing:**

**5 minutes**

## ***Glossary of terms in the 2006/07 NZ Health Survey***

<b>Term</b>	<b>Definition</b>
ACC	Accident Compensation Corporation - administers New Zealand's accident compensation scheme, which provides personal injury cover for all New Zealand citizens, residents and temporary visitors to New Zealand.
Angina	Chest pain that occurs secondary to the inadequate delivery of oxygen to the heart muscle. Often described as a heavy or squeezing pain in the midsternal area of the chest lasting less than 30 minutes.
Anthropometry	Measurements of the size, weight and proportions of the body.
Arthritis	An inflammatory condition that affects joints.
Asthma	A chronic inflammatory disease of the air passages causing widespread narrowing, obstruction of airflow, and episodes of wheezing, chest tightness and shortness of breath.
Auahi kore	A national programme promoting smoke-free lifestyle to Māori, brand managed by the Health Sponsorship Council ( <a href="http://www.healthsponsorship.co.nz">www.healthsponsorship.co.nz</a> ).
Body Mass Index (BMI)	A measure of body mass calculated by dividing weight (kilograms) by height (metres) squared.
Cancer	A range of diseases where some of the body's cells begin to multiply out of control, can invade and damage the area around them, and can also spread to other parts of the body to cause further damage.
Cervical smear	Procedure for detecting and diagnosing various conditions, especially malignant and pre-malignant conditions of the cervix.
Chronic condition	A physical or mental illness that has lasted, or is expected to last, for more than 6 months.
Chronic pain	Pain that has lasted or is expected to last more than 6 months.
Complementary and alternative providers (CAM)	<p>A broad domain of healing resources that encompasses all health systems, modalities, and practices and their accompanying theories and beliefs, other than those in the dominant western health system. CAM includes all such practices and ideas self-defined by their users as preventing or treating illness or promoting health and well-being.</p> <p>Examples of CAM include acupuncture, herbal medicine, and homeopathy.</p>
COPD	Chronic Obstructive Pulmonary Disease - a progressive disease process that most commonly results from smoking. COPD is characterised by difficulty breathing, wheezing and a chronic cough.
Diabetes	<p>A chronic condition in which the body makes too little of the hormone insulin or cannot use it properly. This raises the blood level of the body's major energy source, the sugar glucose, and causes other widespread disturbance of the body's energy processes.</p> <p>Type 1 diabetes usually arises in childhood or youth, marked by a complete lack of insulin and needing insulin replacement for survival.</p> <p>Type 2 diabetes is the most common form, occurring mostly in people aged 40 years and over and marked by reduced or less effective insulin.</p>

Term	Definition
Dietitian	A non-medically qualified person who specialises in dietetics - the study of food and its nutritional properties. Dietitians give advice on the design of special diets for well and ill patients.
Early Childhood Care and Education (ECCE)	ECCE in New Zealand covers the ages from birth to school entry age. Participation is voluntary but increasing at all ages. There are many different types of ECCE organisations.
Epilepsy	A disturbance of brain function marked by recurrent fits and loss of consciousness.
Ethnicity	<p>A social construct of group affiliation and identity. Members of an ethnic group have one or more of the following for characteristics (Statistics NZ):</p> <ul style="list-style-type: none"> <li>• they share a sense of common origins</li> <li>• they claim a common and distinctive history and destiny</li> <li>• they possess one or more dimensions of collective cultural individuality</li> <li>• they feel a sense of unique collective solidarity.</li> </ul>
	Ethnicity is self-perceived and people can belong to more than one ethnic group. People can and do change their ethnic affiliation, both over time and in different contexts.
General Practitioner (GP)	a medically qualified doctor who practices general medicine as a family practitioner. Some GPs are also qualified in specialised medicine.
Heart disease	Any disorder that affects the heart. There are many types of heart disease, for example: angina; arrhythmia; congenital heart disease; coronary artery disease (CAD); dilated cardiomyopathy; heart attack (myocardial infarction); heart failure; hypertrophic cardiomyopathy; mitral regurgitation; mitral valve prolapse; and pulmonary stenosis.
Hysterectomy	An operation in which the uterus is partially or completely removed.
Healthline	Healthline is a free, 24 hour a day telephone health advice service, staffed by registered nurses.
Immunisation/vaccination	The introduction of vaccine into the body for the purpose of inducing immunity for protection against infectious diseases.
Inpatient	Persons admitted to health facilities which provide board and room, for the purpose of observation, care, diagnosis or treatment.
Mammogram	A breast x-ray that helps to check for early signs of breast cancer.
Medical specialist	A medical doctor with specialist training, usually based in the hospital, eg, cardiologist, neurologist, psychiatrist, obstetrician,
Midwife	Trained specialist to assist women during pregnancy and birth.
Occupational therapist	Trained specialist to help people manage the daily activities of living, such as dressing, grooming or cooking, and regaining vocational skills.
Optician or optometrist	Professional trained to provide primary eye and vision care and improve vision with glasses, contact lenses, etc.
Osteoarthritis	Non-inflammatory degenerative joint disease occurring chiefly in older persons, characterised by degeneration of the cartilage and bone. It is accompanied by pain and stiffness, particularly after prolonged activity.
Osteoporosis	A reduction in the amount of bone mass, leading to fractures after minimal

Term	Definition
Outpatient	trauma. A patient who is not an admitted to a hospital. Outpatient care is sometimes called ambulatory care.
Pharmacist	An individual trained in preparing and dispensing medicines.
Physiotherapist	a specialist trained using exercise and physical activities to condition muscles and improve level of activity.
Prescription	A written direction for the preparation and administration of a remedy.
Primary caregiver of a child	An adult who has day-to-day responsibility for the care of a person aged less than 15 years old.
Primary health care provider (PHCP)	Health providers that have responsibility for the care of a given population over time, as the usual point of first contact with the health system, except in serious emergencies.
Rheumatoid arthritis	Chronic inflammatory disease in which there is destruction of joints.
Spinal disorders	A range of conditions affecting the back or neck (eg, lumbago, sciatica, chronic back or neck pain, vertebrae or disc problems)
Spirometry	Measurement of volume of air inhaled or exhaled by the lung.
STEPS	The World Health Organization's three-step approach to population surveillance of risk factors for non-communicable diseases.
Stroke	Damage to a group of nerve cells in the brain is often due to interrupted blood flow, caused by a blood clot or blood vessel bursting. Depending on the area of the brain that is damaged, a stroke can cause coma, paralysis, speech problems and dementia.
Transient ischaemic attack	a temporary paralysis, numbness, speech difficulty or other neurologic symptoms that start suddenly and recovers within 24 hours (typically resolved over several hours).

## References

- Andrews G. and Slade T. 2001. Interpreting scores on the Kessler Psychological Distress Scale (K10). *Australian and New Zealand Journal of Public Health*, 25, p494-497.
- Babor TF, Higgins-Biddle JC, Saunders JB, and Monteiro MG. 2001. *AUDIT: The Alcohol Use Disorders Identification Test: Guidelines for Use in Primary Care*. 2<sup>nd</sup> edition. Department of Mental Health and Substance Dependence, World Health Organisation, Geneva. p.19.
- Cassady C, 1998. *Manual for the Primary Care Assessment Tool*. John Hopkins University.
- Earls R and M Carlson, 2001. The Social Ecology of Child Health and Wellbeing, *Annual Review of Public Health*. 22:143-66.
- Jensen J, M Spittal, S Crichton, S Sathiyandra and V Krishnan, 2002. *Direct Measurement of Living Standards: The New Zealand ELSI Scale*. Wellington, Ministry of Social Development.
- Landgraf JM, Abetz L & Ware J, 1999. *Child Health Questionnaire (CHQ) A User's Manual*. Boston, Health Act Inc.
- Ministry of Health, 1998. *Child Health Strategy*. Wellington, Ministry of Health.
- Ministry of Health, 1999. *Taking the Pulse: the 1996/97 New Zealand Health Survey*. Wellington, Ministry of Health.
- Ministry of Health, 2000. *The New Zealand Health Strategy*. Wellington, Ministry of Health.
- Ministry of Health, 2001. *The Primary Health Care Strategy*. Wellington, Ministry of Health.
- Ministry of Health, 2002a. *The Wellchild Framework*. Wellington, Ministry of Health.
- Ministry of Health, 2002b. *The Wellchild-Tamariki Ora National Schedule Handbook*. Wellington, Ministry of Health.
- Ministry of Health, 2003. *Child Health Information Strategy*. Wellington, Ministry of Health.
- Ministry of Health, 2004. *Child and Youth Health Toolkit*. Wellington, Ministry of Health.
- Ministry of Health, 2005. *A Portrait of Health: Key results of the 2002/03 New Zealand Health Survey*. Wellington, Ministry of Health.
- Ministry of Social Development, 2002. *New Zealand's Agenda for Children*. Wellington, Ministry of Social Development.
- Ministry of Social Development, 2004a. *Children and Young People: Indicators of Wellbeing in New Zealand*. Wellington, Ministry of Social Development.
- Ministry of Social Development, 2004b. *Whole Child Approach: A guide to applying the whole child approach*. Wellington, Ministry of Social Development.
- Salmond C, King P, Crampton P, Waldegrave C (2005) *NZiDep: A New Zealand Index of Socioeconomic Deprivation for Individuals*. Department of Public Health, Wellington School of Medicine, Otago University.
- Smith AB, NJ Taylor and MM Gallop (eds) 2000. *Children's Voices: Research, Policy and Practice*. Auckland, Pearson Education NZ.

Starfield B, 1998. *Primary Care: Balancing Health Needs, Services, and Technology*. Oxford, Oxford University Press.

Starfield B, 1998. *Adult Primary Care Assessment Tool – Short Version*. Primary Care Policy Center, John Hopkins University.

Ware JE, Kosinski M & Dewey JE, 2000. *How to Score Version 2 of the SF-36 Health Survey*. Lincoln RI, Quality Metric Incorporated.

World Health Organization, 2005. *STEPwise Approach to Surveillance (STEPS)*.  
[http://www.who.int/ncd\\_surveillance/steps/en/](http://www.who.int/ncd_surveillance/steps/en/)

Wynne HJ. 2003. *Introducing the Canadian Problem Gambling Index*. Wynne Resources, Alberta.