2004–05 4715.0.55.004

NATIONAL ABORIGINAL AND TORRES STRAIT ISLANDER HEALTH SURVEY: USERS' GUIDE

AUSTRALIA

EMBARGO: 11.30AM (CANBERRA TIME) FRI 5 MAY 2006

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INQUIRIES

For further information about these and related statistics, contact the National Information and Referral Service on 1300 135 070.

NOTES

ABOUT THIS PUBLICATION

The purpose of this Users' Guide is to provide information about the 2004–05 National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) which will assist users of the data in better understanding the nature of the survey, its potential and its shortcoming in meeting their data needs. Supplementary information about the survey is contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package, 2004–05* (cat. no. 4363.0.55.001), which includes a set of questionnaires and list of output data items.

This publication includes information about survey objective, the development process, content of the survey and the concepts, methods and procedures used in the collection of data and derivation of estimates. Also included is information about the products and services available from the 2004–05 NATSIHS and other ABS Indigenous and health surveys. In addition, classifications and other relevant material are provided as Appendixes.

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CHAPTER 1 INTRODUCTION

INTRODUCTION

This publication presents information about the National Aboriginal and Torres Strait Islander Health Survey (NATSIHS) conducted by the Australian Bureau of Statistics (ABS) in 2004–05. It includes information about the NATSIHS objectives, how the survey was developed, the survey concepts and methods, procedures used in the collection of data and the derivation of estimates, and information about the quality, interpretation and availability of survey results. Definition of survey terms and copies of key classifications are provided as Appendixes.

The aim of this publication is to provide information to assist users of the data in better understanding the nature of the survey, and its potential and shortcomings, in meeting their data needs. Further information about the survey is available from the ABS web site. This information includes:

- A data reference package containing the questionnaires and associated prompt cards used to collect the data, together with a list of output data items available from the survey;
- links to sets of tables from the NATSIHS compiled for States and Territories; and
- links to an Information Paper detailing the availability of microdata from the survey.

Other useful information will also be added to the web site over time as it becomes available. Summary level results for most topics covered in the 2004–05 NATSIHS are presented in the publication *National Aboriginal and Torres Strait Islander Health Survey, Australia 2004–05* (cat. no. 4715.0) which was released in April 2006.

The survey was conducted in association with the National Health Survey (NHS). Although this publication deals specifically with the NATSIHS, some sections are also applicable to the NHS, as both surveys had similar data content, shared common elements in the questionnaire, and were processed concurrently. For further information about the NHS see *National Health Survey 2004–05: Users' Guide* (cat. no. 4363.0.55.001) available on the ABS web site.

BACKGROUND TO THE SURVEY

The NATSIHS is part of the ABS Indigenous household survey program which also includes a six yearly National Aboriginal and Torres Strait Islander Social Survey (commencing with the 2002 survey). These surveys contain some common elements in regard to health, education, employment and income so that trends in Indigenous issues can be monitored more frequently over time.

The 2004–05 NATSIHS was conducted during the 10 month period August 2004 to July 2005. Information was collected in the survey about the health status of Indigenous Australians, their use of health services and facilities and health related aspects of their lifestyle.

Previous surveys in the series were conducted in 1995 and 2001. Commencing with the 2004–05 survey, the NATSIHS is now conducted six yearly, under a partnership agreement between the ABS and the Department of Health and Ageing (DoHA) under which DoHA provides supplementary funding for the conduct of ABS health and related surveys.

BACKGROUND TO THE SURVEY *continued*

The 2004–05 NATSIHS was conducted in 4883 private dwellings selected throughout Australia, including remote areas. Information was obtained from both adults and children (0 to 17 years) in the selected households. A total of 9,785 Aboriginal and Torres Strait Islander adults and children were included in the NATSIHS sample. The NATSIHS sample was combined with the 654 Indigenous Australians (351 private dwellings) enumerated as part of the 2004–05 NHS (either as selected sample, or additional NATSIHS specific sample) to provide a total sample of 10,439 (referred to as the "Total Indigenous Sample" in this Users' Guide).

Trained ABS interviewers personally interviewed the selected adult member of the household, and children aged 15 to 17 years, with parental consent. A parent or guardian was asked to answer questions in respect of their children aged 15 to 17 years who were not personally interviewed, and children aged less than 15 years. This person is referred to as the child proxy throughout this publication, and in other outputs from the survey. Although the survey was conducted over 10 months, selected households were interviewed only once in that period. Medical records were not required and no medical tests were taken as part of the NATSIHS.

Information was collected in the survey about the health status of Indigenous Australians, their use of health services and facilities and health related aspects of their lifestyle. Information was collected about long term medical conditions experienced by respondents, recent injury events, consultations with health professionals, other actions people had recently taken in regard to their health (e.g. days away from work, medication), aspects of their lifestyle and other factors which may affect their health such as smoking, alcohol consumption, diet, exercise and immunisation. For the first time, information was collected on the social and emotional well being of Indigenous Australians. The survey design enables information for all topics to be analysed in relation to other topics, and in relation to a range of demographic and socioeconomic characteristics.

Development of the 2004–05 NATSIHS began at the end of 2002. Government agencies, research bodies, Aboriginal and Torres Strait Islander communities and other interested parties were consulted regarding priorities for the specific health topics or issues to be included in the survey. The NATSIHS Reference Group was established to assist the ABS in the ongoing consultation process and to advise on data requirements. This group comprises representatives of the DoHA, the Australian Institute of Health and Welfare (AIHW), Indigenous community health groups, State health authorities, Indigenous academic and research centres, and the ABS. Reports on the development and testing process were prepared for consideration by the group, and distributed to other interested organisations and individuals on request.

The range of topics and of items within topics identified for inclusion in the survey far outstripped the capacity of the survey. All topics identified were assessed, and relative priorities were established with the assistance of the NATSIHS Reference Group. Topics ultimately selected for inclusion in the survey were those identified as being of highest priority and which could be appropriately addressed in an ABS household survey of this type.

BACKGROUND TO THE SURVEY *continued*

Some topics proposed for inclusion in the 2004–05 NATSIHS underwent focus group testing with Indigenous people in South Australia and New South Wales to test the understanding of the concepts being proposed for collection, and to enable questions and associated procedures to be developed to elicit the information required. The survey questionnaires and associated procedures, classifications, etc. were tested to ensure appropriateness and suitability of the proposed new questions, to field test existing questions and refine response categories. A secondary objective was to assess the time taken to enumerate households. A pilot test for the 2004–05 NATSIHS was conducted in South Australia, Northern Territory, Queensland (including Torres Strait) and Western Australia in November/December 2003 and a dress rehearsal was conducted in Victoria, Northern Territory and Western Australia during April/May 2004.

The 2004–05 NATSIHS was conducted under the authority of the Census and Statistics Act 1905. The ABS sought the willing cooperation of households in the survey. The confidentiality of all information provided by respondents is guaranteed. Under its legislation the ABS cannot release identifiable information about households or individuals. All aspects of the NATSIHS's implementation were designed to conform to Information Privacy Principles set out in the Privacy Act 1988, and the Privacy Commissioner was informed of the details of the proposed survey.

The success of the 2004–05 NATSIHS was dependent on the very high level of cooperation received from Indigenous Australians and their communities. Their continued cooperation is very much appreciated; without it, the range of Indigenous statistics published or planned by the ABS would not be possible.

CHAPTER 2 SURVEY DESIGN AND OPERATION

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SCOPE

The 2004–05 NATSIHS covered usual residents of private dwellings in both remote and non-remote areas of Australia. Indigenous persons in scope of the survey were those identified by an adult within each sampled private dwelling as a usual resident of that dwelling. A private dwelling was defined as a house, flat, home unit, caravan, garage, tent and any other structure being used as a private place of residence at the time of the survey. Non-private dwellings, including hotels and motels, hostels and boarding houses, were excluded. Also excluded were hospitals, nursing and convalescent homes, prisons, reformatories and single quarters of military establishments.

Operationally, for survey purposes, the ABS defines a household as one or more persons, at least one of whom is aged 15 years and over, usually resident in the same private dwelling. In the NATSIHS only households containing one or more persons aged 18 years and over were included.

In the 2004–05 NATSIHS only Indigenous households were considered in scope of the survey. An Indigenous household was defined as a household where at least one person of Aboriginal and/or Torres Strait Islander origin was usually resident (including children). Households selected in non-community areas were screened to identify Indigenous households for inclusion in the NATSIHS sample. Non-Indigenous persons were not eligible for selection in the NATSIHS sample although, if they were the parent or guardian of an Indigenous child, they could have acted as spokesperson for the child (referred to as the child proxy). They may also have acted as the household spokesperson.

Note: Because of the different collection methodologies described below for the community and non-community samples, not all data items are available for the total Indigenous population. The content for the NATSIHS in remote community areas of Queensland, South Australia, Western Australia and the Northern Territory, is a subset (approximately 80%) of the content collected in other areas. The community content excluded those items for which acceptable data quality levels could not be achieved. Data items which are not collected in these remote Indigenous communities are not released for the remote area in general or for total Australia. In the following topic chapters, reference is made to remote and non-remote methodology and guidelines. These descriptions should in fact be relating community and non-community collections. However, given that remote area data is guided by the collection methodology and issues of the remote community collection and release of data is based on remoteness status and not community status, it is simpler to refer to issues as a remoteness issue.

SAMPLE DESIGN AND SELECTION

Sample Design

The 2004–05 NATSIHS sample was designed to provide reliable Indigenous estimates for the whole of Australia, for each state and territory, for the Torres Strait, and for remote and non-remote areas. 'Remote' is being used here to refer to the aggregation of the Australian Standard Geographic Classification (ASGC) Remoteness Areas of 'Remote Australia' and 'Very Remote Australia', defined as Statistical Local Areas (SLAs) with a dwelling density of less than 0.057 dwellings per square kilometre. Decisions on the appropriate sample size, distribution and method of selection rested on consideration of the aims of the survey, the topics it contained, the level of disaggregation and accuracy at which the survey estimates were required, and the costs and operational constraints of conducting the survey.

Sample Design continued

In order to achieve the design objectives the in-scope Indigenous population was divided (as far as possible) into persons residing in Indigenous communities, referred to as the community frame, and the remainder of the in-scope population, referred to as the non-community frame. Samples were drawn from both the community frame and the non-community frame using different sample designs. This approach was taken because of operational and sampling issues.

The Indigenous Community Frame (ICF) consisted of a list of discrete Indigenous communities (including any outstations associated with them) in remote areas of Queensland, South Australia, Western Australia and the Northern Territory. The ICF was constructed using both Census counts and information collected in the 2001 Community Housing and Infrastructure Needs Survey (CHINS). The non-community frame consisted of a list of Census collection districts (CDs) including estimates of the number of Indigenous dwellings in each CD based on the 2001 Census.

The ICF contains only remote, Indigenous communities, however it does not contain all remote Indigenous persons. Particularly it does not include Indigenous persons in remote areas not living in communities (residents of Alice Springs for example). Such persons had a chance of selection on the non-community frame. For those data items collected from both questionnaire types (see Data Collection) the use of the community and non-community frames does not negate our ability to produce estimates for remote and non-remote regions.

Both the community and non-community selections were performed using stratified multistage sampling. The non-community sample was designed to incorporate Indigenous respondents identified in the 2004–05 National Health Survey. The manner in which the NHS Indigenous sample was combined with the NATSIHS sample to produce Indigenous estimates is described in the section entitled Estimation Procedures.

Sample Selection

NON-COMMUNITY

In the non-community NATSIHS, dwellings were selected using a stratified multistage area sample. Census collection districts (CDs) formed the first stage selection units. CDs were first stratified by state, ASGC remoteness classification and by the number of Indigenous dwellings in the CD based on 2001 Census data. A sample of CDs was then selected from each strata with probability proportional to the number of Indigenous households in the CD. This meant that CDs with a higher number of Indigenous households had a greater chance of selection. A random selection of dwellings within selected CDs were then screened to assess their usual residents' Indigenous status. Where a dwelling contained one or more Indigenous usual residents, up to two Indigenous adults (18 years of age or more) and up to two Indigenous children (0 to 17 years of age) were randomly selected to participate in the survey.

Indigenous selections identified in the 2004–05 NHS were included in the NATSIHS non-community sample. This could happen in two ways. Where an Indigenous person (adult or child) was randomly selected for the NHS, they were also included in the NATSIHS. As well, when an NHS selected household contained Indigenous persons (not selected in the NHS sample), up to one additional Indigenous adult and child was randomly selected to be surveyed in the NATSIHS.

Sample Selection continued

COMMUNITY

The remote community sample (as detailed previously) was obtained from a random selection of discrete Indigenous communities (and their associated outstations) using information collected in the 2001 CHINS. Communities were selected with probability proportional to the size of the community, so that larger communities had a higher chance of selection. Within selected communities and outstations, a random selection of dwellings was made. Within selected dwellings, one Indigenous adult (18 years of age or more) and up to one Indigenous child (0 to 17 years of age) were randomly selected to participate in the survey.

For the non-community NATSIHS, approximately 83% of households identified with in-scope Indigenous residents responded to the survey. For the community NATSIHS, approximately 85% of in-scope households responded to the survey.

DATA COLLECTION

Information was obtained in the 2004–05 NATSIHS by trained ABS interviewers, in the main through personal interviews with an adult member of selected households in scope of the survey. Aspects of data collection are discussed below under the headings: interviews, interviewers and questionnaires.

Interviews

In both the community and non-community NATSIHS, persons aged 18 years or more were interviewed personally, with the exception of persons who were too sick or otherwise unable to respond personally. Persons aged 15 to 17 years were interviewed with the consent of a parent or guardian; otherwise a parent or guardian was interviewed on their behalf. For persons aged under 15 years, information was obtained from a person responsible for the child (referred to as the child proxy). However, there were a number of differences in the data collection methods used in community and non-community areas.

NON-COMMUNITY

In the non-community 2004–05 NATSIHS Primary Approach Letters were not sent to selected households because of the screening process. The screening process involved interviewers at first contact with a household, asking a responsible adult member (Any Responsible Adult (ARA)), "Is anyone in this household of Aboriginal or Torres Strait Islander descent?" If they answered "Yes", then the interviewer proceeded to conduct the NATSIHS with the selected members of that household. Interviewers provided respondents with information about the survey including a brochure which contained some background to the survey and a guarantee of confidentiality.

General characteristics of the household were obtained from the ARA. This information included the number and basic demographic characteristics of usual residents of the dwelling, the relationships between those people (e.g. spouse, son/daughter, not related). The ARA was also asked to nominate the person(s) in the household who were best able to provide information about children in the household, and information about household income.

From the information provided by the ARA about the household composition, the survey instrument established those persons in scope of the survey and selected those residents (up to two Indigenous adults and two Indigenous children) to be included in the survey. The selection was made on a random basis by the computer assisted instrument. A

Interviews continued

NON-COMMUNITY *continued*

personal interview was conducted with the selected adult (where possible) and an adult was asked to respond on behalf of the children. If the dwelling contained no usual residents aged 18 years or more the dwelling was not enumerated.

In some instances adult respondents were unable to answer for themselves because of old age, illness, intellectual disability or difficulty with the English language. In these cases, a person responsible for them was interviewed on their behalf, provided the interviewer was assured that this was acceptable to the selected person. Where there were language difficulties other persons in the household may have acted as an interpreter if this was suggested by the respondent. Otherwise, the interview was considered a non-response.

Where possible, children aged 15 to 17 years were interviewed in person, with a parent or guardian's consent. Otherwise an adult was interviewed on behalf of the child (aged 0 to 17 years) selected within the dwelling. This adult, who may or may not have been the selected adult respondent in the household, is referred to as the Child Proxy.

In order to obtain a personal interview with the appropriate respondents, interviewers made appointments to call back as necessary to the household. In some cases appointments for call backs were made by telephone; however, all interviews were conducted face to face. Interviews may have been conducted in private or in the presence of other household members according to the wishes of the respondent.

Although the non-community NATSIHS form was conducted using CAI, there were two additional paper questionnaires which respondents were asked to complete. Female respondents aged 18 years and over were asked to complete a questionnaire relating to women's health issues while all respondents aged 15 years and over were asked to complete a substance use form. Participating respondents completed the questionnaire themselves and returned the form to the interviewer themselves in a sealed envelope. Child proxies who were answering for children aged 15–17 years old were not asked to complete the substance use form on behalf of their proxy.

In cases where a respondent initially refused to participate in the survey, a follow up letter was sent to the respondent and a second visit was made, usually by an office supervisor, to explain the aims and importance of the survey and to answer any particular concerns the respondent may have had. Persons missed from the survey through non contact or refusal were not replaced in the survey.

In total, conduct of the NATSIHS in non-community areas averaged 58 minutes per household, which included completion of the household form, all personal (and/or) proxy interviews and completion of the supplementary women's health and substance use questionnaires.

COMMUNITY

In the community component of NATSIHS, ABS Regional Offices contacted communities and health clinics by telephone prior to enumeration commencing and sent a Community Approach Letter as confirmation.

Interviews continued

COMMUNITY *continued*

In communities, standard household survey approaches were modified to take account of language and cultural issues. In addition, interviewers worked in teams of two, one male and one female, to collect the survey information. Male interviewers collected personal information from male respondents, and female interviewers collected personal information from female respondents. The interviewers were accompanied, wherever possible, by local Indigenous facilitators, usually one male and one female, who assisted in the conduct and completion of the interviews. The Indigenous facilitators explained the purpose of the survey to respondents, introduced the interviewers, assisted in identifying the usual residents of a household and in locating residents who were not at home, and assisted respondent understanding of the questions where necessary.

In addition, the survey content collected in communities was limited to those topics for which data of acceptable quality could be collected. Some questions were reworded to assist respondents in understanding the concepts. For example, in communities, a subset of the supplementary women's health topics was not self enumerated but was collected through face-to-face personal interview with adult female respondents who were informed of the potential sensitivity and voluntary nature of these additional questions.

Interviewers

Interviewers for the 2004–05 NATSIHS were primarily recruited from a pool of trained ABS interviewers who had previous experience with Indigenous surveys, particularly in Indigenous communities within remote areas. Those selected to work on the NATSIHS underwent further classroom training and were required to satisfactorily complete home study exercises. In addition, all interviewers selected to work on the 2004–05 NATSIHS underwent Indigenous Cultural Awareness training. All phases of the training emphasised an understanding of the survey concepts, definitions and procedures in order to ensure that a standard approach was employed by all interviewers concerned.

Each interviewer was supervised in the field in the early stages of the survey and periodically thereafter to ensure consistent standards of interviewing procedures were maintained. In addition, regular communication between field staff and survey managers was maintained throughout the survey via database systems set up for the survey.

Questionnaires

For the first time, the non-community component of NATSIHS used an electronic questionnaire. The Computer Assisted Interview (CAI) instrument was based on the paper questionnaires used in the 2001 NHS(I), modified as necessary to operate in a computerised format, and modified as appropriate to incorporate new and changed survey content.

The CAI instrument offered important advantages over the paper questionnaires used in the past. These included:

- the ability to check the responses entered against earlier responses, to reduce data entry errors by interviewers, and to enable seemingly inconsistent responses to be clarified with respondents at the time of the interview. The audit trail recorded in the instrument also provides valuable information about the operation of particular questions, and associated data quality issues.

Questionnaires continued

- the ability to carry forward responses to later questions, to assist respondents in answering, and interviewers in recording future questions. For example, questions in the survey regarding the cause of long term conditions used responses provided to previous questions to establish the scope of the cause questions.
- the ability to use complex sequencing to define specific populations for questions, and ensure word substitutes used in the questions were appropriate to each respondent's characteristics and prior responses.
- the data are captured electronically at the point of interview, which removes all the added cost, logistical, timing and quality issues around the transport, storage and security of paper forms, and the transcription/data entry of information from forms into a computerised format.
- the instrument delivers data in an electronic semi-processed form compatible with ABS data processing facilities; semi-processed in terms of the data validation and some derivations which occur in the instrument itself. While both the input and output data still needed to be separately specified to the processing system, input of the data in this form assists in that specification task and reduces the amount and complexity of some later processing tasks. Electronic delivery of text fields describing medical condition, medications used and alcoholic drinks consumed has facilitated the introduction of auto-coding systems and improved supplementary manual coding and query processes. Provision was made in the CAI instrument to enable interviewers to record comments to help explain/clarify certain responses or provide supplementary information to assist in office coding.

In community areas, pen and paper interviewing (PAPI) was still employed. While in the community, where possible, interviewers data entered the paper form into a data entry system on a laptop computer. By doing this in the community, sequencing errors or inconsistent responses could be followed up with the respondent. Where data entry was not possible, forms were either data entered by the interviewers when they returned home or were sent back to the ABS for office processing.

The questionnaires were designed to be administered using standard ABS procedures for conducting population interview surveys, having regard to the particular aims of the survey and of the individual topics within it, and to the methodological issues associated with those topics. Other factors considered in designing the questionnaire included the length of individual questions, the use of easily understood words and concepts, the number of subjects and overall length of the questionnaire, sensitivity of topics, etc. Where appropriate, excerpts from previous ABS surveys on the topics covered were adopted. All questionnaires were fully field tested to ensure:

- they were adequately addressing the data requirements from the survey i.e. they obtained the data required in the most effective and efficient way;
- there was minimum respondent concern about the sensitivity or privacy aspects of the information sought, effective respondent/interviewer interaction, acceptable levels of respondent load, etc.; and
- the operational aspects of the survey were satisfactory e.g. arrangement of topics, sequencing of questions, adequacy and relevance of coding frames, etc.

The questionnaires employed a number of different approaches to recording information at the interview:

Questionnaires continued

- questions to which responses were classified by interviewers to one or more of a set of predetermined response categories. This approach was used for recording answers to the more straightforward questions, where logically a limited range of responses was expected or where the focus of interest was on a particular type or group of responses (which were listed in the questionnaire, with the remainder being grouped together under 'other');
- questions to which responses were recorded by interviewers as reported, for subsequent classification and coding by office staff during processing. This style of question was used for the potentially more complex topics such as type of illness condition, type of medication used, type and quantity of alcohol consumed, etc.;
- questions asked in the form of a running prompt i.e. predetermined response categories were read out to the respondent one at a time until the respondent indicated agreement to one or more of the categories (as appropriate to the topic) or until all the predetermined categories were exhausted; and
- questions asked in association with prompt cards. Printed lists of possible answers to the question were handed to the respondent who was asked to select the most relevant responses. By listing a set of possible responses (either in the form of a prompt card or a running prompt question) the prompt served to clarify the question or to present various alternatives, to refresh the respondent's memory and at the same time assist the respondent to select an appropriate response.

To ensure consistency of approach, interviewers were instructed to ask the interview questions as written in the questionnaire. In certain areas of the questionnaire however, interviewers were asked to use indirect and neutral prompts, at their discretion, where the response given was, for example, inappropriate to the question asked or lacked sufficient detail necessary for classification and coding. This occurred particularly in relation to type of medical condition, where interviewers were asked to prompt for a condition if a treatment or symptom was initially reported.

Eight questionnaires were used in the collection of data for the 2004–05 NATSIHS. In non-community areas information was collected using CAI (aside from the self completed women's health and substance use forms), while in remote areas paper forms were used for all form types. Details of the forms used are set out below:

- Household form
  - This form was used to collect basic demographic data about usual residents of the household (e.g. sex, age, date of birth, birthplace, Indigenous status, marital status) and details of the relationship between individuals in each household. This information was obtained from the ARA within the household. The form was also used to identify the selected adult respondent for the dwelling, and the child proxy where applicable. The form was also used by interviewers to record their calls made to the dwelling and the subsequent response status of the household in the survey (e.g. fully responding, refusal, vacant dwelling, etc.).
- Adult form

Questionnaires continued

- This questionnaire was used to collect information from adults about their demographic and socio-economic characteristics and health characteristics such as health-related actions they had taken, long term illness conditions experienced, selected lifestyle behaviours, etc. In community areas, this form also included selected questions from the Women's Supplementary Health Form (see below).

- Child's form
  - This questionnaire was used to collect information about each child and included demographics and their socio-economic characteristics and various health characteristics. This questionnaire was also used to collect some demographic and socio-economic information about the child proxy. Where the child proxy was also the selected adult in the dwelling, some of these details were copied from the selected adult's record. Where the child proxy was not the selected adult the information was separately obtained from the child proxy and recorded on the child's form
- Women's Supplementary Health Form (see Note below)
  - This questionnaire was provided to female respondents aged 18 years and over in non-community areas. It contained questions relating to specific women's health issues and was completed by the respondent in writing and returned to the interviewer in a sealed envelope.
- Substance Use Form (see Note below)
  - This questionnaire was provided to all respondents aged 15 years and over in non-community areas. It contained questions relating to substance use and was also completed by the respondent in writing and returned to the interviewer in a sealed envelope. If a child aged 15–17 used a Child Proxy, permission was asked from the proxy for the respondent to complete the form. If permission was not received then the form was not completed.

Note: This approach was adopted for the women's health and substance use form in recognition of the potential sensitivity of the topics covered. Instructions to respondents on how to complete the form were contained on the form itself. In general, this form was completed without interviewer intervention, but interviewers may have assisted respondents if queried regarding the applicability of specific questions to the respondent, etc.

Unlike the 2001 NHS and the non-community NHS(I), which were virtually identical in content, there were a number of differences between the 2004–05 NHS and the non-community NATSIHS. The main differences are listed below:

- Topics covered in NHS but not NATSIHS

  Medications for Mental Wellbeing

  Type and Frequency of Medication (for arthritis, asthma, heart and circulatory conditions, diabetes and osteoporosis)

  Women's Health - Hysterectomy, Hormone Replacement Therapy

Questionnaires continued

- Topics covered in NATSIHS but not NHS
  - Financial Stress
  - Unmet Need for Medical Services
  - Discrimination
  - Substance Use
  - Renal disease and dialysis
  - Oral Health
  - Women's Health - mammograms, pap smear tests, breastfeeding, contraception

In addition there were some topics where the content of the questions were different between the 2004–05 NHS and the non-community NATSIHS. These were:

- Demographics - the NHS included questions on Country of Birth, Year of Arrival in Australia and Proficiency in Spoken English.
- Child Immunisation - the NATSIHS covered all immunisations (excluding meningococcal and varicella) as per the Department of Health and Ageing Guidelines while the NHS only covered Hepatitis B and varicella immunisations.
- Social and Emotional Wellbeing - the NHS used the Kessler K10 to measure psychological distress while the NATSIHS used a shorter version, with only five questions from the K10 used. For information about the Kessler scale please see the ABS Information Paper - Use of the Kessler Psychological Distress Scale in ABS Health Surveys (cat. no. 4817.0.55.001) available from the ABS web site. The NATSIHS also asked a further series of questions related to social and emotional wellbeing and cultural identification.

The total survey content for the community component of NATSIHS was similar to that collected in the non-community areas of NATSIHS, but was limited to those topics for which data of acceptable quality could be collected. In addition, some of the questions were reworded to assist respondents in understanding the concepts. As a result, separate questionnaires were developed for the community NATSIHS. The following topics were not collected in communities:

- private health insurance;
- health cards;
- child immunisation; and
- substance use.

Other topics were collected, although for some they were reduced in content.

A 'paper version' of the non-community NATSIHS questionnaires and related prompt cards and the community questionnaires are contained in the National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package, 2004–05 (cat. no. 4363.0.55.002) which is available from the ABS web site. A data item list, indicating the population for which items can be released (based on non-remote and remote identification), is also contained within the package.

MEASURES TO MAXIMISE RESPONSE

Response to a survey can be considered in two parts:

- obtaining contact with the respondent and information from the respondent; and
- ensuring that the information obtained is as accurate and as relevant to survey objectives as possible.

MEASURES TO MAXIMISE RESPONSE *continued*

This section deals with the first of these shown above. Measures taken to ensure accuracy and relevance of the data (e.g. survey procedures, questionnaire design, interviewers, etc.) have previously been outlined in this chapter.

In any sample survey responses should ideally be obtained from all selected units; in practice however there will always be some non-response, when people refuse to cooperate, cannot be contacted or are contacted but cannot be interviewed. It is important that response be maximised in order to reduce sampling variability and avoid biases. Sampling variability is increased when the sample size decreases and biases can arise if the people who fail to respond to the survey have different characteristics from those who did respond.

The ABS sought the willing cooperation of selected households in the 2004–05 NATSIHS. Measures taken to encourage respondent cooperation and maximise response included:

- stressing the importance of the survey to the planning and provision of Indigenous health services and facilities to meet Australia's health needs;
- stressing the importance of participation in the survey by selected households. Each selected dwelling (and its residents) represented a number of others in that local area in that State and in Australia. Each household selected represented a number of others like them in size, composition, location, occupation, lifestyle and health. The cooperation of those selected was important to ensure all households/persons were properly represented in the survey and properly reflected in survey results; and
- stressing the confidentiality of all information collected. The confidentiality of data is guaranteed by the Census and Statistics Act 1905; under provisions of this Act the ABS is prevented from releasing any identifiable information about individuals or households to any person, organisation or government authority.

Through call-backs and follow-up at selected dwellings, every effort was made to contact the occupants of each selected dwelling and to conduct the survey in those dwellings. Call-backs occurred at different times during the day to increase the chance of contact. Once contacts had been made at a dwelling the interviewer completed all necessary questionnaires where possible. If any persons who were selected to be included in the survey were absent from the dwelling when the interviewer called, arrangements were made to return and interview them. Interviewers made return visits as necessary in order to complete questionnaires for selected persons in scope of the survey. In some cases, the selected adult or designated child proxy within a dwelling could not be contacted or interviewed, and these were classified as individual non-contacts.

Respondents who refused to participate in non-community areas were usually followed-up later by letter and a subsequent visit by an office supervisor.

The collection methodology used in remote communities was adapted to be culturally appropriate for Indigenous persons living in these areas. However, the ABS was conscious not to change the collection methodology to the extent that data collected in communities would not be comparable with that collected in non-community areas or the 2004–05 NHS. In communities, interviewers carried out any call back interviews whilst they were at the community. The special measures used in communities for interviews, including the use of 'teams' of one male and one female interviewer and the use of local facilitators are outlined above under 'Interviews'.

MEASURES TO MAXIMISE RESPONSE *continued*

In communities, there was no follow-up of refusals. Interviewers were instructed to make every effort to convert refusals at the initial contact stage by explaining, with the assistance of a local facilitator, the importance of the survey and the confidentiality provisions under which the ABS operates. If there was a high non-response in a community due to some event occurring, such as a funeral, interviewing in that community was postponed to a more appropriate time.

Field testing

The final collection methodologies and data content for the 2004–05 NATSIHS were determined through field testing, analysis of testing outcomes, and consultations with Indigenous respondents and people in the Indigenous health field. Separate testing programs were undertaken in non-community and community areas of the 2004–05 NATSIHS as outlined below.

NON-COMMUNITY

A number of field tests were conducted in non-community areas between June 2003 and May 2004 to refine and adapt, where necessary, the questionnaire and supporting systems for the enumeration of Indigenous respondents in non-community areas. Other important objectives of the test were to:

- undertake a timing analysis of the interview time per household
- field test new and revised questions
- refine response categories
- assess clerical time
- fine tune the survey content and structure
- assess and refine the sequencing and general layout of the CAI instrument
- refine the training package and survey documentation
- evaluate respondent and interviewer reaction to the survey topics

COMMUNITY

An extensive testing program, comprising pre-testing, a pilot test and a dress rehearsal, was undertaken in remote Indigenous communities across Australia from July 2003 to May 2004. The purpose of the tests were to develop a questionnaire and supporting field procedures and systems for the enumeration of Indigenous respondents in community areas. Other important objectives of the testing program were to:

- develop, test and refine the procedures and materials required for interviewers
- assess the time taken to enumerate households
- test respondent selection methodology
- assess interviewer reaction to procedures, survey documentation and survey questionnaires
- assess respondent reaction to survey content
- test recall for appropriate questions, in particular, instances where the respondent is required to provide information about members of their household
- assess whether questions are appropriately worded so that Indigenous persons living in remote areas understand the concepts and questions being asked.

Analysis of testing outcomes

Outcomes from the field tests, and the resulting test data, were analysed separately for non-community and community areas of the NATSIHS.

Analysis of testing outcomes continued

NON-COMMUNITY

Overall, the survey was well received by respondents who participated in the pilot test. Respondents had little difficulty understanding the concepts and terms used in the most of the survey. Testing on the new section on Social and Emotional Wellbeing showed that these questions required some fine tuning before the questionnaire was finalised. The most important issue that the testing revealed was that to to align the survey within the allowed timing and meet cost objectives the survey content needed to be reduced.

COMMUNITY

The experience and knowledge gained through the testing program in remote areas was invaluable to the development of the survey, and was used to revise survey content, questionnaires and operational procedures. The survey was well received by the communities and respondents who participated in each field test. The use of local people to assist the interviewers was also very successful in facilitating respondent acceptance of the interviewers and participation in the survey. As with the non-community, the testing revealed that the content of the survey had to be reduced to meet interview timing and cost objectives.

RESPONSE RATES

For non-community NATSIHS the final response status for each State and Territory is shown below (excluding sample obtained from the NHS):

PERCENTAGE OF FULLY RESPONDING HOUSEHOLDS (FRHH)

States	*FRHH Including Sample loss*	*FRHH Excluding Sample loss*
NSW	84.3	85.3
VIC	79.5	82.0
QLD	87.9	88.6
SA	77.8	81.1
WA	72.7	74.9
TAS	88.5	91.1
NT	74.9	80.6
ACT	91.3	92.3
Total	81.1	83.4

For community NATISHS the final response status for each State and Territory is shown below:

RESPONSE RATES *continued*

PERCENTAGE OF FULLY RESPONDING HOUSEHOLDS (FRHH)

States	*FRHH Including Sample loss*	*FRHH Excluding Sample loss*
NSW		
VIC		
QLD	96.8	97.3
SA	54.4	68.9
WA	77.3	78.1
TAS		
NT	79.1	83.8
ACT		
Total	80.6	85.5

5,014 households (or 10,087 persons) were considered to be fully or adequately complete for use in the survey (including households/persons from the NHS sample). In order to increase the survey sample, households which were not considered fully responding or adequately complete but contained fully responding records were used. This added an additional 220 households (or 352 persons) to the survey sample.

Completed questionnaires were obtained for 10,439 Indigenous persons in fully/adequately responding and partial non-response dwellings (from NATSIHS sample and NHS sample), as shown below:

COMPLETED QUESTIONNAIRES(a)

State/Territory	*0–17*	*18+*	*Total*
New South Wales	710	875	1 585
Victoria	395	455	850
Queensland	911	1 172	2 083
South Australia	495	611	1 106
Western Australia	835	1 049	1 884
Tasmania	408	468	876
Northern Territory	763	924	1 687
Australian Capital Territory	165	203	368
Total	4 682	5 757	10 439

(a) Includes those records obtained from non-response classified households (e.g. part refusal, part non-contact, language problem, death or illness/other) and the NHS survey.

INPUT CODING

Input coding refers to the coding of main language spoken at home, occupation, industry, educational qualification and coding of the relationships within the household. This coding was performed by ABS State offices. Coding of alcohol consumption and type of long term medical conditions was undertaken later in processing in the central office of the ABS; see Coding of Health Items below. A brief outline of the input coding undertaken follows:

INPUT CODING *continued*

- Coding of language — The non-community 2004–05 NATSIHS listed 10 frequently reported languages spoken at home in the general population. In communities four categories were listed: 'English', 'An Aboriginal Language', 'A Torres Strait Islander Language' and 'Other'. Interviewers in both areas were instructed to mark the appropriate box, or if the reported language was not among those listed, to record the name of the language for subsequent office coding. Language was coded to the *Australian Standard Classification of Languages (First Edition)* (cat. no. 1267.0).
- Coding of occupation — In the 2004–05 NATSIHS, occupation relates to the main job held by employed respondents at the time of their interview. Occupation was office coded, based on a description of the kind of work performed, as reported by respondents and recorded by interviewers. Occupation was coded to the four-digit (unit group) level of the *Australian Standard Classification of Occupations* (cat. no. 1222.0).
- Coding of industry — In the 2004–05 NATSIHS, industry and industry sector relates to the main job held by employed respondents at the time of their interview. These were office coded based on the name of employer and the respondent's description of the business or service carried out at the respondent's workplace. Industry was coded to the four-digit level of the *Australian and New Zealand Standard Industrial Classification* (cat. no. 1292.0).
- Coding of educational qualification — Level of highest non-school educational qualification and field of study of that qualification were coded to the *Australian Standard Classification of Education (ASCED)* (cat. no. 1272.0): this classification replaces the ABS CLASSIFICATION OF QUALIFICATIONS which was used in the 2001 NHS(I). Further information is provided in Chapter 6 of this Guide.
- Other input coding - ABS State Offices coded the relationships between household members onto the Household Form based on information provided on the form. The items derived included relationship of the selected adult, child or child proxy to other household members in non-family or mixed family households, social marital status, age composition and size of household, student status and parent status of adult household members.

CODING OF HEALTH ITEMS

In addition to the general coding of population characteristics outline above, the following items were office coded:

- long term medical conditions; and
- alcohol consumption.

This coding was undertaken by coding staff specifically recruited and trained for the task. All coding was centralised in the Canberra office of the ABS. Initially, Computer Assisted Coding systems (CAC) were developed for both items: these systems were based on those used in the 2001 NHS(I), updated as necessary. Rigorous quality control processes were applied throughout to ensure that the coding process met agreed standards.

In February 2005 an automatic coder was introduced for these items. These auto-coders sought exact matches between text recorded in the questionnaires, and text entries in the coders. Cases which could not be coded by the auto-coders were coded manually using the CAC systems.

A brief outline of the coding is provided below. Further information about the CAC and auto-coder systems and how they were applied in the survey can be provided on request.

Coding of medical conditions

All reported long term medical conditions were coded to a list of approximately 1000 conditions, which was built into a CAC system. Conceptually the coding process simply involved locating the reported condition in the CAC system, and recording the 3 digit code allocated. In practice it was a more complex task and a query data base was established where coders could register any problems they came across, and where a solution could be posted. This provided coders with both a response to specific coding issues, and a resource for dealing with future problem cases.

The code list was compiled for use in the 2001 NHS and NHS(I) by the Family Medicine Research Centre, University of Sydney, in association with the ABS. Conditions classified at the full level of detail will not generally be available for output from the survey, although they can be regrouped in various ways for output. Two standard output classifications, developed for the health surveys, are available:

- a classification based on International Classification of Diseases 10th Revision (ICD–10),
- a classification based on the International Classification of Primary Care (ICPC), and

A copy of each of these output classifications is provided as Appendixes 2 and 3.

Coding of alcohol consumption

In the 2004–05 NATSIHS information about alcohol consumption was recorded against nine general categories of alcoholic drinks: beer, wine, champagne/sparkling wine, ready-to-drink spirits, liqueurs, spirits, fortified wine, cider and other alcoholic beverages. Details of the quantity of each of these drinks consumed on (up to) the last three days in the week prior to the day of interview were recorded. Quantities were recorded in terms of standard measures where possible; otherwise a description of the quantity consumed was recorded by interviewers. Interviewers were encouraged to record further details about the brand or name of drink where possible to assist in coding.

Initially a CAC system was used to calculate in millilitres the amount of pure alcohol contained in the drinks which respondents reported they had consumed. This system, which was first used in the 2001 NHS and NHS(I) used information about the type of alcoholic drinks consumed (including brand name for common drinks), and the size and number of drinks consumed. A conversion factor was applied to this information to obtain the amount of pure alcohol consumed. Conversion factors tailored to specific drinks/drink types were included in the system, and default factors for each of the seven broad types of alcoholic drinks used in the survey were included for cases where more detailed information had not been recorded at interview. This system was replaced part way through processing by an automated coding system, supported by clerical coding using the CAC system outlined above when the auto-coder could not find a match.

EDIT CHECKS

As mentioned earlier in this chapter, the use of CAI for non-community respondents meant that computer edits could be applied during the interview. For community respondents, paper forms were completed and some of the same computer edits that were applied in the CAI to the non-remote forms were applied to each record during data entry. For both community and non-community respondents checks were performed to ensure that specific values lay within valid ranges and that relationships between items were within limits deemed acceptable for the purposes of this survey. The edits were also designed to detect errors which may have occurred during processing (e.g. during data entry, clerical coding) and to identify cases which although

EDIT CHECKS *continued*

not necessarily errors, were sufficiently unusual or close to agreed limits as to warrant further examination.

Periodically throughout computer processing, the data were output to frequency counts and tables containing cross-classifications of selected data items for checking purposes. These were aimed at identifying any problems in the input data, which had not previously been identified, errors in derivations and other inconsistencies between related items. In the final stages of processing additional output editing was undertaken to ensure that estimates conformed to known or expected patterns and were broadly consistent with data from the 2001 NHS(I) or from other (including external) data sources, allowing for methodological and other factors which might impact comparability.

Any errors detected in the data or derivations were checked and subsequently corrected where possible. While all reasonable care was taken to ensure the data are correct some errors may survive to the final data file. Further information about data quality issues are contained in Chapter 7: Data Quality and Interpretation of Results.

Data available from the survey are essentially 'as reported' by respondents. The processing procedures and edit checks outlined above were designed primarily to minimise errors occurring during processing. In some cases it was possible to correct errors or inconsistencies in the data which was originally recorded through reference to other data in the record; in other cases this was not possible and some apparent errors and inconsistencies remain on the data file.

OUTPUT DATA FILE

Information from the survey was stored on the computer output file in the form of data items. In some cases, items were formed directly from information recorded in individual survey questions, in others, data items have been derived from answers to several questions (e.g. the item 'body mass' is derived from reported height and weight). Some items have been derived from the reported information in conjunction with information obtained from other sources (e.g. in deriving the health risk, associated with the reported level of alcohol consumption as defined by National Health and Medical Research Council).

In designing the output data file, the aims were to create a file which was similar to the 2001 data file, but simplified where possible. The result is an 8 level, down from 13 levels in 2001, hierarchical data output file as outlined below:

- Household level, containing information about the household size and structure, dwelling characteristics including geographic classifications and related items, and household income details;
- Persons in household level, containing basic demographic, relationship and income information about all members of households, including those members selected in the survey and non-Indigenous persons;
- Person level, which is the main level, containing all demographic and socio-economic characteristics of the survey respondents, and most of the health and related information they provided;
- Alcohol level, containing detailed information about the 3 most recent days in the previous week on which the respondents reported consuming alcohol, and the types and quantities consumed on those days;

OUTPUT DATA FILE *continued*

- Two condition levels containing detailed information about the long term conditions reported in the survey;
- Two injury related levels, one with items related to the types of injuries, the other to the body part(s) injured.

A hierarchical data file is an efficient means of storing and retrieving information which describes one to many or many to many, relationships i.e. a person may report multiple types of injuries, and may report multiple body parts injured for all/some of these.

Data about households, families and income units are contained as individual characteristics on person records. Estimates at the household level are also available from this survey for household level items, such as household income, geography, household size and structure, financial stress. Estimates at the family or income unit level are not available from this survey.

A full listing of output data items available from the survey is contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package, 2004–05* (cat. no. 4363.0.55.002) which can be accessed on the ABS web site.

Once processing and validation of the data were complete, weights were inserted into each responding person's record to enable the data provided by these persons to be expanded to obtain estimates relating to the whole population within scope of the survey: see below. To enable standard errors on estimates to be produced, 250 replicate weights were included. Age standardised weights (for state, sex, remoteness, and total Indigenous population) were also inserted into each responding person's record along with their associated 250 replicate weights.

ESTIMATION PROCEDURES

Indigenous estimates from the 2004–05 NATSIHS are based on the total records from the community and non-community NATSIHS plus all the Indigenous records from households selected in the 2004–05 NHS (a total of 654 (of which 395 were selected in the NHS) records). This is illustrated in the table below:

	NHS		NATSIHS	
2004–05	*Indigenous NHS selected records*	*Extra Indigenous records*	*Indigenous non-community records*	*Indigenous community records*
NATSIHS Indigenous data file	395	259	7 438	2 347

Estimates from the 2004–05 NATSIHS are derived using a procedure which combines information collected in the course of the survey, in responses to the survey, and concerning the propensity of selected sample units to respond, with independently available information concerning the underlying populations. As a result, the 2004–05 NATSIHS estimates of the Indigenous population conform to population counts at broad age, sex, State/Territory levels and remoteness (major cities of Australia, inner regional Australia, outer regional Australia and other) levels.

Benchmarks

The 2004–05 NATSIHS was benchmarked to the estimated Indigenous population (adjusted for the scope of the survey) as at 31 December 2004. These estimates were based on the 2001 Census of Population and Housing.

Weighting specifications

To obtain person-based estimates, expansion factors or 'weights' were inserted into responding persons' records to enable the data provided by these persons to be expanded to provide estimates relating to the whole population within the scope of the survey. The strategy for deriving person weights involved a number of steps as described below.

INITIAL HOUSEHOLD WEIGHT

The first step of the weighting procedure was to assign an initial household weight to responding dwellings. The initial household weight was calculated as the inverse of the probability of the household's selection in the sample. A household's selection probability was a function of its State/Territory, whether it was a community or non-community dwelling, and the estimated number of Indigenous dwellings in the household's community or CD. This is described in the sections entitled Sample Design and Sample Selection.

ADJUSTMENT FOR NUMBER OF INDIGENOUS HOUSEHOLDS IN A CD

In the non-community sample an adjustment was made to the initial household weights. This was to help compensate for non-response related to the number of Indigenous households in the CD. 'Non-response' here includes Indigenous households not identified as such and households identified as containing Indigenous residents but from which no response was obtained.

INITIAL PERSON WEIGHTS

The next step in the procedure was assigning initial weights to responding persons. This involved taking into account the survey the respondent was selected in i.e. the community or non-community NATSIHS or the NHS, and the subsampling scheme deployed within households. In the NATSIHS community sample up to one adult and one child aged 0–17 years were enumerated in selected households while in the non-community NATSIHS up to two adults and two children aged 0–17 years were enumerated. The NHS selected up to one adult and one child for enumeration. However with the additional sample selected for the NATSIHS, an additional adult and child could be selected within the household. Initial person weights were calculated by inflating multiplying the person's household weight (adjusted household weight for non-community NATSIHS) by the inverse of the probability of the person being selected. For persons aged 18 years and over the household weight was multiplied by the number of residents in the household aged 18 years and over. The same process was carried out for children aged 0–17 years.

COMBINING NATSIHS AND NHS RECORDS

To improve the quality of estimates the 2004–05 NATSIHS total sample includes the contribution from 654 Indigenous persons selected in 2004–05 NHS responding dwellings (including NHS Indigenous selections and the additional NATSIHS selections in these households). It was necessary to adjust person weights to appropriately and

Weighting specifications continued

COMBINING NATSIHS AND NHS RECORDS *continued*

optimally combine the NATSIHS and NHS records. To do so the NATSIHS and Indigenous NHS sampled persons sharing a common scope (non-community, non-very-remote) had their weights adjusted by multiplying by a factor between 0 and 1. This was done with the goal of minimising the sampling variance of the combined estimates at the State/Territory level.

CALIBRATION TO PERSON LEVEL BENCHMARKS

The final step in the weighting procedure was calibrating the person weights to person level benchmarks. The calibration to benchmarks ensures that the sample survey estimates agree exactly with independent measures of the population at specific levels of disaggregation. In addition, the calibration reduces the impact of differential non-response bias at the specific levels of disaggregation, and may also reduce sampling error.

The person benchmarks used in the NATSIHS were estimates for December 2004 projected from the 2001 Census of Population and Housing results.

Three sets of Indigenous person benchmarks were used:

(i) State by Remoteness Area
(ii) State by Age group by Sex
(iii) Broad ATSIC region (Torres Strait, rest of QLD, rest of Australia) by Torres Strait Islander status (Torres Strait Islander, Other Indigenous)

Remoteness Area is defined as:

Major cities
Inner regional
Outer regional
Remote
Very remote

The age group categories in the NATSIHS were set such that there was a reasonable sample size in each weighting class at the state by age group by sex level. The age categories adopted are shown below:

0–4
5–14
15–24
25–34
35–44
45–54
55 and over

The calibration process involved adjusting the input person weights as little as possible such that they aggregated to the marginal person level benchmark totals as specified above.

Weighting specifications continued

AGE STANDARDISATION

Age standardisation techniques have been used in some of the tables in the publication *National Aboriginal and Torres Strait Islander Health Survey, Australia 2004–05* (cat. no. 4715.0) to remove the effect of the differing age structures in the Indigenous and non-Indigenous populations for 2004–05, and over time. The age structure of the Indigenous population is considerably younger than that of the non-Indigenous population, and age is strongly related to many health measures. Therefore, estimates of prevalence which do not take account of age may be misleading when comparing the Indigenous and non-Indigenous population. The age standardised estimate of prevalence is that which 'would have prevailed' should the Indigenous and non-Indigenous populations have the standard age composition. In publication tables, the standard population used for age standardising was the total estimated resident population of Australia as at 30 June 2001.

The direct age standardisation method was used. The formula is as follows:

$$C_{direct} = \sum_{a} (C_a \times P_{sa})$$

where C_{direct} = the age standardised estimate of prevalence for the population of interest, a = the age categories that have been used in the age standardisation, C_a = the estimate of prevalence for the population being standardised in age category a, and P_{sa} = the proportion of the standard population in age category a.

The age categories used in the standardisation for this publication were 0 to 4 years, and then 10 year age groups to 55 years or over.

CHAPTER 3 HEALTH STATUS INDICATORS

CONTENTS

INTRODUCTION

The 2004–05 NATSIHS collected information to describe various aspects of the health status of the Indigenous population, with a particular focus on the National Health Priority Areas (NHPA) of asthma, cancer, heart and circulatory conditions, diabetes, injuries, and musculoskeletal conditions, particularly arthritis and osteoporosis.

To enable the prevalence of all long term conditions to be established, supplementary information was also collected on other long term non-NHPA conditions. A long term condition was defined as one reported by respondents as being a condition which they currently had and which had lasted or was expected to last for six months or more.

In addition to information about the medical conditions they had, respondents were asked to rate their overall health.

For each of the NHPA conditions listed above as well as renal (kidney) disease, a condition 'status' item has been derived. These items bring together the concepts of whether ever told (by a doctor or nurse) that they have the condition, whether the condition was current at the time of the interview, and whether the condition had lasted or was expected to last for 6 months or more, regardless of how and where in the questionnaire the condition was reported, and classifies the condition for each respondent into the following categories:

1. Ever told has condition, still current and long term
2. Ever told has condition, still current but not long term
3. Ever told has condition, not current
4. Not known if ever told, but condition current and long term
5. Never told, not current or long term.

Counts of persons with a specific long term NHPA condition will agree with the sum of current and long term status categories (i.e. status categories 1 and 4) above: as noted previously, some conditions are assumed to be current and/or long term. This is discussed in more detail in the individual condition sections which follow. Status items are derived for each of the specific conditions listed in the questionnaire, and for group totals (e.g. all types of heart and circulatory conditions combined).

In some cases persons with these NHPA conditions may not have reported the conditions in response to these specific questions but may instead have reported the condition in response to subsequent, more general, questions covering all conditions. Where this occurred the condition was recorded and is counted in survey results as a current and long term condition, but the supplementary information about actions taken or medication used is not available. Where these cases were identified by the survey instrument at the time of the interview the respondent was asked whether they had ever been told by a doctor or nurse that they had the condition. This enabled most of these cases to be appropriately classified in condition status items which are derived for all NHPA conditions. The small number of cases which were not identified at the time of interview have been allocated to condition status 4: Not known if ever told, but condition current and long term.

Conversely, in some cases respondents reported non-NHPA conditions in response to the questions about NHPA conditions. While all conditions reported are recorded and are available for output, counts may differ according to the particular item or population used and some care should be taken in using the data to ensure the items and

INTRODUCTION *continued*

populations used are appropriate to the purposes intended. Implications for particular NHPA data are discussed under the separate condition sections below.

The approach of screening respondents through 'ever told' questions for most NHPAs was adopted because those previously diagnosed with the conditions, but who no longer consider they had the particular condition, may be at special risk, and were therefore a key group of interest to users of the data. But a key outcome of this methodology is that most of those with NHPA conditions which are included in general long term conditions data from the survey reported they had been medically diagnosed with the condition. This differs from the approach used for data collected in the survey about all other long term conditions, which required only that a condition is current and long term before it is recorded, irrespective of whether it had been medically diagnosed. For general output from the survey all conditions are combined to provide an overall picture of current long term conditions in the population. However, the conceptual differences in the coverage of particular conditions should be considered when interpreting those data.

Conceptually cases of misdiagnosis are excluded. Where interviewers became aware of a condition which the respondent had been told they had/have, but that diagnosis later proved incorrect, the respondent was recorded as not ever told they have the condition. This approach retains the conceptual alignment between the 'ever told' and 'whether current' populations. However respondents may not have made this known to interviewers, with the result those cases will appear in survey results as 'ever told' but 'not current'.

Although the overall approach was similar for most NHPA conditions, there are some differences in the conceptual bases of the conditions data available. These are summarised in the table below (with X indicating the concepts collected) along with some other conditions which were collected under similar approaches. As noted above, regardless of these differences, the scope of published results about long term conditions is those conditions identified (by the respondent or assumed under the survey methodology) as *current and long term*. A point to note is that for the conditions listed, most were assumed, by the survey methodology, to be long term conditions. In remote areas, all conditions are considered to be long term conditions.

INTRODUCTION *continued*

LONG TERM CONDITIONS

Type of condition	*Ever had condition*	*Ever told by doctor or a nurse has condition*	*Currently has condition*	*Condition lasted or expected to last for 6 months or more*
Asthma		X	X	Assumed
Cancer		X	X	Assumed
Heart and circulatory condition		X	X	(a) Assumed and X
Diabetes/high sugar levels		X	X	(b) Assumed and X
Arthritis	X	X	X	Assumed
Osteoporosis		X	X	Assumed
Gout/rheumatism	X		X	(c) Assumed and X
Renal disease		X	X	Assumed
All other conditions			X	(c) Assumed and X

(a) Assumed for rheumatic heart disease, heart attack and stroke; in non-remote areas asked for all other reported heart and circulatory conditions.
(b) Assumed for diabetes; in non-remote areas asked for high sugar levels.
(c) Assumed in remote areas; asked in non-remote areas.

Despite the different methodologies used for obtaining information about medical conditions, all conditions data from the survey are ultimately 'as reported' by respondents. While the survey questionnaire was designed to prompt respondents and give them an opportunity to report all NHPA conditions and all other long term conditions they had, whether or not they chose to report a condition to the ABS interviewer, and how they chose to identify or describe that condition, were at the respondent's discretion.

As far as was possible (and with the exception of the NHPA 'condition status' items described above) the conditions recorded and classified in the survey were those currently experienced by the respondent at the time of the interview, although not necessarily manifest in terms of current symptoms; for example, a person may suffer from hayfever or sinusitis but experience infrequent attacks.

The 2004–05 NATSIHS questionnaire design enabled a theoretical maximum of almost 100 conditions per person to be reported; there was no limit on the data file to the number of conditions an individual respondent could have but no respondents reported more than 25 conditions.

INFORMATION ABOUT MEDICAL CONDITIONS

Classification of conditions

Provision was made on the survey questionnaire for interviewers to record condition information in two ways:

- record responses against predefined and specified condition type/name response categories; and
- write in responses as reported by respondents for later office coding.

Information from both sources was combined and classified to a single list of approximately 1000 specific condition and condition group categories; referred to as the "1000 input code list" in this publication. This list covered the more common types of long term conditions experienced in the Australian community. The list was initially developed by the Family Medicine Research Centre at the University of Sydney, in

Classification of conditions continued

consultation with the ABS for the 2001 NHS/NHS(I). A computer-based coding system was developed by the ABS based on this list, and all 'write in' condition information was office coded using this system. Predefined response categories in the questionnaire were allocated unique codes within the 1000 input code list.

Initially the coding system was a computer assisted system, but from February 2005 an automated coding system was introduced. The system allocated codes on the basis of an exact match between the condition description recorded by the interviewer, and the description contained in the auto-coder. The coder was successful in coding around 29% of condition coding instances (from the NHS and NATSIHS) processed after its introduction. Cases which were not auto-coded were manually coded using the computer-assisted system.

Results from the survey are generally not available classified to the full 1000 code level. As the data are from a sample survey there are simply not enough observations to support reliable estimates at that level of detail. While some data at this level may be made available on request for more commonly occurring conditions to meet special needs, for general output purposes long term conditions are classified in two ways:

- a classification based on the 10TH REVISION OF THE INTERNATIONAL CLASSIFICATION OF DISEASES (ICD–10); and
- a classification based on the INTERNATIONAL CLASSIFICATION OF PRIMARY CARE (ICPC 2+).

These output classifications were developed by the ABS based on mappings between the 1000 input code list and ICD–10 and ICPC provided by the Family Medicine Research Centre. The classifications take account of:

- the types of long term conditions more commonly reported in a population-based survey and for which reliable estimates could be produced;
- the types of conditions or groups of conditions known to be of particular interest to data users; and
- the variability of the descriptions of conditions provided by respondents.

Efforts were made to ensure that the description of each condition which was recorded at interview was as precise and informative as possible to enable detailed, accurate and consistent coding of conditions. However, provision was made in the coding system and classifications for the general and imprecise terms often used by respondents.

Copies of the standard classifications of medical conditions available from this survey are contained in Appendixes 2 and 3 of this Guide. The process of mapping the 1000 input codes to the ICD and ICPC–based output classifications was complex, and in some cases the classification of the input codes was based on 'best fit' rather than 'exact match'.

Interpretation of conditions data

In addition to the self reported nature of the 'all the conditions' data recorded, and the conceptual differences (outlined above) between the data recorded for the NHPA conditions and other long term conditions, there are a number of other points to be considered in interpreting the information about medical conditions available from this survey;

Interpretation of conditions data continued

- The likelihood of respondents reporting a condition may differ according to the type and form of the questions asked. Those conditions which are specifically mentioned in questions or in prompt cards or other aids are expected to be better reported than conditions which are not. As it is not possible (or appropriate) to mention every condition in the survey interview, the relativity between conditions shown in survey results may in part reflect different methodologies used to collect the information. In the 2004–05 all survey respondents were specifically asked about the following conditions:
    1. the NHPA conditions (as outlined above);
    2. eye and sight problems;
    3. ear and hearing problems; and
    4. renal (kidney) disease.
- Other conditions specifically shown in prompt cards for non-remote areas (in the order in which they were shown) were:
    - Hayfever
    - Sinusitis or sinus allergy
    - Other allergy
    - Anaemia
    - Bronchitis
    - Emphysema
    - Epilepsy
    - Fluid problems, fluid retention or oedema (Exclude: those due to a heart or circulatory condition)
    - Hernias
    - Kidney stones
    - Migraine
    - Psoriasis
    - Stomach ulcers or other gastrointestinal ulcers
    - Thyroid trouble or goitre
    - Tuberculosis
    - Back – slipped disc or other disc problem
    - Back pain or back problems – specify
    - Amputation or loss of limb (for example: arm, foot, finger)
    - Behavioural or emotional disorders
    - Deformity or disfigurement (For example: effects of burns)
    - Dependence on drugs or alcohol
    - Difficulties in learning or understanding
    - Feeling anxious or nervous
    - Feeling depressed
    - Gallstones
    - Incontinence
    - Paraplegia or other paralysis
    - Speech impediment

Interpretation of conditions data continued

- In remote areas prompt cards were not used. However, some conditions were prompted for verbally. These conditions were:
  - Hayfever
  - Loss of limb (for example: arm, leg, finger, toe)
  - Tuberculosis
  - Back problems – specify
  - Skin problems – specify
  - Breathing problems apart from asthma – specify
- The survey estimates show the reported prevalence of the condition as a long term condition at any point of time during the survey period; the data do not refer to the incidence of conditions occurring in the survey period.
- As noted above only those NHPA conditions which were current at the time of interview and which were long term (i.e. of six months or more duration in the respondent's view) are included in estimates of the prevalence of persons with that long term condition. However, for some conditions and purposes, estimates relating to persons ever told they have the condition may be considered a preferable measure of the prevalence of the condition. For example while most types of diabetes can be successfully managed most cannot currently be cured so that a 'truer' measure of prevalence might be those 'ever told', rather than the subset of those ever told who considered they currently had the condition and who considered it to be long term.
- Results of the survey can show the numbers of people with particular conditions, combinations of conditions, etc. However some caution should be used in interpreting counts of the number of conditions from the survey. This is because the number of conditions is in part a product of the classification system used to compile the data. The effects of this are not consistent across conditions – at those levels of the classifications which are fairly broad, the effects may be to undercount conditions (because several different conditions may be classified to a single category and hence appear in output as a single condition), while at more detailed classification levels these effects would be reduced.

ASTHMA

Definition

This topic refers primarily to those ever told by a doctor or a nurse that they have asthma, and who still regard their asthma as a current condition. Persons who reported they had been told they had asthma, but not told by a doctor or nurse, were recorded as not having been told. As a result they were sequenced around the detailed asthma questions, but did have the opportunity to report current asthma (if appropriate) through later sections of the questionnaire covering 'other' long term conditions.

Information recorded about whether or not asthma was still current was 'as reported' by the respondent. Many people may consider they still get asthma even though it may have been some time since they last had an asthma attack or since they last used medication to prevent an attack. However if an adult indicated they were unsure how to answer because they have not had an attack since childhood, interviewers were instructed to record that asthma was not still current. All persons recorded as still having asthma were considered to have asthma as a long term condition.

Methodology

All respondents were asked whether they had ever been told by a doctor or nurse that they have asthma, and then whether they still got asthma. Those who answered yes to both these questions were asked questions about whether they had used medications(excluding vitamins or herbal medicines) for asthma in the last two weeks, or used an inhaler (or puffer) in that period. Non-remote respondents who answered yes to the questions about having asthma were asked about written asthma action plans and the purpose for which medication was used.

As noted above, persons sequenced around these questions may have reported current long term asthma in response to later general questions about medical conditions. These are included and contribute to estimates of the prevalence of asthma, but the information about written asthma action plans and the use of medications was not collected in these cases.

For non-remote respondents, written asthma action plans included management plans developed in consultation with a doctor, cards associated with peak flow meters and medication cards distributed through chemists. Respondents who reported having a written plan were shown a prompt card of the asthma action plan recommended by the National Asthma Campaign (which is available through doctors) and asked if their plan was similar to this; it is this plan which is referred to as the 'standard plan' in the output data items.

Population

Information was obtained for all Indigenous persons.

Data items

As follows:

Asthma status
Whether has written asthma action plan (non-remote only)
Source of written asthma action plan (non-remote only)
Whether standard action plan (non-remote only)
Whether used pharmaceutical medications for asthma in last 2 weeks

Output categories for these items are available from the list of output data items contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package, 2004–05* (cat. no. 4363.0.55.002) available from the ABS web site.

Interpretation

Points to be considered in interpreting data for this topic include:

- The definition of asthma for identification and enumeration purposes is difficult as there is a range of different methodologies and criteria which can be applied. In this survey, almost all current asthma cases identified are those which the respondent reported as being medically diagnosed. Those cases which were identified through general questions about long term conditions (rather than the specific asthma questions) have not necessarily been medically diagnosed, and may instead be a different respiratory condition. In both situations however cases are essentially self reported, and hence may not agree with data from other sources using different approaches to the definition of asthma and the collection of data.

Interpretation continued

- As asthma for many people is episodic, the notion of whether the condition is still current may be a difficult one (e.g. at what time since the last attack might a person say they no longer get asthma) and one which is likely to be differently judged by different people. Although some guidance was provided to interviewers in cases where a number of years had passed, the questions were deliberately tailored to ensure the respondent's perception of their current status was recorded. However, this should be considered in interpreting asthma prevalence as described by the survey.
- Respondents may have mistakenly reported medication usage for other conditions, as being used for asthma.
- Because this is a household based survey, those people with asthma who are residents in hospitals, nursing or convalescent homes or similar accommodation are outside the scope of this survey.

Comparability with 2001

The methodology used in the 2004–05 NATSIHS was the same as that used in the 2001 NHS(I), and data for this topic which are common to both surveys are therefore considered directly comparable, within the general limits of comparability resulting from a change in the means of data collection (see Chapter 7: Data quality and interpretation of results).

The following table summarises the differences in the items collected:

Item	*2004–5*	*2001*	*Comment*
Type of medication used	Not collected	Collected in non-remote areas	Item dropped
Respiratory symptoms	Not collected	Collected	The series of items was dropped from 2004–05 due to concerns about the quality/interpretation of the indicators they provided.
Use of nebuliser	Not collected	Collected in non- remote	Item dropped
Action taken for Asthma	Not collected	Collected	Item dropped

CANCER

Definition

This topic refers primarily to those ever told by a doctor or nurse they have cancer, and who consider they currently have cancer (including cancer in remission).

For the purposes of this survey all cancer reported as current was regarded as being a long term condition. Given the potential sensitivity of the topic, this was considered the most appropriate approach, although it was recognised that some cases of cancer may not meet the six months threshold (e.g. a person diagnosed for skin cancer who has surgery to remove it, all within a six month period).

Methodology

Respondents were asked if they had ever been told by a doctor or nurse that they had cancer, and the type of cancer they had.

Methodology continued

Predefined 'type of cancer' categories were included on the questionnaire, with provision for interviewers to record one additional 'write-in' type of cancer if required. The type of cancer categories used were:

- Skin
- Colon/rectum/bowel
- Breast
- Prostate
- Lung (incl. trachea, pleura, bronchus)
- Female reproductive organs (incl. cervix, uterus, ovary)
- Bladder/Kidney
- Stomach
- Leukaemia
- Lymphoma (incl. Non-Hodgkins lymphoma)
- Other (specify)
- Unknown (primary site)

The use of these types in the questionnaire effectively established this list as the most detailed level of information on type of cancer available from the survey, although very limited further detail may also be available for those recorded in the 'other specify' category.

If breast cancer was reported, age when first diagnosed with breast cancer was asked. Respondents were then asked if they currently had cancer and the type of cancer. For the purposes of this survey, persons in remission were regarded as still having cancer, irrespective of the period of remission. In non-remote this was specifically mentioned in the question regarding currency (i.e. "including cancer which is in remission, do you currently have cancer?"). In remote areas there was an Interviewer prompt.

As noted in the introduction, persons sequenced around these questions may have reported current long term cancer in response to later general questions about medical conditions. These are included and contribute to estimates of the prevalence of cancer.

Population

Information was obtained for all Indigenous persons.

Data items

As follows:

- Cancer status (separately for each type of cancer ever told and a combined item)
- Age first diagnosed with breast cancer

Output categories for these items are available from the list of output data items contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package, 2004–05* (cat. no. 4363.0.55.002) available from the ABS web site.

Interpretation

Points to be considered in interpreting data for this topic include:

- Those cases of cancer reported through the general questions about long term conditions (rather than the specific cancer questions) have not necessarily been medically diagnosed, and may instead be other conditions; self diagnosed skin cancer in particular may be subject to misreporting.

Interpretation continued

- As noted above, current cancers were assumed to be of six months or more duration. This is not necessarily the case.
- Because this is a household based survey, those people with cancer who are residents in hospitals, nursing convalescent homes or similar accommodation are outside the scope of this survey.

Comparability with 2001

The methodology used in the 2004–05 NATSIHS was the same as that used in the 2001 NHS(I), and data for this topic which are common to both surveys are therefore considered directly comparable, within the general limits of comparability resulting from a change in the means of data collection (see Chapter 7: Data quality and interpretation of results).

The following table summarises differences in the items collected:

Item	*2004–05*	*2001*
Whether used medication for cancer in the last 2 weeks(a)	Not collected	Collected
Number of medications used	Not collected	Collected
Type of medications used	Not collected	Collected in non-remote areas

(a) Including vitamins and minerals, natural and herbal medicines.

Advice from key users was that there was sufficient information on medication use for cancer from other sources, and this item was therefore deleted as a lower priority.

HEART AND CIRCULATORY CONDITIONS

Definition

This topic refers primarily to those persons ever told by a doctor or nurse that they have one or more heart or circulatory conditions, and who consider they currently have one or more such conditions. In order to be more meaningful in remote areas the title of this topic was changed to 'heart and blood pressure problems'.

The scope of this topic differs according to the particular data aspect being considered:

- For data collection purposes, and for data output relating to heart and circulatory conditions as a group of NHPA conditions, heart and circulatory conditions were defined broadly to include a range of heart, vascular and related conditions.
- For output as long term conditions classified to the standard ICD or ICPC–based classifications, some conditions such as high cholesterol were appropriately classified to other (i.e. non-circulatory) disease or condition groups.

Some care should be taken in using the data to ensure the scope of the topic is appropriate to the data use intended.

For the purposes of this survey rheumatic heart disease, heart attack and stroke were assumed to be long term conditions i.e. of six months or more duration, if the respondent reported them as current conditions. This reflects the likelihood of ongoing effects/consequences of those conditions. In non-remote areas, although unlikely in some cases, all other heart and circulatory conditions could be reported by the respondent as current conditions, but in the respondent's perception, not be of six months or more duration and hence not be defined as a long term condition in this survey. In remote areas, all conditions were considered to be long term.

Methodology

Respondents were asked if they had ever been told by a doctor or nurse that they had a heart or circulatory condition. In non-remote areas, a prompt card showing examples of conditions was provided to respondents. In non-remote areas, the following predefined condition categories were included on a prompt card and in the questionnaire, with provision for interviewers to record three additional 'write-in' conditions if required:

- Rheumatic heart disease
- Heart attack
- Stroke (Including after effects of stroke)
- Angina
- High blood pressure or hypertension
- Low blood pressure or hypotension
- Hardening of the arteries, atherosclerosis or arteriosclerosis
- Fluid problems, fluid retention or oedema
- High cholesterol
- Rapid or irregular heartbeats, tachycardia or palpitations
- Heart murmur or heart valve disorder
- Haemorrhoids
- Varicose veins
- Other – specify (up to 3 conditions could be recorded)

In remote areas, the above categories were read out to respondents, albeit in a different order, excluding haemorrhoids and varicose veins. For children in remote areas, heart attack, stroke, angina, hardening of the arteries, and fluid problems were also not included in the prompts.

The use of these categories in the questionnaire effectively established this as the most detailed level of information on those conditions available from the survey, although very limited further detail may also be available for those conditions recorded in the 'other specify' category.

Respondents were then asked if they currently had any heart or circulatory conditions. In non-remote areas, it was specifically prompted for respondents to include those conditions currently controlled by medications, and they were asked whether any/which of these conditions had lasted or were expected to last for six months or more (excluding those conditions defined previously as being assumed to be long term). In non-remote and remote, the list of predefined conditions was again used for these questions, with provision for interviewers to record up to three additional conditions if required. If in response to either of these questions a respondent mentioned a heart or circulatory condition they hadn't previously mentioned, the earlier questions in this section were re-asked as appropriate.

Information was then obtained about medication use (excluding vitamins and herbal medicines) for the heart and circulatory conditions reported. Only those medications specifically used for (the particular) heart and circulatory condition are conceptually included.

Persons sequenced around these questions because they reported they had never been told by a doctor or nurse that they had a heart or circulatory condition may have reported a current and long term heart or circulatory condition in response to later general questions about medical conditions. These cases are included and contribute to

Methodology continued

estimates of the prevalence of heart and circulatory conditions, but the information about medication use was not collected in these cases.

Population

Information was obtained for all Indigenous persons.

Data items

As follows:

Condition status (separately for each of the predefined heart and circulatory conditions reported and a combined item)

Whether used pharmaceutical medications for heart/circulatory condition(s) in the last 2 weeks

Output categories for these items are available from the list of output data items contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package, 2004–05* (cat. no. 4363.0.55.002) available from the ABS web site.

Interpretation

Points to be considered in interpreting data for this topic include:

- The conditions recorded are as reported by respondents. In some cases it could be expected that some conditions reported may be symptoms of other conditions; heart or circulatory conditions or other conditions. For example oedema may be a symptom of a heart valve disorder. Respondents were not asked to associate conditions in this way, such that both symptoms and underlying conditions may have been reported in some cases, or symptom or condition only in other cases. As a result, in looking at the prevalence of certain conditions, data users should consider how related or associated conditions should be treated.
- Respondents may have mistakenly reported medication usage for other conditions, as being used for heart and circulatory conditions.
- Because this is a household based survey, those people with heart/circulatory conditions who are residents in hospitals, nursing or convalescent homes, or similar accommodation are outside the scope of this survey; as a result, the survey will under-represent those with more severe conditions.

Comparability with 2001

The questions and methodology for this survey were the same in 2004–05 NATSIHS as in the 2001 NHS (Indigenous), so that data from both surveys are considered directly comparable, within the general limits of comparability resulting from a change in the means of data collection (see Chapter 7: Data quality and interpretation of results). However, the following should be noted:

- Hypotension (low blood pressure) was added to the prompt card/prompting and main condition picklist in the 2004–05 NATSIHS, and this may lead to a higher level of reporting of that condition than in previous surveys.
- Angina, hardening of the arteries, fluid problems/fluid retention and heart murmur were added to the prompting list in remote areas for 2004–05. As for hypotension, this may also lead to a higher level of reporting of those conditions than in previous surveys.
- Myocardial conditions (391) were combined with heart attack (936) in the 2001 NHS, in the 2004–05 survey they have been separated.

Comparability with 2001 continued

- The type of medications used and for which conditions (where known) was asked in the non-remote 2001 NHS(I), while the 2004–05 NATSIHS only asked about whether medications were taken for heart and circulatory conditions (excluding vitamins or herbal medicines).

DIABETES

Definition

This topic refers primarily to those ever told by a doctor or nurse they have diabetes or high sugar levels in their blood or urine, and who consider they currently have this condition. In remote areas, respondents were asked about 'diabetes or sugar problems'.

Methodology

Respondents were asked if they had ever been told by a doctor or nurse that they had diabetes or high sugar levels in blood or urine and the age at which they were first diagnosed. They were then asked whether the diabetes or high sugar level was still current.

Information was then obtained about whether the respondent had daily insulin injections and the age they started having daily injections, and about the use of other medications (excluding vitamins or herbal medicines) in the last two weeks. Use of vitamins/minerals and natural/herbal medications were identified through questions about other recent actions; see below. Only those medications specifically used for diabetes or high sugar levels were included. Other medications, used for example to treat symptoms or side effects of treatment, were excluded where the purpose for use was identified.

Respondents who reported they had current and long term diabetes or high sugar levels were also asked about changes to diet, recent actions taken to manage their condition, and whether in the last 12 months their condition had interfered with their work, study and/or other day to day activities. Further information was obtained in the section on 'Eyesight' about whether these people had a diabetes-related sight problem, the type of sight problem, and the time since they had last consulted an eye specialist or optometrist.

Respondents sequenced around these questions because they reported they had never been told by a doctor or nurse that they had diabetes or high sugar levels may have reported these conditions in response to later general questions about long term medical conditions. These cases are included and contribute to estimates of the prevalence of diabetes and high blood sugar as appropriate, but the information about medication use, recent actions, eye/sight problems, etc. was not collected in these cases.

Population

Information was obtained for all Indigenous persons.

Data items

As follows:

Diabetes status;
Current diabetes/high sugar level status;
Diabetes/high sugar level status history;
Age first told had diabetes/high sugar level;
Whether having daily insulin injections;
Age started daily insulin injections;
Whether used pharmaceutical medications for diabetes/high sugar levels in last two weeks;

Data items continued

Whether changes made to diet/eating patterns due to diabetes/high sugar levels;
Action(s) taken to manage diabetes/high sugar levels in last 2 weeks;
Whether diabetes/high sugar levels interfered with activities in last 12 months;
Type(s) of activities interfered with;
Whether has eye/sight problem due to diabetes/high sugar level;
Type of eye/sight problem due to diabetes/high sugar level;
Time since last consulted eye specialist or optometrist for diabetes-related eye condition (non-remote only);
Time since last consulted eye specialist or optometrist for any eye/sight condition.

Output categories for these items are available from the list of output data items contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package, 2004–05* (cat. no. 4363.0.55.002) available from the ABS web site.

Interpretation

Points to be considered in interpreting data for this topic include the following:

- Those cases of diabetes or high sugar levels reported through the general questions about long term conditions (rather than the specific questions about diabetes and high sugar levels) have not necessarily been medically diagnosed.
- As type of diabetes was not collected, all diabetes was assumed to be long term. Gestational diabetes and diabetes insipidus are therefore not treated in the same way as NHS (i.e. diabetes insipidus could not be sequenced out of the questions, and gestational diabetes could not be removed from being a long term condition and removed from more detailed diabetes questions). This should be considered when comparing diabetes data from the NATSIHS with NHS data.
- As data from remote areas does not distinguish between diabetes and high sugar levels, consideration should be made regarding combining these two categories together when producing national or comparative data which include remote areas.
- Just over 15% of persons who reported they had been medically diagnosed with diabetes reported the condition was no longer current. Respondents with diabetes insipidus or gestational diabetes would have contributed to this group, however would not account for all responses. Type 1 and Type 2 diabetes can be managed with medications and lifestyle changes but they cannot currently be cured. It is highly likely that some people with Type 1 or Type 2 diabetes reported they no longer have the condition. These cases then have been misreported, but they are a group of particular interest because the fact that they report no longer having the condition suggests they are not taking action to effectively manage their condition.
- Because this is a household based survey, those people with diabetes but who are residing in hospitals, nursing or convalescent homes or similar accommodation are outside the scope of this survey; as a result the survey will under-represent those with more severe complications of the condition.
- Respondents may have mistakenly reported medication usage for other conditions, as being used for diabetes or high sugar levels.

Comparability with 2001

The methodology used in the 2004–05 NATSIHS was similar to that used in the 2001 survey, and therefore data for most items are considered directly comparable between surveys, within the general limits of comparability resulting from a change in the means of data collection (see Chapter 7: Data quality and interpretation of results).

Comparability with 2001 continued

However, there were some differences, summarised below, which impact comparability:

- In 2004–05 non-remote respondents reporting they had been told they had diabetes were sequenced passed the 'ever told' question for high sugar levels. In 2001 it was possible for a respondent to report they had been told they had both conditions, but if they reported both, subsequent questions about age first told, and whether the condition was current related to the diabetes only. These differences mean that estimates for those 'ever told', age first told and those with current high sugar levels are more narrowly defined in 2004–05 and are therefore not directly comparable with 2001 estimates, unless the 2001 data are redefined to match the 2004–05 coverage.
- In the 2001 NHS(I) type of diabetes was reported for non-remote respondents. For the 2004–05 NATSIHS non-remote respondents were only required to report for diabetes in general. As mentioned previously, this meant that sequencing and output revisions undertaken in 2001 (and the 2004–05 NHS) for respondents who had diabetes insipidus or gestational diabetes (including revising long term responses to being not long term, or removing reference to having diabetes) could not be replicated in 2004–05 as these populations could not be identified.
- The 2001 NHS(I) asked respondents for the number and type of pharmaceutical medications used to treat diabetes. This question was not asked in the 2004–05 NATSIHS with respondents only being asked if they had taken medication (excluding vitamins or herbal medicines) in the last two weeks.
- The 2004–05 NATSIHS asked remote respondents who had daily insulin injections the age they started having the injections. This question was not asked in the remote component of the 2001 NHS(I).

ARTHRITIS

Definition

This topic refers primarily to those who consider they currently have arthritis (whether or not they had been told by a doctor or nurse that they had the conditions). The methodology used for this topic differs from that used in the 2001 NHS(I), and differs from that used for most other NHPA conditions in this survey.

Methodology

Respondents were asked whether they have, or had ever had, gout, rheumatism or arthritis. Respondents in non-remote areas who reported arthritis were asked the type of arthritis – osteoarthritis, rheumatoid arthritis, and/or other type (to be specified). All respondents (in both non-remote and remote areas) were then asked whether they currently had this/any of these conditions. For gout and rheumatism, non-remote respondents were asked whether the condition had lasted or was expected to last for 6 months or more. All cases of current arthritis were assumed to be long term conditions.

All respondents who reported they had or ever had arthritis (of any type) were asked whether they had been told by a doctor or nurse. Information was then obtained about whether respondents had used medication for arthritis in the last 2 weeks, excluding vitamins and herbal medicines.

Respondents sequenced around these questions because they reported they did not have and never had arthritis may have reported the condition in response to later general questions about long term medical conditions. These cases are included and contribute to estimates of the prevalence of arthritis as appropriate, but the information about medication use was not collected in these cases.

Population

Information was obtained for all Indigenous persons.

Data items

As follows:

Type of arthritis ever had (non-remote only)

Status items: each type of arthritis (non-remote only); combined version (non-remote and remote)

Whether used pharmaceutical medications for arthritis in last two weeks

Output categories for these items are available from the list of output data items contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package, 2004–05* (cat. no. 4363.0.55.002) available from the ABS web site.

Interpretation

Points to be considered in interpreting data for this topic include:

Whereas the 2004–05 NATSIHS methodology used for other NHPAs commenced with the 'ever told' question such that all further questions were asked only of that population medically diagnosed, questions on arthritis commence with 'have or ever had' such that the 'ever told' population is a subset, not the defining population for the topic. This methodology recognises the large numbers of people in the community who consider themselves to have arthritis, but who have not necessarily been diagnosed with the condition; most of these cases would not be recorded under the methodology used for the other NHPA conditions. For output the different approach means:

- That although 'status' items are derived for arthritis the same as for other NHPAs the data are conceptually different.
- That for the purpose of contributing to long term condition data, it is likely that there are more cases of current arthritis (as it is assumed all current cases are long term) which are not diagnosed being counted than for most other NHPAs. For example, of respondents reporting current arthritis (and hence contributing to long term condition data) 22% were not 'ever told', whereas of respondents reporting current and long term heart or circulatory conditions 1% were not 'ever told'.
- The distinction between arthritis, rheumatism and some other joint disorders may not be clear to respondents, particularly those whose condition has not been medically diagnosed. As the data collected in the survey are self reported by respondents there is a likelihood of some leakage to and from similar conditions. Unfortunately information is not available from this survey as to the extent this is likely to have occurred, but users of the data should consider taking account of similar conditions when, for example, looking at the prevalence of arthritis.
- Because this is a household based survey, those people with arthritis but who are residing in hospitals, nursing or convalescent homes or similar accommodation are outside the scope of this survey; as a result the survey will under-represent those with more severe complications of the condition and the elderly.
- Respondents may have mistakenly reported medication usage for other conditions, as being used for arthritis.

Comparability with 2001

Despite methodology changes between 2004–05 and 2001 surveys, results for non-remote areas are considered broadly comparable for common items. However some care should be used in comparing results between surveys as discussed below. Arthritis was not specifically collected in the remote component of the 2001 NHS(I) as a topic, although it was used as a prompt in the general long term medical conditions section.

As previously noted the coverage of the topic and the order of hierarchy in determining the populations involved differed between surveys, as shown in the table below. The 2004–05 NATSIHS collected considerably more data items on arthritis than the 2001 NHS(I). A comparison between the two surveys is set out below:

	2004–5		2001	
Item	*Hierachy*	*Status*	*Hierachy*	*Status*
Whether has/ever had arthritis	1	Collected		Not collected
Whether currently has arthritis	2	Collected	1	Collected
Whether arthritis is a long term condition		Assumed	2	Collected
Whether ever told by doctor or nurse	3	Collected		Not collected

However data output from both surveys are conceptually similar in non-remote areas. For counts of persons with long term arthritis 'whether currently has arthritis' in 2004–05 and 'whether currently has arthritis' and 'whether arthritis is a long term condition' in 2001 have been used. The 'has/ever had' screen in 2004–05 does not restrict the population 'currently'. The 2001 results showed that almost all current cases were reported as long term, so the 2004–05 approach of assumed long term status will have negligible effects on the estimates.

In non-remote areas of 2001 gout, rheumatism and arthritis were initially covered in a running prompt style of questions, while in 2004–05 they were initially covered in a series of separate questions. A point of difference which may effect comparability is that in 2001 gout and rheumatism were asked after the main types of arthritis, while in 2004–05 they were asked before. While multiple responses were allowed in both surveys, if respondents were unclear about their condition (and were not aware of subsequent questions) there may have been a tendency for people to report against the first mentioned condition. The overall effects on comparability are expected to be minor, but should be considered in analysis of changes over time.

Most of the data items collected for this topic in the 2004–05 NATSIHS are not available for 2001. The only items which are available for both surveys are for the non-remote — Whether currently has arthritis, and type of arthritis currently has.

OSTEOPOROSIS

Definition

This topic refers primarily to those ever told by a doctor or nurse they have osteoporosis or (in non-remote areas) osteopenia (a mild loss of bone mass density that may progress to osteoporosis). The methodology used for this topic differs from that used in the 2001 NHS(I), but is similar to that used for most NHPA conditions in this survey.

Methodology

Respondents were asked whether they had ever been told by a doctor or nurse that they had osteoporosis. The question to non-remote respondents also asked about osteopenia. All cases reported were assumed to be still current and long term. Information was then obtained about medications used for the conditions in the last 2 weeks, excluding vitamins and herbal medicines. Only those medications specifically used for arthritis were conceptually included. Medications used for example to treat symptoms or side effects of treatment were excluded where the purpose for use was identified.

Respondents sequenced around these questions because they reported they had never been told they had osteoporosis (or osteopenia for non-remote respondents) may have reported the condition in response to later general questions about long term medical conditions. These cases are included and contribute to estimates of the prevalence of the conditions as appropriate, but the information about the use of medications was not collected in these cases.

Population

Information was obtained for all Indigenous persons.

Data items

As follows:

Osteoporosis status (and osteopenia status for non-remote respondents)
Whether used pharmaceutical medications for osteoporosis in last two weeks

Output categories for these items are available from the list of output data items contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package, 2004–05* (cat. no. 4363.0.55.002) available from the ABS web site.

Interpretation

Points to be considered in interpreting data for this topic include the following:

- The population for this topic was determined by the response to the question 'whether ever told by a doctor or nurse' that they had the condition. The currency and long term nature of the condition were assumed. While this is appropriate given the nature of the condition it conceptually differs from the approach used for most other conditions covered in this survey.
- Presence of the condition is often not known or even suspected until medical diagnosis. Results from this survey are therefore expected to significantly underestimate the true prevalence of the condition throughout the community.
- Because this is a household based survey, those people with osteoporosis or osteopenia but who are residing in hospitals, nursing or convalescent homes or similar accommodation are outside the scope of this survey; as a result the survey will under-represent those with more severe complications of the condition and the elderly.
- Respondents may have mistakenly reported medication usage for other conditions, as being used for osteoporosis.

Comparability with 2001

The methodology changes between the 2004–05 and 2001 surveys mean that results are not considered directly comparable. In the 2001 NHS(I) osteoporosis was listed on a prompt card for 'other' long term conditions in non-remote areas, whereas it wasn't mentioned in remote areas. Previous experience indicates that the inclusion of a specific

Comparability with 2001 continued

question about a condition is likely to obtain a higher response than a more general question. Therefore part of the increase in the reported prevalence of osteoporosis between the surveys is likely to be attributable to methodology rather than a true increase in prevalence. The specific mention of osteopenia in non-remote areas of 2004–05 is expected to have little impact as it is understood to be rare as often by the time the condition is diagnosed it has progressed to osteoporosis.

In addition to issues influencing the likelihood of the condition being reported, the data from each survey are conceptually different — self reported current and long term in 2001 compared with 'ever told' and assumed current and long term in 2004–05. However, the impact on the data is expected to be relatively minor. The nature of the condition is such that it usually only comes known to a person through diagnosis, so that although not explicit in the 2001 survey, it could be expected that most, if not all cases reported had been diagnosed. The nature of the condition also means the assumption of currency and long term nature in 2004–05 would have minimal impact on data comparability.

RENAL DISEASE

Definition

This topic refers primarily to those ever told by a doctor or nurse they have kidney disease. The methodology used for this topic differs from that used in the 2001 NHS(I), but is similar to that used for most NHPA conditions in this survey.

Methodology

Respondents were asked whether they had ever been told by a doctor or a nurse that they had kidney disease and whether they still had the condition. All cases reported as current were assumed to be long term. All respondents, whether or not they indicated that had kidney disease were also asked if they had ever used a dialysis machine, which also included 'take home' packs.

Respondents who did not indicate at this point that they had been 'ever told' they had kidney disease may have reported the condition in response to later general questions about long term medical conditions. These cases are included and contribute to estimates of the prevalence of the conditions as appropriate.

Population

Information was obtained for all Indigenous persons.

Data items

As follows:

Kidney disease status
Whether ever had dialysis

Output categories for these items are available from the list of output data items contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package, 2004–05* (cat. no. 4363.0.55.002) available from the ABS web site.

Interpretation

Points to be considered in interpreting data for this topic include:

- The population for this topic was determined by the responses to 'whether ever told by a doctor or nurse' that they had the condition and whether current. The long term nature of the condition was assumed. While this is appropriate given the nature of the condition it conceptually differs from the approach used for most other conditions covered in this survey.

Interpretation continued

- Presence of the condition is often not known or even suspected until medical diagnosis. Results from this survey are therefore expected to significantly underestimate the true prevalence of the condition throughout the community.
- Respondents may not have distinguished between kidney disease, kidney stones or kidney infection. Kidney stones and kidney infection may be short term conditions. Distinction cannot be made from the data between the various kidney ailments and as such there may be respondents incorrectly classified as long term. However given the prevalence of kidney disease is expected to be an underestimate, it is considered that the impact is minimal.
- Because this is a household based survey, those people with kidney disease but who are residing in hospitals, nursing or convalescent homes or similar accommodation are outside the scope of this survey; as a result the survey will under-represent those with more severe complications of the condition and the elderly.

Comparability with 2001

In the 2001 NHS(I) kidney disease was not mentioned in non-remote areas. In remote areas it was used as a prompt in the general long term conditions section. Previous experience indicates that the inclusion of a specific question about a condition is likely to obtain a higher response than a more general question. Therefore part of the increase in the reported prevalence of kidney disease between the surveys is likely to be attributable to methodology rather than a true increase in prevalence.

SOCIAL AND EMOTIONAL WELLBEING

KESSLER PSYCHOLOGICAL DISTRESS SCALE *continued*

Definition

Mental health relates to emotions, thoughts and behaviours. A person with good mental health is generally able to handle day-to-day events and obstacles, work towards important goals, and function effectively in society. However, even minor mental health problems may affect everyday activities to the extent that individuals cannot function as they would wish, or are expected to, within their family and community. Some studies have shown that mental health is likely to be the second or third highest contributor, among Indigenous males and females respectively, to the burden of disease on these populations.

The Social and Emotional Wellbeing (SEWB) module is the first attempt to quantify the various aspects of the mental wellbeing of the Indigenous population. It's objective is to provide a broad assessment of a range of measures and data items that reflect on such wellbeing. The module will provide both measures of aspects of social and emotional wellbeing as well as some of the context in which it is measured.

In 2004–05, information was collected on SEWB via:

Five questions (some slightly modified) from the Kessler Psychological Distress Scale–10 (K10) and some questions on the impact of psychological distress from the K10+ ;

Four questions from the SF–36 about feelings of happiness and energy levels;

Questions relating to anger; and,

Cultural identification questions relating to homelands/traditional country (non-remote only), removal from family and stressors.

These are outlined below.

Definition continued

KESSLER PSYCHOLOGICAL DISTRESS SCALE

The Kessler Psychological Distress Scale – 10 (K10) is a scale of non-specific psychological distress. It was developed by Professors Ron Kessler and Dan Mroczek, as a short dimensional measure of non-specific psychological distress in the anxiety-depression spectrum, for use in the US National Health Interview Survey. It was asked of adults aged 18 years and over in the 2004–05 NHS.

The K10 is a ten item questionnaire, yielding a measure of psychological distress based on questions about negative emotional states experienced in the four weeks prior to interview. For the 2004–05 NATSIHS, the K10 set of questions was reduced to five questions to provide the best set of questions to exhibit psychological distress. Advice on the best set of questions to use was obtained from a range of experts, including State and Territory health authorities who had used a modified Kessler scale in their surveys. Professor Kessler was approached and advised that the K5 provides a worthwhile short set of psychological distress questions.

The five questions selected were regarding feeling nervous, without hope, restless or jumpy, everything was an effort, and, so sad that nothing could cheer them up. For each item in the Kessler questionnaire there is a five level response scale based on the amount of time that a respondent experienced the particular problem in the four weeks prior to interview. The response options are: none of the time; a little of the time; some of the time; most of the time; all of the time.

In Australia, national level information on psychological distress using the K10 was first collected in the Survey of Mental Health and Wellbeing of Adults (SMHWB) conducted by the ABS in 1997. The SMHWB was an initiative of, and funded by, the (then) Commonwealth Department Of Health and Family Services as part of the National Mental Health Strategy. The K10 was included in both the 2001 and 2004–05 NHS as it proved to be a better predictor of depression and anxiety disorders than the other short, general measures used in the 1997 SMHWB. For further information about ABS use of the instrument see the information paper, *Use of the Kessler Psychological Distress Scale in ABS surveys* (cat. no. 4817.0.55.001).

The K10+ contains some additional questions to assess functioning and related factors. Questions were asked regarding whether the feelings reported in the K5 resulted in being unable to work or carry out normal activities, seeing a doctor or health professional regarding the feelings, or the frequency the feelings were the main cause of physical problems.

Between the K10 and the K10+ questions a general question was asked of all respondents of whether the frequency of feelings they had reported were usual. Those respondents who had answered the K5 with responses of None of the time for all questions were then sequenced around the K10+ questions.

SF–36

The SF–36 is a standard international instrument containing questions which provide a generic measure of health status. The SF–36 measures eight concepts: physical functioning, role limitations due to physical health problems, bodily pain, general health, vitality (energy/fatigue), social functioning, role limitations due to emotional problems, and mental health (psychological distress and psychological wellbeing). For the 2004–05

Definition continued

SF–36 *continued*

NATSIHS, the SEWB module includes four SF–36 questions that relate to feelings of happiness and energy levels.

The four questions selected were regarding feeling calm and peaceful, happy, full of life, and having a lot of energy. The response options for questions are the same as for the Kessler module: none of the time; a little of the time; some of the time; most of the time; all of the time.

ANGER

Anger was viewed by the health experts that advised the ABS as a useful indicator of distress that could be used as a cross-classifactory variable when analysing the other dimensions of the SEWB module. As there were no questions that satisfactorily covered this issue from current Australian surveys, five questions were adopted using a set developed for American Indian communities in the United States. The objective of these questions was not to provide a measure of anger, but to report the manifestations of anger against the other dimensions of the SEWB module. For example, are respondents reporting high scores for psychological distress more likely to report 'wanting to break things'.

The response options for these questions were: a lot, some, not at all.

CULTURAL IDENTIFICATION

A series of questions was asked about cultural identification and stressors to provide a context for the rest of the SEWB module and possibly other sections of the NATSIHS, such as long term conditions, health risk factors and service usage. Non-remote respondents were also asked about whether they identify with a clan, tribal or language group, and whether they visit their homeland.

All respondents were asked whether they or any of their relatives were taken away from their natural families. Both non-remote and remote respondents were also asked about problems that may have caused stress to them or their immediate social environment.

Population

Information was collected for Indigenous persons aged 18 years and over.

Data items

As follows:

- Responses to each K5 question
- Whether feelings occurred more often, about the same or less often than usual in last 4 weeks
- Whether had days unable to work/carry out normal activities due to feelings in last four weeks
- Number of days unable to work/carry out normal activities because of feelings in last four weeks
- Whether saw doctor or health professional about feelings in last four weeks
- Number of times saw doctor or health professional about feelings in last four weeks
- How often physical health problems were the main cause of feelings in last four weeks
- Responses to the selected SF–36 questions
- Responses to the selected Anger questions

Data items continued

Whether identified with clan, tribal or language group (non-remote only)
Whether they visited their homeland (non-remote only)
Whether they or any of their relatives had been taken away from their natural families
Whether they or their immediate social environment had experienced personal stressors and types

Output categories for these items are available from the list of output data items contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package, 2004–05* (cat. no. 4363.0.55.002) available from the ABS web site.

Comparability with 2001

The SEWB module is being collected for the first time in the 2004–05 NATSIHS. However, the 2002 National Aboriginal and Torres Strait Islander Social Survey (NATSISS) asked the same questions about cultural identification and is directly comparable with the 2004–05 NATSIHS.

LONG TERM CONDITIONS: TYPE OF CONDITION

Definition

Long term conditions were defined as medical conditions (illness, injury or disability) which were current at the time of the survey and which have lasted at least six months, or which the respondent expects to last for six months or more, including:

- Long term conditions experienced from which only infrequent attacks may occur,
- Long term conditions which may be under control, for example through the continuing use of medication;
- Conditions which, although present, may not be generally considered 'illness' because they are not necessarily debilitating e.g. reduced sight; and
- Long term or permanent impairments or disability.

In the 2004–05 NATSIHS long term conditions were made up of two conceptually different sets of data;

- The NHPA conditions of asthma, cancer, heart and circulatory conditions, diabetes, arthritis and osteoporosis, and renal disease. As outlined in previous sections, these data primarily relate to conditions which have been medically diagnosed, and which are current and either reported to be, or assumed to be, of six months or more duration.
- Other conditions (including conditions related to the other NHPAs of injuries and mental health) which respondents reported as current at the time of the survey, and which the respondents had, or expected to have, for a period of six months or more.

For outputs from this survey relating to long term conditions or persons with long term conditions, data from these two groups are combined.

Methodology

Information about the collection of data for the specific NHPA conditions and renal disease is contained in the previous sections of this publication. Information about the collection of data about all other long term conditions is provided below.

These other long term conditions were addressed in two ways:

- Respondents were asked a series of questions about specific conditions, covering eye and sight problems and ear and hearing problems.

Methodology continued

- In non-remote areas respondents were shown a series of 3 prompt cards (two with conditions listed while the third contained more general descriptions of condition types) and asked whether they had any of the conditions shown or conditions similar to those shown or described. In remote areas respondents were read a short list of conditions and also asked to think about reoccurring conditions that were infrequent, whether they had conditions they had become used to, or that were no longer a problem due to medication being used.

Population

Information was collected in respect of all Indigenous persons.

Data items

As follows:

Whether has long term condition
Type(s) of long term condition
Number of long term conditions
Whether currently wears glasses or contact lenses
Whether sight problems corrected by glasses or contact lenses
Whether sight problems correctable but glasses or contact lenses not used
Types of sight problems corrected by glasses or contact lenses

Output categories for these items are available from the list of output data items contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package, 2004–05* (cat. no. 4363.0.55.002) available from the ABS web site.

Interpretation

Points to be borne in mind in interpreting data from the survey relating to long term conditions include the following:

- As noted previously, the data relate to conditions 'as reported' by respondents and hence do not necessarily represent conditions as medically diagnosed, except in the case of those conditions which respondents reported having been advised by a doctor or nurse. However, as the data relate to conditions which have lasted or are expected to last for six months or more it is considered there is a reasonable likelihood that medical diagnosis would have been made in most cases. However, the degree to which conditions have been medically diagnosed is likely to differ across condition types.
- Even where conditions have been medically diagnosed, respondents may have used different terminology when reporting the condition, and it may be classified to a different group.
- While the methodology aimed at maximising the identification of long term conditions, some underreporting may have occurred, particularly in respect of those conditions which are controlled by treatment (such as epilepsy), recur infrequently or to which respondents have become accustomed and no longer consider an illness.
- It is expected that those conditions which were specifically mentioned in questions, and to a lesser extent those conditions shown on prompt cards, would have been better reported than conditions for which response relied entirely on respondent judgement and opinion as to whether or not to report them. Data are not available from this survey to enable the magnitude of this effect to be quantified, but it is likely to differ across condition types and for different groups in the population.

Interpretation continued

- Although long term/permanent disabilities were within the scope of long term conditions, data from this survey should not be interpreted as indicating the disabled or handicapped population. In some cases long term/permanent impairment/disability is evident from the condition categories e.g. blindness (complete or partial), while for others some degree of impairment/disability could be inferred from the nature of the condition e.g. arthritis, back problems. However, these data should at best be considered as proxy indicators of disability only.
- As noted previously, information about long term conditions is available from the survey classified to two classifications. The categories in these classifications have been adopted to cover specific conditions of known interest to data users, which can be supported by the observations obtained in the survey. In some cases data at a more detailed level can be made available on request — see Chapter 2: Survey Design and Operation. However, it should be recognised that given the vagaries of condition reporting, the finer the level of detail the less accurate the condition data will become.
- Because this is a household based survey, those people who reside in hospitals, nursing or convalescent homes or similar accommodation are outside the scope of this survey.

Comparability with 2001

Data on long term conditions from the 2004–05 NATSIHS are broadly comparable with long term condition data from the 2001 NHS(I). However, direct comparisons should be made with care:

- The methodologies used for the NHPA conditions are the same or similar to those used in the 2001 NHS(I) such that most data should be directly comparable; however readers are advised to see the comments on comparability contained in each of the separate NHPA sections.
- Although the methodology used for the non-NHPA conditions was similar to that used in 2004–05 NATSIHS overall, there were some differences (e.g. in the coverage of particular conditions in the survey prompt cards) which have reduced comparability — see Chapter 7: Data quality and interpretation of results.
- Changes in community perceptions of illness and disability, together with changes in the identification and treatment (e.g. institutional versus community care) of conditions may have affected the degree to which certain conditions were identified in the survey.
- General diminished or disturbed hearing (ABS code 337) was included under the heading of inner ear conditions in 2001, but was included under the heading of partial deafness conditions in 2004–05.

LONG TERM CONDITIONS: REPORTED CAUSE

Definition

This topic refers to the reported cause of current long term conditions. Respondents are asked if any of their long term conditions are the result of an injury or accident.

Methodology

Respondents who earlier in the survey had reported one or more current long term conditions (or conditions which were assumed to be current and long term) were asked whether the condition(s) were the result of an injury or accident. In non-remote areas, all the conditions previously reported were brought together in the instrument, and those reported by respondents due to an injury or accident were recorded by

Methodology continued

interviewers, as appropriate. In remote areas, it was necessary to either go back through the questionnaire and look for conditions reported or leave it to recall.

Population

Information was collected in respect of all Indigenous persons for whom one or more current long term condition (or condition which were assumed to be current and long term) had been reported.

Data items

As follows:

Whether any long term condition(s) was due to an injury or accident
Type of long term condition(s) due to an injury or accident

Output categories for these items are available from the list of output data items contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package, 2004–05* (cat. no. 4363.0.55.002) available from the ABS web site.

Interpretation

The questions were asked only in respect of conditions which had previously been reported during the survey interview. If respondents had failed to previously report a condition, the injury or accident origin of the condition was not established. Some conditions resulting from an injury or accident may not be identified in the survey as a result.

Comparability with 2001

In the 2004–05 NATSIHS the questions and general methodology for this topic were similar to those of the 2001 survey, with the result that the data are considered broadly comparable between the surveys, within the general limits of comparability resulting from a change in the means of data collection (see Chapter 7: Data quality and interpretation of results). However, the following points should be borne in mind in making comparisons:

- In the 2001 survey, for practical reasons the number of conditions which could be recorded as due to an injury was limited to five; in the non-remote areas of 2004–05 NATSIHS there was no limit so that all conditions previously reported could potentially be reported as due to an injury. It should be noted that the limit of five in 2001 applied to five conditions as reported, which may differ from the number of conditions coded and which appear on the final data file – but from that data file 14% of non-remote respondents were recorded as having more than five conditions. In remote areas of 2001 the number of conditions which could be recorded was also five, whereas in 2004–05 the number of conditions which would be recorded was four.
- In 2004–05 only a question regarding whether a condition was the result of an injury was asked. In 2001, information regarding whether a condition was work related, whether a condition was the result of an injury and in what situation the injury occurred. Some respondents may not have reported a condition as due to an injury because they had already reported it as work related. The extent to which this may have occurred is not known. Where it has occurred, conditions due to injuries will be underestimated in the 2001 data.

Comparability with 2001 continued

- This topic is directly dependent on the conditions previously reported in the survey, so that any change in methodology effecting the likelihood of conditions being reported, will impact on comparability. While the overall approach to collecting conditions data was the same in both surveys, changes for example to the approach for arthritis, gout, rheumatism, osteoporosis, kidney disease, changes to condition prompt cards, etc. will have had some impact on data for this topic.

RECENT INJURIES

Definition

This topic refers to selected events occurring in the 4 weeks prior to interview which resulted in an injury, and which in turn resulted in medical consultation or treatment, or a reduction in usual activities. The types of events included were:

Accidents (e.g. a fall, vehicle accident, hitting or being hit by something);
Harmful incidents (e.g. bites and stings, attack by another person, near drowning);
Exposures to harmful factors (e.g. poisoning (other than food poisoning), electric shock, loud sounds); and
Other events resulting in injuries such as cuts, scalds, dislocations, sprains, fractures, etc.

The topic aimed to cover all injuries, from minor scrapes and cuts through to serious injuries such as broken bones and burns, and included birth injuries if these occurred in the previous 4 weeks. Detailed information was collected about those events resulting in injury for which some action was taken. Food poisoning was collected but was not regarded as an injury for the purposes of this survey.

The data items included in the NHS module on recent injuries are based on the National Minimum Data Set for Injury Surveillance in the National Health Data Dictionary. They include items describing the event, the type of injury and its bodily location, the place of occurrence and the activity when injured.

Methodology

In non-remote areas, respondents were asked (with the aid of prompt cards) whether

Methodology continued

any of the following events had happened to them in the previous 4 weeks:

- Attacked by another person
- Bites or stings
- Bruising
- Burns or scalds
- Choking
- Cuts
- Dislocations, sprains, strains
- Electric shocks
- Falling over
- Fractures
- Hit by something
- Hitting something
- Inhaling fumes
- Internal injuries
- Loud sounds
- Near drowning
- Swallowing poisons
- Vehicle accidents
- Other injuries
- Food poisoning

In remote areas, respondents were asked if they had had any accidents, hurt themselves or been hurt by someone or something.

If they responded they had, they were asked whether those events had resulted in the respondent taking one or more of the following actions:

- Consulting a health clinic (non-remote); going to the community clinic or hospital (remote)
- Seeking and/or receiving medical advice or treatment (non-remote)
- Reducing usual activities (non-remote)
- Treating the injury themselves, such as using a band aid or bandage, applying an ice-pack, taking medication, bed rest, etc.
- Doing anything else (remote)

For those who reported an event for which one or more of those actions was taken, information was collected to establish the number and types of event(s) which had occurred in that period.

Further information was then collected about the most recent event in that 4 week period. This information covered details of the event (activity at the time of the injury, and location of event) and consequences of the event (type and bodily location of injury and medical treatment). In non-remote areas, prompt cards were used to assist respondents in reporting type of injury, activity at time of event, location of event, and medical consultation arising from the event.

Methodology continued

Respondents reporting an injury while working for an income were asked if this was in the same occupation as previously reported in the interview; that is, occupation in the main job the respondent had at the time of the survey. For those not in the labour force, not currently employed, or who have changed occupation since their injury, details of the occupation at the time of the injury were not recorded.

Respondents (aged 15 years and over) were also asked if they had been drinking alcohol or using other drugs when they were injured.

A small number of cases were recorded in the survey where after the initial screening questions, it was found that no injury had resulted from the reported event. In these cases no further information about the event or consequences of the event were recorded. These are included in counts of events, but not in counts of injuries or injury events.

Population

Information was collected for all Indigenous persons.

Data items

Items available for reported events:

- Whether had event for which action(s) were taken
- Whether had injury event
- Type of event for which action taken
- Number of events occurring for which action taken (for each type of event)
- Type of most recent injury event
- Type(s) of injury from most recent injury event
- Part(s) of body injured
- Whether injury received while working (for income or as volunteer)
- Occupation at time of injury most recent injury (only where that occupation was the same as the respondent's current occupation)
- Activity at time of injury
- Location of injury event
- Type of hospital attendance
- Type of medical professional consulted
- Whether injured while under influence of alcohol/other substance

Output categories for these items are available from the list of output data items contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package, 2004–05* (cat. no. 4363.0.55.002) available from the ABS web site.

Interpretation

Points to be considered in interpreting data for this topic include:

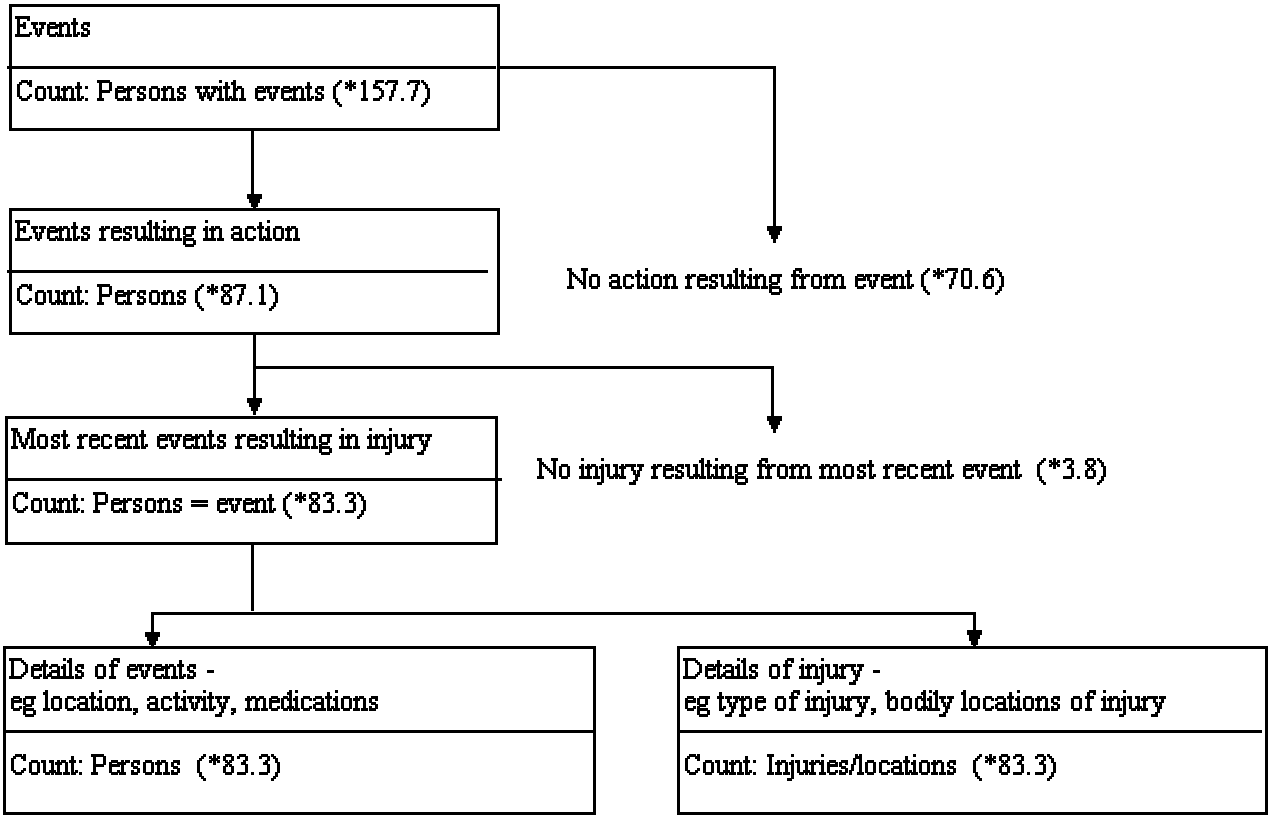
- As the data in this topic can relate to persons, events, injury events and injuries, care should be taken to ensure that the data used are appropriate to the purpose for which they are intended; in particular to ensure that data relate to events, injury events or injuries as required, and that the units used (e.g. events or persons) are appropriate.
- An event is an occurrence of any of the following in the previous 4 weeks:

Interpretation continued

- Attack by another person, Hit by something, Bites or stings, Bruising, Burns or scalds, Choking, Cuts, Dislocations, sprains, strains, Electric shocks, Falling over, Fractures, Hitting something, Inhaling fumes, Internal injuries, Loud sounds, Near drowning, Swallowing poisons, Vehicle accidents, Other injuries;

- and which resulted in one or more of the following actions:
  - Consulting a health professional, seeking and/or receiving medical advice or treatment, reducing usual activities, or treating the injury themselves (e.g. using a bandage, applying an ice-pack, taking medication, bed rest).
- An injury event is an event (as defined above but excluding food poisoning) which resulted in an injury.
- An injury is the damage sustained in an injury event; a single event may result in multiple injuries, and each type of injury may involve multiple bodily locations.

The relationships between these concepts are shown in the diagram below.



* Estimates are rounded to thousands.

- The identification of events and injury events was entirely at the discretion of respondents and reflected their perceptions of the elements of intent, neglect, etc. which may have been factors in the occurrence and their willingness to identify such occurrences. For example, although interpersonal violence was conceptually within the scope of the topic, it is expected such occurrences will be underreported in this survey

Interpretation continued

- Similarly, although all events in the previous 4 weeks resulting in injury were within scope of the topic, events resulting in minor injuries, and particularly those occurring earlier in the reference period, were less likely to be reported than other events. The degree to which events resulting in minor injuries were reported could also be expected to differ between population groups
- While the survey identified those injury events which in the respondent's opinion occurred while they were working, the data are not necessarily indicative of injuries which would be considered work related under workers' compensation provisions.

Comparability with 2001

The methodology used to collect data about recent injuries in the 2004–05 NATSIHS is similar to that used in the 2001 NHS(I). As a result the data are considered broadly comparable, but attention is drawn to the differences outlined below.

Two small, but important changes were made to the 2004–05 NATSIHS list of event types compared to the 2001 NHS(I):

- A new category 'cut with a knife, tool, other implement' was added;
- The category 'exposure to fire' was renamed 'exposure to fire/heat'.

These changes were aimed at assisting respondents in recalling events, and helping interviewers in recording those events. As a result the likelihood of respondents reporting these types of events was increased; increases between 2001 and 2004–05 estimates for related categories are likely due in part to these wording changes.

A major change between the surveys was that:

- In the 2004–05 NATSIHS detailed information was collected only about the most recent event resulting in action, which may or may not have been an injury event, whereas
- In the 2001 NHS(I) detailed information was collected about the three most recent events resulting in action, which may or may not have been an injury event.

This difference means that, subject to the other comparability issues noted above, data for all events resulting in action, and for the most recent event (injury event or not) are comparable between survey. However data for all injury events are not directly comparable, since in 2001 the data combine information from up to 3 events while in 2004–05 injury events are a subset of the most recent event (resulting in action).

The following table summarises differences in the items collected:

Item	*2004–05*	*2001*	*Comment*
All details of 2nd and 3rd most recent injury event	Not collected	Collected	Basic event details recorded for all events, but details collected only for most recent injury event in 2004–05
Whether injured while under the influence of alcohol/other substance	Collected	Not collected	New item included on request
Injury event category - cut with a knife, tool, other implement	Collected	Not collected	
Time off work/study due to injury	Not collected	Collected	Item dropped
Whether cut down on usual activity due to injury	Not collected	Collected in non-remote areas	Item dropped

ORAL HEALTH

Definition

This topic refers primarily to the oral health of respondents. This information was not collected in the 2001 NHS(I).

Methodology

This collection of questions immediately followed the questions relating to dental visits. Respondents were asked if they had lost any of their natural teeth (excluding wisdom teeth), if they wear dentures or false teeth and if they need them to eat properly.

Population

Information was obtained for Indigenous persons aged 15 years and over.

Data items

As follows:

Whether lost any teeth/number lost
Whether wears dentures or false teeth

Output categories for these items are available from the list of output data items contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package, 2004–05* (cat. no. 4363.0.55.002) available from the ABS web site.

Comparability with 2001

This item was not specifically collected in the 2001 NHS(I) for either non-remote or remote areas, although problems with teeth may have been reported in the other long term conditions section.

SELF ASSESSED HEALTH STATUS

Definition

This topic is composed of a series of questions about how respondents rate their overall health.

Population

Information was obtained for all Indigenous persons aged 15 years and over.

Data items

As follows:

Self assessed health status
Health status compared to one year ago

Output categories for these items are available from the list of output data items contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package, 2004–05* (cat. no. 4363.0.55.002) available from the ABS web site.

Interpretation

Points to be considered in interpreting these data items include:

- These are subjective data items. Perceptions may be influenced by any number of factors, which may be unrelated to health or which may reflect momentary or short term, rather than usual, feelings or circumstances. Responses may have been influenced by factors involved in the interview itself such as the presence of another family member.
- Analysis of similar data from the previous NHS(I)s showed some correlation between self assessed health status and health status as indicated by more objective measures such as long term conditions. However, self assessed health status should not be used as an alternative to those measures without analysis of correlations in the particular use of the item proposed.

Interpretation continued

- Information recorded for persons aged 15 to 17 may have been reported by an adult within the household, usually a parent. Data for this age group therefore is not conceptually 'self assessed' health as for other age groups, and responses may have been different if children had responded for themselves.

Comparability with 2001

Self assessed health status is considered directly comparable between the 2004–05 NATSIHS and 2001 NHS(I), within the general limits of comparability resulting from a change in the means of data collection (see Chapter 7: Data quality and interpretation of results).

However, whereas in the 2001 NHS(I) information for children aged 15 to 17 years was reported by an adult in all cases (possibly with the child's assistance) in the 2004–05 NATSIHS children in this age group were encouraged to answer for themselves (with parental consent). This will impact comparability of data for this age group, particularly for subjective items such as self assessed health status.

In 2001 an additional general health indicator (Quality of life delight/terrible scale) was included, which was not retained for the 2004–05 survey.

CHAPTER 4 HEALTH RELATED ACTIONS

CONTENTS

INTRODUCTION

The 2004–05 NATSIHS obtained information about the following selected actions persons had taken for their health in the reference period.

As follows:

- Stays in hospital
- Visits to casualty (emergency) and outpatient units at hospital
- Visits to day clinics (non-remote only)
- Doctor consultations
- Dental consultations
- Consultations with selected other health professionals
- Days away from work or school/study
- Other days of reduced activity
- Use of medications

In addition information was collected regarding continuity of care (general actions), attendance at men's health activities and responses to discrimination.

For practical reasons (i.e. limited interview time and the difficulties in defining every possible type of action a person may have taken in relation to his/her health), the survey covered only the limited range of actions listed above. These actions reflect the main areas known to be of interest to data users and cover the more common actions people take in relation to their health. However, care should be taken not to interpret the data as comprehensive of all actions taken.

Except for stays in hospital, men's health, discrimination and general actions, the reference period used for actions data was the two weeks prior to interview. Stays in hospital uses both a 12 month and a two week reference period. Discrimination and men's health generally use a 12 month reference period. General actions uses the concept of where a respondent 'usually' goes. A two week reference period was used in this survey and previous NHS(I)s as an acceptable compromise between enabling respondents to accurately recall and report actions taken in the period while ensuring sufficient observations were recorded in the survey to support reliable results. While the two week period is used for consistency across most actions it is more appropriate to some types of action such as doctor consultations, which are more frequently taken actions, than to other types such as dental consultations, which tend to be taken much less frequently. This will impact on the relative reliability of the estimates across action types.

Estimates are available for the number of persons taking a particular action in a two week period, and the number of occasions on which the action was taken in that period - e.g. the number of consultations or number of days away from work. Service use data from other sources are commonly compiled on an annual basis. Because the 2004–05 NATSIHS was conducted over a 10 month period, the results represent an average two weeks in that enumeration period. This enables 'annualised' estimates of the number of occasions to be produced from the data simply by multiplying the two week estimate by 26. Although the 'annual' estimates produced will be approximates only, they are considered suitable for general comparative purposes. However this approach should not be used to produce 'annualised' estimates of persons taking a particular action, because it takes no account of the frequency patterns of actions taken by individuals.

INTRODUCTION *continued*

Information about the medical condition or other reasons (e.g. test, checkup) for taking the action was not generally obtained in the 2004–05 survey; however limited linkage between actions taken and medical condition was recorded for persons reporting some conditions. Details are provided within the action descriptions below.

In the 2004–05 NATSIHS information was collected about use of medication for selected conditions (asthma, heart and circulatory conditions, diabetes, arthritis and osteoporosis). Details on medication use are therefore available separately for each of these conditions, but because of the restricted coverage of the data, medication use does not contribute to counts of actions taken. Responses to discrimination, attendance at men's health activities and general actions also do not contribute to counts of actions taken.

Overall, actions data from the 2004–05 NATSIHS are similar to those collected in the 2001 NHS(I). All changes, and their implications for comparability between the surveys, are discussed under the relevant individual topic headings which follow.

The data items available from this section of the survey are listed under the particular topic to which they relate. In addition, data items which combine various actions taken, enabling analysis of action levels and patterns in respect of population groups, etc. can also be produced on request.

GENERAL ACTIONS

Definition

This topic covers details on where the respondent usually seeks treatment and continuity of care.

Methodology

All respondents were asked where they usually go when they have a health problem and whether they usually go to the same medical professional or service.

Population

Information was obtained for all Indigenous persons.

Data items

As follows:

Where usually go if problem with health
Whether usually goes to the same GP/medical service

Output categories for these items are shown in the list of output data items contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package, 2004–05* (cat. no. 4363.0.55.002) available from the ABS web site.

Interpretation

Points to be considered when interpreting data from the survey relating to actions include:

- Respondents who don't usually seek health care were also asked whether they usually go to the same doctor or medical service. These respondents may occasionally seek health care and as such indicate appropriately whether they go to the same doctor or service. However, no distinction is made regarding whether the respondent occasionally or never seeks health care, so responses of 'no' for whether they go to the same doctor or service cannot distinguish between people who occasionally seek medical advice and change doctor or service and people who don't seek medical care.

Comparability with 2001

Data for this topic was not collected in the 2001 NHS(I).

STAYS IN HOSPITAL

Definition

This topic refers to admissions to hospital as an inpatient (including same day patients). For the purposes of this survey, a hospital was defined as an institution which offers residential health care, other than a nursing or convalescent home.

In order to be counted, the stay in hospital must have commenced with formal admission and ended in formal discharge, with discharge taking place in the 12 months prior to interview. However, in some cases persons who had not been discharged were included; this occurred when persons who were technically still admitted patients were enumerated when home on day release or as hospital-at-home patients.

Methodology

NON-REMOTE

Non-remote respondents were asked whether they had been admitted to hospital in the 12 months prior to interview, and the number of times admitted in that 12 month period. Further details were obtained about the respondent's most recent inpatient episode in the last 12 months, including length of stay (number of nights in hospital), whether they had been discharged in the two weeks prior to interview, whether they had stayed in a public or private hospital and whether they had been admitted as a Medicare or Private patient. The medical reasons for hospitalisation were not recorded.

These questions were asked after questions about recent visits to casualty and outpatients units, and questions about recent visits to day clinics, to minimise the risk of respondents reporting these visits as hospital admissions.

REMOTE

Remote respondents were asked whether they had stayed overnight in a hospital in the 12 months prior to interview, and how many times they had been to hospital and stayed overnight in that 12 month period. Further details were obtained about the respondent's most recent overnight stay in the last 12 months, including number of nights in hospital and whether they had been discharged in the two weeks prior to interview. The medical reasons for hospitalisation were not recorded.

These questions were asked prior to questions about recent visits to casualty and outpatients units so that hospital admissions could be defined clearly as an overnight stay at hospital.

Population

Information was obtained for all Indigenous persons.

Data items

As follows:

- Whether admitted to hospital in last 12 months
- Number of times admitted in last 12 months.
- In respect of the most recent admission in the last 12 months:
  - Whether discharged in last 2 weeks
  - Number of nights in hospital
  - Patient type (Medicare or private patient) (non-remote only)
  - Hospital type at most recent admission (public/private) (non-remote only)
  - Reasons chose to be admitted as a Medicare patient (non-remote only).

Data items continued

Output categories for these items are shown in the list of output data items contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package 2004–05* (cat. no. 4363.0.55.002) available from the ABS web site.

Interpretation

Points to be considered when interpreting data from the survey relating to stays in hospital include the following:

- In general "actions" results from the survey, only those persons discharged from hospital in the previous two weeks are included, consistent with the reference period for all other "actions" data obtained in the survey. The 12 months reference period is usually used in results relating specifically to stays in hospital.
- Statistics on hospital inpatient episodes provided by this survey are not directly comparable with hospital morbidity statistics produced from other sources, due to differences in coverage, definitions and procedures used in their collection.
- Where respondents were enumerated at home, although they were technically still admitted patients at the time, they have been included although their admission had not been completed at that stage. Length of stay in these cases was recorded as the period from admission to date of interview. The number of cases where people in this situation were identified in the survey was very small, and therefore will have negligible effects on results.
- Patient type at most recent episode refers to the patient type as reported by respondents, not to the type of hospital to which admitted; a person may be a private patient at either a public or private hospital. Persons who reported to the interviewers that they had been a patient under a Department of Veterans Affairs entitlement were recorded as public patients.
- In non-remote areas, a person may legitimately have reported no nights in hospital if admitted and discharged on the same day.

Comparability with 2001

Data from the 2004–05 NATSIHS is considered directly comparable for most items with those from the 2001 survey, within the general limits of comparability resulting from a change in the means of data collection (see Chapter 7: Data quality and interpretation of results). However, the following points should be noted.

- In response to concerns about a possible undercount of persons reporting zero nights in hospital in the 2001 NHS(I), an additional question was included in 2004–05 asking whether any nights were spent in hospital, which was followed by the previously used question about number of nights. Results show an increase in the proportion of people in non-remote areas admitted to hospital who reported their most recent stay as zero nights. This increase in part is considered due to the new question.
- The collection of hospital data was slightly different in remote areas between 2001 and 2004–05. Both surveys used the concept of overnight stay to distinguish between a hospital admission and visiting casualty or outpatients. However, in 2001 the question relating to how many times in the last 12 months the respondent had been in a hospital did not refer to overnight stays whereas it did in 2004–05. This meant that a number of respondents in 2001 responded to have stayed no nights in their most recent stay, but in 2004–05 this response was not possible.
- Two new items were collected in the non-remote 2004–05 NATSIHS:

Comparability with 2001 continued

- Whether most recent stay was in a public or private hospital, and
- Reasons chose to be admitted to a public hospital (if had private hospital insurance).

VISITS TO CASUALTY/EMERGENCY AND OUTPATIENTS

Definition

This topic refers to visits to casualty/emergency and/or outpatients units at a hospital in the two weeks prior to interview. For the purposes of this survey, a hospital was defined as an institution which offers residential health care, other than a nursing or convalescent home.

Only visits related to the respondent's health were included; visits such as taking another sick or injured person to emergency are excluded. Also excluded are situations where the respondent was admitted to hospital through a casualty/emergency ward; these instances were recorded as stays in hospital. Visits to dental hospitals, which are sometimes attached to a hospital as part of the outpatients section are also excluded from this topic; these cases were recorded under dental consultations.

Methodology

Respondents were asked whether they had visited a casualty/emergency or outpatients unit/ward for their own health in the two weeks prior to interview, and the number of visits in that period. Non-remote respondents who reported visiting an outpatients unit/ward were asked whether their most recent visit in that two week period was related to a previous or expected admission to hospital.

Information about the medical condition(s) or other reasons for visiting the casualty/emergency or outpatients unit/ward was not collected in the survey

Population

Information was obtained for all Indigenous persons.

Data items

As follows:

Whether visited casualty/emergency or outpatients
Number of visits to casualty/emergency or outpatients
Whether visited casualty/emergency ward in last 2 weeks (non-remote only)
Number of visits to casualty/emergency ward (non-remote only)
Whether visited outpatients section in last 2 weeks (non-remote only)
Number of visits to outpatients section (non-remote only)
Whether most recent visit to outpatients unit/ward was related to previous/expected admission to hospital (non-remote only)

Output categories for the items above are shown in the list of output data items contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package 2004–05* (cat. no. 4363.0.55.002) available from the ABS web site.

Interpretation

Points to be considered when interpreting data from the survey relating to casualty/emergency and outpatients visits include:

- Statistics on the usage of casualty/emergency or outpatients units provided by this survey are not directly comparable with statistics produced from other sources, due to differences in coverage, definitions and procedures used in their collection.

Interpretation continued

- Although interviewers provided guidance to respondents if queried, in non-remote areas the decision to report a visit against casualty/emergency or outpatients was the respondent's choice. While the distinction between casualty/emergency and outpatients units could be expected to be clear-cut in most cases, the potential for respondents to confuse outpatients with day clinics, or possibly outpatients with day admissions may have affected results. In remote areas, casualty/emergency and outpatients were not collected separately.

Comparability with 2001

Results from the 2004–05 NATSIHS are considered directly comparable with those from the 2001 survey, within the general limits of comparability resulting from a change in the means of data collection (see Chapter 7: Data quality and interpretation of results).

VISITS TO DAY CLINICS (NON-REMOTE ONLY)

Definition

This topic refers to visits to day clinics in the two weeks prior to interview for the respondent's own health. Day clinics, which are often attached to or operate as part of a hospital, offer minor surgery or diagnosis procedures such as scans, ultrasounds, endoscopies, cardiac tests, etc. They do not offer residential health care in the same way as hospitals but in some cases a visit may result in an overnight stay.

Included in the survey are all reported visits to day clinics, except those visits solely for the purpose of an X-ray.

Methodology

Non-remote respondents were asked whether in the last two weeks they had visited a day clinic for minor surgery or diagnostic tests (other than an X-ray). The number of times they had visited a day clinic in that period was also recorded. No distinction was made as to whether the day clinic was part of or separate from a hospital facility.

Population

Information was obtained for all Indigenous persons living in non-remote areas.

Data items

As follows:

Whether had visited a day clinic
Number of times visited a day clinic.

Output categories for the items above are shown in the list of output data items contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package, 2004–05* (cat. no. 4363.0.55.002) available from the ABS web site.

Interpretation

Points to be considered when interpreting data from the survey relating to visits to day clinics include the following:

- The wording of the questions, and their sequencing after questions about visits to casualty/emergency and outpatients sections at hospitals, were designed to ensure that, as far as possible, respondents did not report use of hospital services (outpatient clinics in particular) as visits to day clinics or vice versa. However, some crossover in reporting between hospital and day clinics may have occurred, particularly for cases where day clinics are located on hospital premises.

Interpretation continued

- Statistics on the use of day clinics provided by this survey are not directly comparable with statistics available from other sources, due to differences in coverage, definition and procedures used in their collection, and to possible reporting errors as noted above.

Comparability with 2001

Results from the 2004–05 NATSIHS are considered directly comparable with those from the 2001 NHS(I), within the general limits of comparability resulting from a change in the means of data collection (see Chapter 7: Data quality and interpretation of results).

DOCTOR CONSULTATIONS

Definition

This topic refers to any occasion in the two weeks prior to interview on which a respondent discussed his/her own health with, or received treatment from a doctor. Included are consultations by telephone or having someone else consult a doctor on behalf of the respondent (such as a relative or friend, or doctor's nurse or receptionist), but excluded are:

- consultations during a visit to a casualty/emergency ward or outpatient section at a hospital or during a stay in hospital, or during a visit to a day clinic; and
- visits to a doctor only to deliver a sample or collect a prescription, without seeing the doctor.

As defined for this survey, 'doctor' includes general practitioners and specialists such as surgeons, pathologists, gynaecologists, radiologists, psychiatrists, etc.

This item includes all consultations with a doctor in the reference period, regardless of the type of treatment/service provided. For example, a consultation with a doctor at which acupuncture or physiotherapy was performed has, where identified, been included in this item.

Methodology

Non-remote respondents were asked whether during the two weeks prior to interview they had consulted a general practitioner and the number of consultations, and consulted a specialist and the number of consultations. If the respondent indicated they had consulted a general practitioner or specialist, they were then asked whether they were required to pay any money for their last visit. Those who had not consulted either a general practitioner or specialist in that two week period were asked the time since they had last consulted a doctor (general practitioner or specialist) about their own health (other than as a hospital inpatient or at a visit to a hospital casualty/emergency or outpatients unit, or at a day clinic).

Remote respondents were asked whether during the two weeks prior to interview they had consulted a doctor, the number of consultations and time since last consulted a doctor.

Information about the medical condition or other reason for consultation was not recorded.

Population

Information was obtained for all Indigenous persons.

Data items

As follows:

Whether consulted a doctor in the two weeks prior to interview
Number of consultations with doctor in that period

Data items continued

Time since last consulted a doctor
Whether consulted a general practitioner in the two weeks prior to interview (non-remote only)
Number of consultations with general practitioner in that period (non-remote only)
Whether copayment required at last GP consultation (non-remote only)
Whether consulted a specialist in the two weeks prior to interview (non-remote only)
Number of consultations with a specialist in that period (non-remote only)
Whether copayment required at last specialist consultation (non-remote only)

Output categories for the items above are shown in the list of output data items contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package, 2004–05* (cat. no. 4363.0.55.002) available from the ABS web site.

Interpretation

When interpreting data from the survey relating to doctor consultations the following should be considered:

- Consultations information is essentially 'as reported' by respondents. In some cases respondents may have reported consultations with health practitioners other than doctors because they consider them to be doctors. Conversely, some consultations reported as being with other health professionals should have been reported in this item where the practitioner consulted was a qualified medical practitioner (regardless of the type of treatment/service provided at the consultation). The questionnaire was designed such that most of these cases would be identified through subsequent questions, and information amended as required. However, some cases of misreporting may remain in the final survey output.
- Similarly, for non-remote respondents, the reporting of a consultation as with a general practitioner or with a specialist was largely at the respondent's discretion, and some misreporting could have occurred.
- While the wording and ordering of the questions was aimed at minimising respondents' reporting of consultations with doctors during a visit to, or stay in, hospital or visit to a day clinic, some cases of misreporting or multiple-reporting may have occurred.

Comparability with 2001

Results from the 2004–05 NATSIHS are considered directly comparable for most items with those from the 2001 NHS(I), within the general limits of comparability resulting from a change in the means of data collection (see Chapter 7: Data quality and interpretation of results). However, the following points should be noted.

In order to reduce confusion between doctors and nurses and Aboriginal health workers, in remote areas the ordering of collection of these professionals was changed in 2004–05. A question on visiting Aboriginal Health Workers and nurses was asked just prior to the questions on visiting Doctors. This may have affected the results for these professionals.

In remote areas in 2004–05, data on general practitioner and specialist visits were not collected separately due to testing indicating that the distinction between these two professional types was not well understood. Comparison with 2001 is possible if data for these two professional types are combined.

Comparability with 2001 continued

Copayment information was not collected in 2001.

DENTAL CONSULTATIONS

Definition

Dental consultations refer to any occasion in the two weeks prior to interview on which a respondent consulted a dentist or other dental professional (e.g. orthodontist, dental nurse, dental technician, dental mechanic) about their teeth, dentures or gums.

Consultations at dental hospitals are included, but dental consultations during a hospital inpatient stay or visit to casualty/emergency, outpatients or day clinic are excluded.

Persons who consulted a doctor about a dental problem are included under the item Doctor Consultations.

Methodology

Respondents were initially asked who was the last person seen about their teeth. Respondents who had ever seen someone about their teeth were then asked whether during the two weeks prior to interview they had consulted a dentist or anyone about their teeth, dentures or gums, and the number of times consulted in that period. Respondents who did not consult in that period were asked the time since their last dental consultation. Respondents were then asked the usual reason for seeing a dentist and where they last saw the dentist.

Population

Information was obtained for Indigenous persons aged 2 years and over.

Data items

As follows:

- Type of health professional last consulted regarding teeth
- Whether consulted a dentist or dental professional in the two weeks prior to interview
- Number of times consulted dentist or dental professional in the two weeks prior to interview
- Time since last consulted a dentist or dental professional
- Place of last dental consultation
- Usual reason for dental consultation

Output categories for the items above are shown in the list of output data items contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package, 2004–05* (cat. no. 4363.0.55.002) available from the ABS web site.

Interpretation

The following should be considered when interpreting dental consultations data provided by this survey.

For reasons of consistency with other actions data obtained in the survey, a two week reference period was used for dental consultations. However, it is recognised that dental consultations generally occur less frequently than consultations with doctors and some other health professionals. As a result, the data from this survey on the usage of dental services (particularly in applications such as deriving annual aggregates of service usage) may not be as reliable as for other types of health service covered in the survey.

Comparability with 2001 NHS

Whereas the 2001 NHS(I) collected data for this topic for persons of all ages, the 2004–05 NATSIHS collected data only for those aged 2 years or more. As a result, data provided by the 2004–05 NATSIHS about dental consultations are comparable with those provided by the 2001 NHS(I) (within the general limits of comparability resulting from a change in the means of data collection (see Chapter 7: Data quality and interpretation of results)) when 2001 data are defined for the population aged 2 years or more.

Details regarding type of health professional last consulted, place of last dental consultation, usual reason for dental consultation were not collected in 2001.

CONSULTATIONS WITH OTHER HEALTH PROFESSIONALS (OHP)

Definition

This topic refers to occasions in the two weeks prior to interview in which respondents consulted a nominated health professional other than a doctor or dentist/dental professional; specifically one or more of the following health professionals:

Aboriginal health worker
Accredited counsellor
Acupuncturist
Alcohol and drug worker
Audiologist/audiometrist
Chiropractor
Chemist — for advice only
Chiropodist/podiatrist
Dietician/nutritionist
Herbalist
Hypnotherapist
Naturopath
Nurse
Optician/optometrist
Osteopath
Occupational therapist
Physiotherapist/hydrotherapist
Psychologist
Social worker/welfare officer, and
Speech therapist/pathologist
Traditional Healer

This topic refers to consultations at which some discussion and/or treatment of a health related matter or medical condition took place, or was arranged.

Excluded are:

- occasions where respondents may have visited the professional only to obtain medical supplies, aids, etc. For example, consulting a chemist about a medication would be included, while visiting a chemist simply to fill a prescription would not; consulting an optometrist about a sight problem would be included but going to an optometrist to have a pair of glasses made to prescription would not;
- consultations occurring during a stay in hospital, or visit to a casualty/emergency or outpatients unit, or day clinic;
- consultations with nurses as part of a doctor or dental consultation (including dental nurses); these are included under doctor and dental consultations respectively;

Definition continued

- consultations with a doctor at which any specific type of services (e.g. acupuncture, counselling, etc.) were received. These occurrences are recorded as doctor consultations.

Consultations were recorded against the type of OHP involved, not the type of treatment provided at a particular consultation. For example, if a chiropractor performed physiotherapy, the consultation was recorded under chiropractor. If a practitioner was considered by the respondent to fit more than one of the types listed above, the visit has been recorded against that type of OHP most closely associated with the most recent consultation in the two week period.

Methodology

Non-remote respondents were provided with a prompt card about whether they had consulted any of the listed OHPs in the two weeks prior to interview. If so, the respondent was asked to identify which types of OHP had been consulted. Respondents were then asked whether they had to pay any money for seeing the OHP(s) that had been consulted.

Remote respondents were asked whether in the last two weeks they had been to: a social worker or welfare officer; a traditional healer; an alcohol or drug worker; or specify any other health worker. In a separate question earlier in the questionnaire, remote respondents were also asked to report on whether they had seen an Aboriginal Health Worker or a nurse/sister.

Information about medical condition(s) or other reason(s) for visiting that OHP was not recorded.

Population

Information was obtained for all Indigenous persons.

Data items

As follows:

Whether consulted OHP in two weeks prior to interview
Types of OHP consulted in the last two weeks
Whether copayment required at any OHP consultation in the last two weeks (non-remote only)
Type of OHP requiring copayment (non-remote only)

Output categories for the items above are shown in the list of output data items contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package 2004–05* (cat. no. 4363.0.55.002) available from the ABS web site.

Interpretation

Points to be considered when interpreting data on OHP consultations from this survey include the following:

- The data relate only to those types of OHP specified in the survey and hence should not, in aggregate, be interpreted as relating to all health professionals other than doctors and dentists.
- While it was recognised that all respondents may not understand the functions of all the OHPs listed, it was considered that in most cases they could accurately identify the type of OHP they had consulted. Interviewers were provided with a list defining the main activities of each of the OHPs covered to assist respondents if queried.

Interpretation continued

- Despite the point above some misreporting of type of OHP may have occurred. For example, in cases where the distinction between types of OHP was unclear in the respondent's mind and/or the professional practised more than one form of treatment (e.g. chiropractor/osteopath, naturopath/herbalist)
- Conceptually consultations were only to be recorded where some treatment and/or discussion of a health related matter took place. However, it is recognised that this distinction may be difficult to make in some cases and interpretation may differ between respondents. In particular, the likelihood of reported consultations with chemists and opticians/optometrists being outside the defined scope of the survey should be considered.
- Responses made by remote respondents in the other 'specify' category were recoded to the non-remote categories as applicable. However, due to all categories not being prompted for some underreporting of categories not specifically listed may also have occurred. If the text response did not match a category on the list, the response was deleted and where no other response had been made the respondent was changed to not having seen an OHP. Respondents who identified seeing a mental health worker were coded as seeing an accredited counsellor.

Comparability with 2001

Data for this topic are broadly comparable between the 2004–05 NATSIHS and 2001 NHS(I), within the general limits of comparability resulting from a change in the means of data collection (see Chapter 7: Data quality and interpretation of results). However, several minor changes between surveys should be noted.

In the non-remote 2001 NHS(I), the categories 'Aboriginal health worker' and 'alcohol and drug worker' were defined as 'not elsewhere classified (nec)' - that means that conceptually these were categories which applied only in cases where one of the other categories of OHP in the question could not apply - i.e. they were effectively secondary classification categories. For the 2004–05 NATSIHS the 'nec' was removed, such that those categories are of equal status as other categories in the list, with the result that these categories were more likely to be recorded in 2004–05 than in 2001.

The category of Traditional Healer was not collected in 2001. Therefore, counts for number of people who saw an OHP may differ slightly between 2001 and 2004–05 with this change in population scope (i.e. 2004–05 accounts for people who only saw a Traditional Healer as seeing an OHP, whereas 2001 doesn't).

Copayment information was not collected in 2001.

UNMET NEED

Definition

This topic refers to occasions when respondents needed to see a particular health professional or service but did not go for a particular reason. The aim of these questions is to identify barriers for respondent accessing a hospital, doctor, dentist or other health professional.

Methodology

For each of hospital (including casualty, outpatients or day clinics), doctor, dentist and other health professional, a question was asked regarding whether the respondent needed to go to them in the previous 12 months but didn't. This was followed by a question regarding the reason they didn't go.

Population

Information was collected for all Indigenous persons.

Data items

Data items were produced for each of hospital, doctor, dentist and other health professional as follows:

Whether needed to go to <hospital/doctor/dentist/other health professional> in the last 12 months but didn't

Reason didn't go to <hospital/doctor/dentist/other health professional>

Output categories for the items above are shown in the list of output data items contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package, 2004–05* (cat. no. 4363.0.55.002) available from the ABS web site.

Interpretation

Points to be considered when interpreting data on unmet need from this survey include the following:

- Responses to the questions require interpretation by respondents on a perceived 'need' to go to the service or health professional. Some respondents may have interpreted this as being a medical emergency, while others may have interpreted it to include routine check-ups.
- Respondents may have needed to go to the service or health professional. However, due to being unable to access the particular service or health professional, may have sought care elsewhere. Respondents may then have seen the need as not being relevant as they received attention and therefore respond in the negative to the question.

Comparability with 2001

Data for this topic was not collected in the 2001 NHS(I).

MEN'S HEALTH

Definition

This topic refers to participation in and access to activities organised by health services or community clinics to raise awareness of men's health issues.

A male health and well being service is an activity specifically delivered for males either by an Aboriginal Medical Service (AMS), mainstream practice, and/or allied health service. The purpose of these services is to provide opportunities to discuss health issues considered to be "men's business" and ultimately to promote and increase health service use by Indigenous men.

Methodology

Male respondents were asked if the health service or community clinic organised activities for men only. They were then asked if they attended any of these activities in the last 12 months. If they said that they had not attended any activities, they were asked if they would have gone if their health service or community clinic provided them. All respondents were then asked if they had attended a community group talk about men's health issues in the last 12 months.

Population

Information was collected for Indigenous males aged 18 years and over.

Data items

As follows:

Whether male specific health and wellbeing service available in local area

Whether accessed male specific health and wellbeing services in last 12 months

Whether would have access male specific health and wellbeing service if available in local area

Data items continued

Whether participated in male health and wellbeing discussion at community level or as part of a community group or organisation in last 12 months.

Output categories for the items above are shown in the list of output data items contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package, 2004–05* (cat. no. 4363.0.55.002) available from the ABS web site.

Interpretation

The following should be considered when interpreting data on men's health as collected in this module:

There may be some confusion regarding what constitutes a male health activity and, in urban areas, what constitutes their health service or clinic. There may also be confusion surrounding the link between a clinic and the activity where the respondent is not sure who organised the activity. As such, responses to these questions are an indication of the respondent's view of what is a male specific activity and whether it was provided by a health service or community clinic.

Comparability with 2001

Data for this topic was not collected in the 2001 NHS(I).

DAYS AWAY FROM WORK OR SCHOOL/STUDY

Definition

This topic refers to days, during the two weeks prior to interview, when respondents stayed away from their work and/or their school/study:

- due to an illness or injury which they had; or
- as a carer for someone else who was sick or injured.

For the purposes of this topic a "day away" was defined as more than half the (working or student) day absent. If a person was away from both work and study details were recorded against each activity as appropriate.

Methodology

As appropriate to the age, educational and employment circumstances previously recorded at the interview, respondents were asked separately whether in the last two weeks they had stayed away from work and/or school/study because of an illness/injury they had, and whether in the last two weeks they had stayed away from work and/or school/study to care for someone else who was sick or injured.

The number of days away was recorded for each of these actions as appropriate. Information about the medical condition involved was not collected.

Population

Information was obtained about time away from work or school/study for Indigenous populations as follows:

Days away from work due to own illness: employed persons aged 15 - 64 years
Days away from school/study due to own illness: persons aged 5 - 64 years
Days away from work as carer: employed persons aged 15 - 64 years
Days away from school/study as carer: persons aged 10 - 64 years

Data items

Data items for this topic include:

Whether had any days away from work due to own illness/injury
Number of days away from work due to own illness/injury
Whether had any days away from study due to own illness/injury

Data items continued

Number of days away from study due to own illness/injury
Whether had any days away from work as carer
Number of days away from work as carer
Whether had any days away from study as carer
Number of days away from study as carer
Whether had days away from work for own illness or as carer
Number of days away from work for own illness or as carer
Whether had days away from study for own illness or as carer
Number of days away from study for own illness or as carer
Whether had days away from work or study for own illness
Number of days away from work or study for own illness
Whether had days away from work or study as carer
Number of days away from work or study as carer

Output categories for the items above are shown in the list of output data items contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package, 2004–05* (cat. no. 4363.0.55.002) available from the ABS web site.

Interpretation

Points to be considered when interpreting data on days away from work or study/school include the following:

- Sequencing of respondents through this section of the questionnaire relied on previous information recorded about their current employment and/or student status. To the extent that reporting or recording errors may have occurred in this information, the information recorded about days away from work or school/study will also be affected
- The survey can provide information both about the numbers of Indigenous people (and their characteristics) taking time away from work or school/study due to illness, and about the numbers of days away. While efforts were made in the appropriate questions and using sequencing to ensure only illness related days away are included, and only days where more than half a day's absence was involved are counted, some misreporting may have occurred.
- The questions about days away from work were not asked specifically in terms of a particular job. As a result, for persons with more than one job, the days away were not necessarily (or solely) days away from their main job. While the impact of this is expected to be minor, it should be considered when, for example, analysing information on days away from work against reported occupation or industry of main job.
- The numbers of persons and days away due to own illness/injury and as carer were separately reported and were intended to be conceptually separate so they could be aggregated to produce total 'days away' due to illness or injury if required. A small number of respondents reported days away due to both illness and as carers, and in these cases there is some possibility that the same days were reported in each. However, as the number involved was small, even if this did occur it is expected to have minimal effect on estimates.

Comparability with 2001

Data for days away from work in non-remote areas are considered to be directly comparable between the 2001 NHS(I) and 2004–05 NATSIHS within the general limits of comparability resulting from a change in the means of data collection (see Chapter 7: Data quality and interpretation of results). However, the following should be noted.

Data for days away from work/study are not directly comparable. In the 2001 NHS(I) in remote areas, data was only collected on whether the respondents had days away from work/study for illness (with separate work and study data not available). As well, in the 2001 NHS(I) in non-remote areas, for persons who had days away from both work and school/study in the reference week, the days away have been recorded against days away from work only. The number of persons in the survey who reported days away from both work and school/study was very small; nevertheless a small undercount of persons having days away from school/study, and of the number of days away will have occurred. In the 2004–05 survey persons and days away were recorded against both work and school/study, as reported.

OTHER DAYS OF REDUCED ACTIVITY

Definition

This topic refers to days during the two weeks prior to interview on which a person cut-down on his/her usual activities for all or most of the day due to an illness/injury which they had, excluding days away from work or school/study because of own illness/injury.

Note that these (other) days of reduced activity exclude days cut down on activities to care for another person.

Methodology

Respondents were asked whether on any days in the previous two weeks they had cut down on anything they usually did because of an illness or injury they had, and the number of days they had reduced their activities. For respondents who were employed or at school/study, these questions followed questions on days away from work or school/study, and respondents were asked to exclude those days they had already reported. Respondents who had already indicated that they had had 14 days away from work or study or 28 days away from work and study were sequenced around this set of questions. Information about the medical conditions or other reason(s) for other days of reduced activity was not collected.

Population

Information was collected for Indigenous persons aged 5 years or more.

Data items

As follows:

Whether had (other) days of reduced activity
Number of (other) days of reduced activity

Output categories for the items above are shown in the list of output data items contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package, 2004–05* (cat. no. 4363.0.55.002) available from the ABS web site.

Interpretation

Points to be considered when interpreting data for this item include:

- The information is 'as reported' by respondents. Perceptions of concepts such as 'cut-down on usual activities' may differ between respondents and hence influence the consistency of the data recorded.

Interpretation continued

- Other days of reduced activity conceptually exclude days counted as being away from work or school/study due to own illness/injury. However, days away from work and days away from study may overlap. For this reason the days recorded for each group (work, study, other days of reduced activity) cannot be aggregated to a total 'days out of role'.

Comparability with 2001

Data for this topic from the non-remote areas of the 2001 NHS(I) and 2004–05 NATSIHS are considered comparable within the general limits of comparability resulting from a change in the means of data collection (see Chapter 7: Data quality and interpretation of results).

This topic was not collected in remote areas in the 2001 NHS(I). In the 2001 NHS(I) in non-remote areas the number of days out of role could be calculated, but this information is not available from the 2004–05 NATSIHS because the way days away from work and days away from study have been recorded may result in double counting.

USE OF MEDICATIONS

Definition

This topic refers to the consumption or other use, for selected conditions/reasons only, of any pharmaceutical medications, pills or ointments during the two weeks prior to interview, excluding vitamins and herbal medications.

Information about use of pharmaceutical medication was collected for the following conditions/reasons, as reported by respondents:

Asthma
Heart and circulatory conditions
Diabetes/high sugar levels
Arthritis
Osteoporosis/osteopenia

Pharmaceutical medications exclude vitamin or mineral supplements, and natural or herbal medicines.

Methodology

The methodology used to obtain this information was similar throughout the survey, but there were some differences for individual conditions/reasons for use. Each of the approaches is summarised below; further information is contained in the individual condition sections of this Guide.

ARTHRITIS

Respondents who reported they ever had arthritis and still have arthritis (irrespective of whether or not they had been told by a doctor or nurse) were asked, other than vitamins or herbal medicines, had they used or taken any medicine or tablets for arthritis in the last two weeks.

ASTHMA

Respondents who reported they had been told by a doctor or nurse that they had asthma, and reported it was still a current condition, were asked, other than vitamins or herbal medicines, had they used or taken any medicine or tablets for asthma in the last two weeks. The remote form also specified 'used a puffer' in the questionnaire. Non-remote respondents were also asked if their medication was used for prevention, relief or both.

Methodology continued

HEART AND CIRCULATORY CONDITIONS

Respondents who reported they had been told by a doctor or nurse that they had a heart and circulatory condition, and reported it was a current and long term condition, were asked, other than vitamins or herbal medicines, had they used or taken any medicine or tablets for heart and circulatory condition in the last two weeks.

DIABETES

Respondents who reported they had been told by a doctor or nurse that they had diabetes or high sugar levels in their blood or urine, and reported it was still a current condition, were asked whether they were currently having daily insulin injections and the age they started having these injections. They were also asked whether they had used or taken any medicine for their diabetes in the last two weeks. Medication was collected separately for pharmaceutical medication, vitamin or mineral supplements, and natural or herbal medicines.

OSTEOPOROSIS

Respondents who reported they had been told by a doctor or nurse that they had Osteoporosis/osteopenia were asked, other than vitamins or herbal medicines, had they used or taken any medicine or tablets for osteoporosis in the last two weeks.

Population

Medications data are available for Indigenous persons of all ages who had reported arthritis, asthma, heart and circulatory conditions, diabetes/high sugar levels in blood or urine, or osteoporosis.

Data items

For each of arthritis, asthma, heart or circulatory conditions, diabetes or high sugar levels, osteoporosis:

- Whether used pharmaceutical medications in the last two weeks

Output categories for the items above are shown in the list of output data items contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package, 2004–05* (cat. no. 4363.0.55.002) available from the ABS web site.

Interpretation

Points to be considered when interpreting data from this survey on the use of medications include:

- The information about medications used for asthma, diabetes, cardiovascular conditions and osteoporosis was obtained only for those cases where:
  - the respondent reported that the condition was current and long term, and
  - that they had been told by a doctor or a nurse that they had the condition.
- As a result, for these conditions, the populations for medications data will not necessarily align with the populations who are counted in long term condition data. Because of the different methodology used to collect information about arthritis, medications data were collected for all persons reporting they had ever had the condition and that the condition was current and long term, regardless of whether or not they had been told by a doctor or nurse that they have the condition. As a result, two items have been produced for arthritis:
  - one providing the response as per the population asked. This item is not comparable with the other condition medication items; and

Interpretation continued

- the other restricting the population to those who had been told by a doctor or a nurse that the condition was current and long term. This item is comparable to other medication items.

- The data relates only to whether respondents used medications for particular types of medical conditions. The data does not indicate the type of medication used, the level of use, or the prevalence of medication use in general.
- Although respondents were asked to exclude vitamins and herbal medicines, some may have incorrectly reported the use of vitamins or herbal medicines as pharmaceutical medications.

Comparability with 2001 NHS(I)

Overall, the methodology for collecting data on pharmaceutical medication use in non-remote areas in the 2004–05 NATSIHS was similar to that used in the 2001 NHS(I), with the result that the data about the use of pharmaceutical medications for asthma, heart/circulatory conditions and diabetes/high sugar levels are broadly comparable, within the general limits of comparability resulting from a change in the means of data collection (see Chapter 7: Data quality and interpretation of results).

The use of medications data was not collected for arthritis and osteoporosis in the 2001 NHS(I), and therefore data comparable with 2004–05 NATSIHS are not available. Information about medication use for cancer, which was collected in the 2001 NHS(I), was not collected in the 2004–05 NATSIHS.

Other factors which may potentially affect comparability of the use of medications data between surveys include the availability of medications (coming onto or leaving the market), changes effecting accessibility (e.g. prescription requirements), access to/arrangements for pharmaceutical benefits, and evolving practices for the treatment/management of conditions.

DISCRIMINATION

Definition

This topic refers to whether Indigenous respondents consider they were discriminated against when accessing health care and in general because they are of Aboriginal and/or Torres Strait Islander origin, including how they felt about being discriminated against because of their origin.

Methodology

Respondents were asked how they felt they were treated when they sought health care during the last 12 months compared to non-Indigenous people: worse, the same or better. They were then asked if in the last 12 months they considered they were treated badly in any situation because they were Indigenous. If they answered yes to this question they were asked how they felt and what actions they take when they are treated badly.

Population

Information was collected for all Indigenous persons aged 18 years or more.

Data Items

As follows:

Treatment when seeking health care compared to non-Indigenous persons
Whether felt was treated badly because of being Indigenous
Feelings resulting from being treated badly
Actions resulting from being treated badly

Data Items continued

Output categories for the items above are shown in the list of output data items contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package 2004–05* (cat. no. 4363.0.55.002) available from the ABS web site.

Interpretation

Points to be considered when interpreting data for this item include:

- information is 'as reported' by respondents. Perceptions of concepts such as 'treated badly' may differ between respondents and hence influence the consistency of the data recorded.
- although some respondents may have reported they were discriminated against because they were Indigenous, there may also be a number of reasons for why they considered they had been discriminated against which did not relate to their Indigenous status. As such, these questions only deal with discrimination due to Indigenous status, and not discrimination in general.

Comparability with 2001 NHS(I)

Data for this topic was not collected in the 2001 NHS(I).

CHAPTER 5 HEALTH RISK FACTORS

CONTENTS

INTRODUCTION

A range of genetic, social, economic and environmental factors are recognised as affecting the risk of ill-health of the Indigenous population i.e. the chance an individual has of developing a particular illness or injury. Specific lifestyle and related factors which have been identified as (positively and/or negatively) impacting health include diet and nutrition, use of medicines, obesity, physical activity, high blood cholesterol, high blood pressure, oral hygiene, smoking, alcohol use, inadequate or incomplete immunisation and use of illicit drugs.

It is clearly not possible, and in some cases inappropriate, in a survey such as the NATSIHS to attempt to address the whole range of factors likely to affect the health of the Indigenous population. The approach taken in this survey was to focus on selected lifestyle related health risk factors identified through consultations with health professionals, administrators, Indigenous health organisations, policy makers, researchers, academics etc. as major issues of concern and considered appropriate for inclusion in an interview survey of this type.

Health risk factor topics included in the 2004–05 NATSIHS were:

- Smoking;
- Alcohol consumption;
- Substance use;
- Exercise;
- Height, weight and body mass;
- Dietary habits;
- Breastfeeding;
- Selected childhood and adult immunisation; and
- Women's health.

In addition, other aspects of health risks may be indicated through information obtained in the survey about other health and related characteristics, such as the presence of particular long term conditions. The collection of information about health risk factors and behaviours in conjunction with other health and population characteristics enables all these elements to be analysed together. However, while data from the survey may suggest apparent associations between particular risk factor(s) and certain illness condition(s), the data should not be interpreted as indicating causal relationships.

Some caution should be used in drawing together data for the different risk factors covered as the reference periods used differ e.g. smoking - at time of interview, alcohol consumption - in the last week, exercise - in the last two weeks, etc.

The major changes in the coverage of risk factors between the 2004–05 NATSIHS and 2001 NHS(I) are summarised in the table below:

Topic	*Non-remote* Coverage in 2004-05 NATSIHS compared with 2001 NHS(I)	*Remote* Coverage in 2004-05 NATSIHS compared with 2001 NHS(I)
Smoking	Conceptual change, some additional data items	Conceptual change, some additional data items
Alcohol consumption	Similar, some additional data items	Similar, some additional data items
Substance use	Not covered in 2001 NHS(I)	Not covered in 2004-05 NATSIHS or 2001 NHS(I)
Exercise	Similar, plus additional data items	Not covered in 2001 NHS(I)
Height, weight, body mass	Similar	Similar
Dietary indicators	Similar, plus additional data items	Not covered in 2001 NHS(I)
Breastfeeding	Similar, plus additional data items	Similar
Sun protection	Not covered in 2004-05 NATSIHS	Not covered in 2004-05 NATSIHS or 2001 NHS(I)
Adult immunisation	Similar	Similar
Child immunisation	Similar, plus additional data items	Not covered in 2004-05 NATSIHS or 2001 NHS(I)
Supplementary women's health topics	Similar, Hysterectomy removed	Similar, plus additional data items

INTRODUCTION *continued*

Where appropriate to the survey vehicle and consistent with the data requirements of users, similar methodologies were employed in the 2004–05 NATSIHS to those used in previous surveys to enhance comparability and enable use of the data for time-series analysis. Comments regarding comparability between the 2004–05 NATSIHS and 2001 NHS(I) are contained in the individual topic descriptions below.

SMOKING

Definition

This topic refers to smoking of tobacco, including manufactured (packet) cigarettes, roll-your-own cigarettes, cigars and pipes, but excludes chewing tobacco and smoking of non-tobacco products. The topic focused on 'regular smoking', where regular was defined as one or more cigarettes (or pipes or cigars) per day as reported by the respondent.

The topic primarily describes smoking status at the time of interview – current smokers (daily and other), ex-smokers and those who had never smoked regularly.

Methodology

Adult respondents were asked whether they:

- currently smoke, and if so whether they smoke regularly or at least once a week; or
- have ever smoked regularly, or have smoked 100 cigarettes or pipes or other tobacco products at least 20 times in their life.

Current and ex-regular smokers were asked the age they had started smoking, and ex-regular smokers the age they had last stopped smoking regularly.

In addition, respondents in households other than single person households were asked whether anyone else in the household smoked regularly, and if so, the number of people, and whether they or anyone else usually smokes inside the house. In non-remote areas, this household information was collected from the first adult interviewed or the first proxy interviewed for a child where no adult was selected. In remote areas, this was collected from a household spokesperson.

Population

Information was collected for all Indigenous persons aged 18 years and over.

Data items

As follows:

Data items continued

Regular smoker status
Smoker status
Age started daily smoking
Age last ceased daily smoking
Duration of daily smoking
Number of regular smokers in household.
Whether any regular smokers smoke at home indoors

Although the last two items are household level characteristics, the items are included on each person's record, including records of children aged less than 18 years.

Output categories for these items are available from the list of output data items contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package, 2004–05* (cat. no. 4363.0.55.002) available from the ABS web site.

Interpretation

Points to be considered in interpreting data from this survey include:

Some underreporting of persons identifying as current smokers is expected to have occurred due to social pressures (particularly in cases where other household members were present at the interview). The extent to which underreporting has occurred and hence its effects on the accuracy of survey estimates are unknown.

Concepts such as 'regular' are open to different interpretation by respondents and hence may not have been consistently applied in reporting information in this survey, despite a prompt to respondents that regular meant 'at least once a day'.

The selected adult respondent or household spokesperson may not have known the smoker status of all other members of the household. For example, if another member only smoked when at work, or if children kept their smoking hidden from parents. As a result, some undercounting may have occurred. Estimates of the prevalence of smoking in the population should therefore be based on person level data rather than responses to the smokers in household questions.

The categories of smoker status, and the concepts on which they are based align with those in the National Health Data Dictionary (NHDD).

Duration of smoking is derived from reported age started to current age at the time of the survey (for current smokers) and from age started to age last stopped smoking regularly (for ex-regular smokers). The items are therefore subject to errors around the ages reported by respondents, and the derivation of 'duration' takes no account of periods (potentially long periods) when the respondent may have ceased smoking only to start again.

Comparability with 2001 NHS(I)

Data for some items are directly comparable between the 2001 NHS(I) and the 2004–05 NATSIHS, but due to some differences in the questions and sequencing, care should be taken to ensure the same items are being compared.

Comparability with 2001 NHS(I) continued

Additional questions were asked in the 2004–05 NATSIHS of persons who did not currently smoke and who had never smoked daily, as to whether they had ever smoked 100 cigarettes or more in their life or smoked pipes, cigars or other tobacco products at least 20 times in their life. Consistent with NHDD standards in most outputs from the survey, those who answered yes to either of these additional questions are classified as ex-smokers. This will have the effect of increasing the number of ex-smokers and decreasing those who had 'never smoked' relative to the 2001 NHS(I) methodology.

SMOKER STATUS

2001 NHS(I)	*2004–05 NATSIHS*
Current smoker - daily	Current smoker - daily
Current smoker - other	Current smoker - weekly
	Current smoker - other/ irregular
Ex-smoker (daily)	Ex-smoker (daily or 100+ cigarettes in lifetime or pipes/cigars/etc at least 20 times)
Never smoked (daily)	Never smoked (daily and Less than 100 cigarettes in lifetime and less than 20 times smoked pipes/cigars/etc)

2004–05 NATSIHS data on smoker status, compiled to 2001 NHS(I) criteria can be made available on request to facilitate direct comparisons.

New items collected in 2004–05 NATSIHS which were not collected in the 2001 NHS(I) are:

- age first started to smoke regularly
- age last ceased regular smoking; and
- whether anyone in household usually smokes inside the house.

In both surveys 'other' smokers in the household could include children.

ALCOHOL CONSUMPTION

Definition

This topic refers to consumption of alcoholic drinks, and focuses on two aspects of consumption:

- The intake of alcohol derived from information about the types and quantities of alcoholic drinks (including homemade wines and beers) consumed on the three most recent days in the week prior to interview on which alcohol was consumed; and
- The frequency of consuming 'at risk' amounts of alcohol in the previous 12 months. Amounts are defined in terms of 'standard drinks', where an Australian Standard Drink contains 10 grams (equivalent to 12.5 mls) of alcohol.

The intake of alcohol in the week prior to interview refers to the quantity of alcohol contained in the drinks consumed, not the quantity of the drinks themselves.

Methodology

Adult respondents were asked how long ago they last had an alcoholic drink. Those who reported they had a drink within the previous week were asked the days in that week on which they had consumed alcohol (excluding the day on which the interview was conducted), and for each of the last 3 days (in the last week) on which they drank, the types and quantities (number and size) of drinks they had consumed. They were further asked whether their consumption in that week was more, about the same, or less than their usual consumption.

Methodology continued

Information was collected separately in respect of the following categories of alcoholic drinks:

- Beer
  - light beer
  - mid-strength beer
  - full-strength beer
  - type not known
- Wine
  - red wine
  - white wine
  - low alcohol wine
- Champagne/sparkling wine
- Ready to drink spirits/liqueurs
- Liqueuers
- Spirits
- Fortified wine
- Cider
- Other alcoholic drinks

Those who initially reported having beer or wine were asked supplementary questions to identify the type; e.g. light beer, white wine, as shown above. If interviewers were unsure as to which category a reported drink belonged, details were recorded in 'other alcoholic drinks' for checking/reclassifying as appropriate during office processing.

Respondents were asked to report the number of drinks of each type they had consumed, the size of the drinks, and where possible the brand name(s) of the drink(s) consumed on each of the last 3 days on which they had consumed alcohol.

The collection of accurate data on the quantity of alcohol consumed is very difficult, particularly in a recall situation, and considering the nature and possible circumstances of consumption. Interviewers were provided with extensive documentation and training covering the recording of amounts consumed. Where possible, information was collected in terms of standard containers or measures i.e. 10 oz glass, stubbie, nip, etc. In other cases interviewers were asked to record as much information as necessary to clearly indicate quantity.

Reported quantities of drinks consumed were converted to millilitres of alcohol present in those drinks, and then summed to the drink type, day, week, etc. level as required. The methodology to convert drinks to mls of alcohol consumed is simply: the alcohol content of the drink consumed (%) x the number of drinks (of that type) consumed x the vessel size (in mls). The conversion was performed by a computer-based coding system; initially a computer-assisted clerical system and later in processing an automated system (supported by clerical coding for cases which could not be coded automatically).

Where precise brand or type of drink information was not recorded, default alcohol content values based on drink type were applied. These values are shown below:

Methodology continued

light beer	0.027
mid-strength beer	0.035
full-strength beer	0.049
stout	0.058
wine coolers	0.035
low alcohol wines	0.090
fortified wines	0.178
white wine	0.124
red wine	0.133
sparkling wine/champagne	0.133
spirits	0.400
liqueurs	0.200
pre-mixed spirits (e.g. UDL)	0.050
alcoholic cider	0.047
extra-strong cider	0.075
cocktails	Various
other alcoholic beverage	0.274

It is recognised that particular types or brands of beverage within each of these categories may contain more or less alcohol than indicated by the conversion factor e.g. full-strength beers are usually in the range 4% to 6% alcohol by volume. The factors are considered to be sufficiently representative of each category as a whole for the purposes of indicating relative health risk as appropriate to the aims of this survey. However, it should be noted that these categories, defined by the conversion factors used, may not reflect legal definitions.

In addition to information about alcohol consumed in the previous week, adult respondents who reported they had drunk alcohol in the previous 12 months were asked about the number of times (days) in that period on which they had consumed:

- 7–10 standard drinks and 11 or more standard drinks in a day if male; or
- 5–6 standard drinks and 7 or more standard drinks in a day, if female.

Population

Information was collected for all Indigenous persons aged 18 years and over.

Data items

As follows:

Day of week of interview
Time since last consumed alcohol
Number of days last week on which consumed alcohol
Days of week on which consumed alcohol

For each of the last (up to) three most recent days on which alcohol was consumed:

Type(s) of alcoholic beverage consumed
Quantity (mls) of alcohol consumed
Day of week.

Data items continued

For the reference period:

Number of days of week that consumed alcohol
Estimated total quantity (mls) of alcohol consumed in reference week
Average daily consumption (mls) on days for which data were recorded (maximum of 3 days)
Average daily consumption (mls) on days on which consumed alcohol
Average daily consumption (mls) over reference week
Main type of drink consumed
Alcohol risk level
Weekend consumption flag
Whether consumption in reference week more, less or same as usual.
Number of times (per week/in last 12 months) consumed 5 (or more) standard drinks in a day (female respondents)
Number of times (per week/in last 12 months) consumed 7 (or more) standard drinks in a day (female respondents)
Number of times (per week/in last 12 months) consumed 7 (or more) standard drinks in a day (male respondents)
Number of times (per week/in last 12 months) consumed 11 (or more) standard drinks in a day (male respondents)

Output categories for these items are available from the list of output data items contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package, 2004–05* (cat. no. 4363.0.55.002) available from the ABS web site.

Interpretation

Points to be considered in interpreting data on alcohol consumption from this survey include:

- Some underreporting of consumption, both in terms of persons identifying as having drank alcohol in the reference week, and in the quantities reported, is expected to have occurred. However, the underreporting which has occurred does not invalidate the survey results as indicators of relative consumption levels (current and over time), and of the relative health risks of the consumption levels identified.
- Details of consumption were recorded for the 3 most recent days on which respondents had consumed alcohol in the last week. Because fewer adults were interviewed on Fridays (14%), Saturdays (8%) and Sundays (4%) than other days of the week, the methodology used has resulted in some underrepresentation of those who drank mid-week; see table below.

Interpretation continued

ALCOHOL CONSUMPTION

Day on which consumed alcohol	*% of adults who drank in reference week who drank on that day*	*Of those who drank on that day % for which consumption details were recorded.*
Monday	24	74
Tuesday	26	74
Wednesday	29	69
Thursday	30	62
Friday	49	76
Saturday	54	83
Sunday	31	80

Although consumption levels are highest at weekends, which, as shown above, are also the days of highest coverage in the data, the impact of the methodology used should be considered in interpreting the data. ABS analysis has indicated that while there is some impact of the 3 day methodology at the individual respondent level (for example in terms of the level of health risk), at the population level the impact is considered to be relatively minor.

To assist users of the data an item (the Weekend Consumption Flag) has been derived to indicate whether consumption during the weekend (ie Fri, Sat, Sun) is fully, partly or not recorded in the data.

- two indicators of alcohol risk level were derived from the average daily amount of alcohol consumed:
  - average over the 1 to 3 days for which consumption details were recorded; and
  - average over the 7 days of the reference week i.e. average consumption over 3 days x number of days consumed alcohol / 7.

Published data are compiled using the 7 day average, which is also the basis for assessing risk level; see point below. Results compiled using the 3 day average are available on request.

- According to average daily intake over the 7 days of the reference week, respondents were grouped into three categories of relative risk level. Risk levels are based on the National Health and Medical Research Council (NH&MRC) risk levels for harm in the long term, and assume the level of alcohol consumption in the week recorded was typical. The average daily consumption of alcohol associated with the risk levels is as follows:

Interpretation continued

ALCOHOL RISK LEVEL(a)

Relative risk level	CONSUMPTION PER DAY	
	Males	*Females*
Low risk	50mls or less	25mls or less
Risky	More than 50mls, up to 75 mls	More than 25mls, up to 50ml
High risk	More than 75mls	More than 50mls

(a) One standard drink contains 12.5mls of alcohol

It should be noted, that whereas the NHMRC risk levels assume ongoing consumption at the levels reported, indicators derived in the 2004–05 NATSIHS relate to consumption only during the reference week and take no account of whether or not consumption in that week was more, less or similar to usual consumption levels. In addition, this indicator takes no account of other factors related to health status, other lifestyle behaviours, etc. which may influence the absolute level of personal health risk from drinking alcohol.

- As noted previously, reported quantities of alcoholic drinks consumed were converted to quantities of alcohol consumed. While brand/drink specific conversions were used where possible, some conversions were based on factors representing the alcohol content of each type of drink category as a whole. To the extent that individuals consumed particular brands/types of drink within each group with an alcohol content higher or lower than that represented by the default factor, the derived intake may over or understate actual intake.
- Where quantities of alcohol consumed have been converted to standard drinks a factor of 12.5mls of pure alcohol per standard drink has been applied (equivalent to 10 grams of alcohol).

Comparability with 2001 NHS(I)

The methodology used in the 2004–05 NATSIHS for the collection of data about the quantity of alcohol consumed was essentially the same as that used in the 2001 NHS(I). Results for the two surveys are therefore considered directly comparable.

However, changes to the questionnaire and supporting coding systems used in 2004–05 were aimed at improving the accuracy of the derivation of alcohol consumption. These changes included the following:

- Updating and expanding the index lists supporting the system used to derive alcohol intake, together with the use of an automated coding system from February 2005 (supported by clerical back-up for those cases which could not be coded automatically).
- The separate identification of wine types (sparkling, red, white, low alcohol), ready-to-drink spirits from other spirits, liqueurs from spirits, and cider, through questions and/or response categories in non-remote areas of 2004–05 NATSIHS. In the 2001 NHS(I) and 2004–05 NATSIHS identification relied on interviewers recording additional information.
- In the 2004–05 NATSIHS, brand name and type of spirit was recorded enabling very specific coding of alcohol content. In the 2001 NHS(I), all spirits were coded to a common 'default' alcohol content.

Comparability with 2001 NHS(I) continued

These changes were aimed at improving the accuracy with which alcohol intake was derived from reported consumption, However, as the main sources of error in this topic are reporting errors, these changes may have only marginal impact on the overall quality of alcohol consumption data.

The Weekend Consumption Flag has been derived differently in the 2004–05 NATSIHS to that derived from the 2001 NHS(I), and therefore data for this item are not directly comparable between surveys.

In drawing comparisons, consideration should also be given to the social factors and general changes in health awareness which have occurred in the period between surveys and which may have influenced the levels of reporting.

Data on the frequency of consuming 'at risk' alcohol levels was not collected in the 2001 NHS(I).

SUBSTANCE USE (NON-REMOTE ONLY)

Definition

Substance use refers to the illicit use of substances which are either illegal to possess or the non-medical use of substances which are legally available. Substances covered by this topic in the survey include analgesics; tranquillisers; amphetamines; marijuana; heroin; cocaine; hallucinogens (both synthetic and naturally occurring); ecstasy and other designer drugs; methadone; petrol and other inhalants; and kava. Questions were based on the National Drug Stratgy Household Survey (NDSHS) and those collected in the the 2002 National Aboriginal and Torres Strait Islander Social Survey (NATSISS).

Methodology

Information on substance use was collected in non-remote areas using a voluntary self completed form. Where proxies were being used for people age 15 to 17 years, permission was requested to provide the form to the child. If permission was not received, the form was not completed. Forms were not provided to proxies.

Items which distinguished between non-medical use and medical use were pain killers, tranquilisers, and methadone

Population

Information was collected from Indigenous persons aged 15 years and over in non-remote areas.

Data items

As follows:

- Whether ever used substances
- Type of substances ever used
- Whether used substances in the last 12 months
- Type of substances used in the last 12 months

Output categories for these items are available from the list of output data items contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package, 2004–05* (cat. no. 4363.0.55.002) available from the ABS web site.

Interpretation

- The non-remote self completion questionnaire ensured respondents privacy in reporting this information, although this may have been effected by the presence of other household members at interview. However, the potentially sensitive and personal nature of these questions may have impacted on respondents willingness to respond, and on the nature of those responses.

Comparability with 2001 NHS(I)

Data were not collected in the 2001 NHS(I). However, data may be compared with the 2002 NATSISS (excluding information regarding methadone which was only collected in the 2004–05 survey). Account of the difference in non-response should also be considered, with NATSIHS having 22% non-response compared to 10% for NATSISS.

EXERCISE

Definition

This topic covers two distinct components of physical activity:

- exercise undertaken for recreation, sport or fitness purposes during the two weeks prior to interview, and
- walking for transport on the day prior to interview.

The topic excludes physical activity undertaken for other reasons (e.g. in the course of work or around the house). As a result, the data should not be interpreted as indicating overall levels of activity, and does not indicate levels of fitness.

Methodology

Respondents aged 15 years and over were asked whether, during the previous two weeks, they did any:

- walking for sport, recreation or fitness
- moderate exercise (apart from walking) for sport, recreation or fitness (non-remote only)
- vigorous exercise for sport, recreation or fitness (non-remote only)
- exercise or played any sport (remote only - this question is considered to produce data for a combination of moderate and vigorous exercise)

For each of these categories of exercise, respondents were asked:

- the number of times they had done that exercise in the previous two weeks; and
- in non-remote areas, the total amount of time spent (hours and minutes) doing that exercise over that two weeks.

Respondents were also asked whether they had walked the previous day for periods of 10 minutes or more, for the purpose of going from place to place (not for exercise, sport or fitness), the number of times, the total time walked and whether that time was more, the same or less than they did on most days. Data from these questions did not contribute to the calculations of exercise level discussed below.

For the purposes of the survey, moderate exercise was defined as exercise (undertaken for recreation, sport or fitness) that caused a moderate increase in the heart rate or breathing of the respondent. Vigorous exercise was defined as exercise (undertaken for recreation, sport or fitness) that caused a large increase in the respondent's heart rate or breathing.

The application of these definitions reflected the respondent's perception of moderate or vigorous exercise or walking, and the purpose of that activity. Responses may have varied according to the type of activity performed, the intensity with which it was performed, the level of fitness of the participant, and their general health and other

Methodology continued

characteristics (e.g. age). For example, some respondents may consider a game of golf to be moderate exercise while others may consider it walking. Information was not recorded in the survey about the type of activities undertaken and reported against each of the three categories above.

For non-remote respondents the information recorded about the frequency, duration and intensity of exercise undertaken for sport, recreation or fitness was used to derive an exercise level. The aim was to produce a descriptor of relative overall exercise level, and to indicate the quality of the activities undertaken in terms of maintaining heart, lung and muscle fitness. The level is based on a score, derived from:

No. of times activity undertaken X Average time per session X Intensity

where intensity is a measure of the energy expenditure required to carry out the exercise, expressed as a multiple of the resting metabolic rate. As the survey did not collect details of the types of activities undertaken an intensity value was estimated for each of the three categories of exercise identified in the survey. A score was derived for each of the three categories of exercise and then summed to provide a total for the respondent for that two week period. Non-remote respondents were grouped into exercise levels according to their score.

Exercise level was derived using intensity values of:

- 3.5 for walking;
- 5.0 for moderate exercise; and
- 7.5 for vigorous exercise.

Score ranges were grouped and labelled as follows:

Excercise level	*Criteria*
Sedentary	Scores less than 100 mins(a)
Low exercise level	Scores of 100 mins to less than 1600 mins
Moderate exercise level	Scores of 1600 to 3200 mins or more than 3200 mins but less than 2 hours of vigorous exercise
High exercise level	Scores of more than 3200 mins and 2 hours or more of vigorous exercise

(a) Includes no exercise.

Population

Information was collected for all Indigenous persons aged 15 years and over.

Data items

As follows:

- Whether walked for sport, recreation or fitness
- Number of times walked
- Total time spent walking (non-remote only)
- Whether did any moderate or vigorous exercise
- Number of times did moderate or vigorous exercise
- Whether did any moderate exercise (non-remote only)
- Number of times moderate exercise undertaken (non-remote only)
- Total time spent in moderate exercise (non-remote only)
- Whether did any vigorous exercise (non-remote only)
- Number of times vigorous exercise undertaken (non-remote only)

Data items continued

Total time spent in vigorous exercise (non-remote only)
Summary types of exercise undertaken (non-remote only)
Total time spent exercising (non-remote only)
Exercise level (non-remote only)
Whether walked yesterday for transport
Number of times yesterday walked for transport
Total time spent walking for transport yesterday
Whether time walking for transport was more, same, less than usual.

Output categories for these items are available from the list of output data items contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package, 2004–05* (cat. no. 4363.0.55.002) available from the ABS web site.

Interpretation

Points to be considered when interpreting these data relating to exercise for sport, recreation or fitness include:

- The topic conceptually excludes physical activity undertaken at work, and for reasons other than exercise, sport or recreation (e.g. household duties). As a result the data should not be interpreted as necessarily indicative of overall activity levels of persons, or of their fitness.
- The information is 'as reported' by respondents and reflects the respondent's perception of the activity undertaken, the intensity of their participation, their level of fitness, etc. Information about exercise undertaken by persons aged 15 to 17 years may have been reported by an adult within the household, usually a parent. The child may or may not have been consulted. As a result, data for this age group should be interpreted with particular care.
- In general the use of a two-week reference period was not considered to pose significant recall problems for respondents. For many people, participation in exercise is regular and/or for a set period each session. However, to the extent that persons undertook exercise in less formal circumstances or that the reference period was atypical of usual exercise patterns, the accuracy of the information provided may have been affected.
- Recent developments in the area of statistics on exercise or physical activity have tended to move away from the use of METS (see Glossary for definition) values in deriving exercise level. Retention of the exercise level approach as described above was primarily for the purpose of consistency and comparability with data from previous health surveys. Recent developments have seen more emphasis placed on time exercised as a key indicator. However, while simple measures of time exercising are available as outputs from this survey, it is not possible to derive outputs to meet certain more complex criteria, such as 30 minutes of at least moderate exercise on most days each week.

Points to be considered when interpreting data relating to walking for transport:

Interpretation continued

- Walking for transport is a difficult concept to measure and define in a way which is meaningful to both respondents and users of the data. Testing before the survey showed significant recall and reporting problems for respondents. While these problems may have been reduced through more extensive and rigorous questions, in the context of the NATSIHS, devoting extra time to this topic would have only been possible by reducing time allocated to other topics. While some modifications were made to improve data quality within the allocated time (eg reducing the reference period to 'yesterday'), the data from this topic are considered to be of relatively poor quality, and should be interpreted with care.
- During office processing it was found that in some cases the values recorded at interview for number of times walked for transport, or time spent walking for transport were conceptually impossible, or were considered too extreme to be accurate. In these cases the number of occasions and/or time spent data items were set to 'not stated' values. This change effected records for less than 1% of persons reporting walking for transport.
- In this survey walking for sport, recreation or fitness and walking for transport are conceptually separate activities, and occasions should be recorded as of either type, not both. However for respondents, occasions may be one and the same; for example choosing to walk to work for the exercise rather than take the bus. The order of the questionnaire and instructions to interviewers were aimed at giving priority to recording such occasions as walking for recreation, sport or fitness. However, it is possible (particularly given the different reference periods involved) that some respondents may have reported the same occasions of walking in both sections.
- Walking for transport conceptually excludes walking done at work. Interviewers were asked to exclude these cases where they became aware that respondents had included walking at work. However, testing indicated the likelihood that some respondents will have reported walking at work in response to this question in the final survey.
- The 10 minute threshold (per occasion) is based on advice that this is the minimum time required before some benefits to health accrue from walking. It also provided a cue to respondents about the occasions of walking they should include. However, it is clear from some responses recorded that this threshold was not consistently applied by respondents, and this has impacted both reporting of occasions of walking for transport and the total time reported.

Comparability with 2001 NHS(I)

Data on exercise in non-remote areas for recreation, sport and fitness were collected in the 2004-05 NATSIHS using the same methodology and questions as in the 2001 survey, and therefore results are considered directly comparable, within the general limits of comparability resulting from a change in the means of data collection (see Chapter 7: Data quality and interpretation of results). However, whereas in non-remote areas for the 2001 NHS(I) data, for 15 to 17 year olds was obtained almost exclusively from a proxy (usually a parent and with or without participation of the child), in non-remote areas for the 2004–05 survey, 32% of children aged 15 to 17 answered for themselves. This is expected to have improved the quality of the data recorded for this topic.

Comparability with 2001 NHS(I) continued

Some broad data on exercise was collected in remote areas for the first time in the 2004–05 NATSIHS. Comparison between 2001 and 2004–05 exercise data can only be made for non-remote areas.

Increasingly over recent years there has been a focus by governments, media, etc on health and lifestyle issues around obesity and physical activity. While such attention is likely to influence the levels of activity in the community, it may also impact reporting behaviours by respondents; for example a desire to report what is perceived to be an acceptable level of activity rather than actual activity. This should be considered in interpretating changes between 2004–05 NATSIHS and the 2001 NHS(I) results.

Walking for transport was not included in the 2001 NHS(I).

HEIGHT, WEIGHT AND BODY MASS

Definition

This topic refers to:

- the height and weight of respondents as reported during interview; and to
- self reported and derived body mass.

Information was collected for all Indigenous respondents aged 15 years and over. No measurements of height and weight were taken in non-remote areas. However, in remote areas interviewers offered to measure the respondents height and weight where they didn't know this information.

Methodology

Respondents were first asked whether they considered themselves to be of an acceptable weight, underweight or overweight. In non-remote areas they were then asked to report their weight and height without shoes, while in remote areas they were offered to be measured and weighed if they did not know their height and/or weight. Women who were pregnant at the time of the interview were asked to provide their usual weight before pregnancy, if they queried the interviewer. Answers provided in imperial measurements were recorded by interviewers and converted into metric measurements. If respondents rounded their weight or height (e.g. about 6 feet) interviewers prompted for a more exact measure where possible.

Body mass index (BMI) was derived using Quetelet's body mass index which is calculated as weight (kg) divided by the square of height (m). A BMI score is created which is then commonly grouped for output. There are two main classifications of BMI in common use, one recommended by the NH&MRC and the other by the World Health Organisation (WHO). The standard output classification defined for this survey provides data to meet both NH&MRC and WHO standards:

Methodology continued

BODY MASS INDEX

	2004–05
Underweight	Less than 18.5
Normal range	18.5 to less than 20.0(a)
	20.0 to less than 25.0
Overweight	25.0 to less than 30.0
Obese	30.0 and greater

(a) Classified as underweight by NHMRC and Normal weight by WHO.

Population

Information was collected for all Indigenous persons aged 15 years and over.

Data items

As follows:

Reported height (cm)
Reported weight (kg)
Self assessed body mass
Derived body mass index (BMI)
Whether height meaured (remote only)
Whether weight measured (remote only).

Output categories for these items are available from the list of output data items contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package, 2004–05* (cat. no. 4363.0.55.002) available from the ABS web site. Reported height and weight and body mass index scores are stored on the data file and can be grouped in output to suit individual user needs.

Interpretation

In interpreting data for this topic users should bear in mind that:

- The data are 'as reported' by non-remote and some remote respondents and hence may differ from those which might be obtained by measurement. A comparison of reported height and weight measures recorded in the 1995 NHS with measured height and weight in the 1995 National Nutrition Survey (NNS) was published in 1998 in *How Australians Measure Up, 1995* (cat. no. 4359.0). This showed that overall people tend to overstate their height and understate their weight, the net result of which was that over a quarter of males and females would be classified to a different body mass index group (usually a heavier group) if measured rather than reported height and weight data were used.
- Information for 68% of persons aged 15 to 17 years was reported by an adult within the household, usually a parent, rather than by the child him/herself. The child may or may not have been consulted. As a result, data for this age group should be interpreted with particular care.
- For a variety of reasons some respondents do not report their height and/or weight, which prevents a BMI score being calculated for them. The proportion of males and females in each age group for whom BMI is not available from the 2004–05 NATSIHS is shown below. It cannot be assumed that the BMI pattern for these people is the same as that for people who reported their height and weight.

Interpretation continued

PERSONS FOR WHOM BMI SCORE IS NOT AVAILABLE: PERCENTAGE WITHIN EACH AGE AND SEX GROUP

Age group (years)	*Males*	*Females*
15–24	22.9	28.3
25–34	10.1	21.5
35–44	10.9	22.6
45–54	10.3	18.5
55 and over	15.5	26.3
Total aged 15 years and over	14.5	23.6

- While BMI is a useful tool to assess and monitor changes in body mass at the population level, it may be an inappropriate measure of the body fatness of certain populations and particularly of certain individuals. For example those whose high body mass is due to muscle rather than fat, those with osteoporosis who have lower than usual BMI or those who have a different body build or different body fat distribution.

Comparability with 2001 NHS(I)

Data collected on height and weight in the 2004–05 NATSIHS used the same methodology and questions as in the 2001 NHS(I), and therefore estimates from both surveys are considered directly comparable, within the general limits of comparability resulting from a change in the means of data collection (see Chapter 7: Data quality and interpretation of results).

However a small difference in the methodology for children 15 to 17 should be noted. As outlined above, 32% of children aged 15 to 17 years answered for themselves in the 2004–05 NATSIHS; in the 2001 NHS(I) all information for children was provided by a proxy (with or without the child's involvement). The impact on the quality of the height and weight data reported in unknown; importantly however, the self assessed body mass more directly reflects the child's perception in the 2004–05 NATSIHS than in the 2001 NHS(I), and this should be considered in interpreting changes between surveys for this population.

DIETARY HABITS

Definition

This topic covers selected dietary indicators relating primarily to usual intake of fruit and vegetables and to food security. Information about nutritional intake was not collected in the 2004–05 NATSIHS. Food security refers to whether respondents ran out of food and couln't afford more, and whether on those occasions they were able to get food by other means.

Methodology

Respondents aged 12 years and over were asked the main type of milk they usually consumed.

Non-remote respondents were then asked to report the number of serves of vegetables and of fruit they usually ate each day, excluding drinks and beverages. For the purposes of this survey:

Methodology continued

- a serve of vegetables was defined as a half a cup of cooked vegetables or one cup of salad vegetables - approximately equivalent to 75 grams. All types of vegetables were included (tomatoes were included as a vegetable rather than a fruit) but legumes were excluded.
- a serve of fruit was defined as one medium piece or two small pieces of fruit, or one cup of diced fruit, or one quarter cup of sultanas, or four dried apricot halves - approximately 150 grams of fresh fruit or 50 grams of dried fruits.

Picture prompt cards were used to assist non-remote respondents in understanding the concept of a serve; one prompt card showed 6 examples of single serves of different vegetables and another card showed 6 single serves of fruit; if respondents had difficulty in reporting, interviewers were encouraged to prompt in terms of asking respondents about their usual consumption of vegetables and fruit at breakfast, lunch and dinner and for snacks.

Remote respondents were asked whether they usually ate fruit and/or vegetables each day. In addition to those products excluded in non-remote areas, fruit or vegetables considered to be bush tucker was also excluded.

Respondents were then asked how often they added salt to food after it was cooked. Adults were also asked some questions regarding food security. These included whether they had run out of food in the previous 12 months and couldn't afford to buy more, and when this happened, whether they went without food.

Population

Indigenous persons aged 12 years and over for fruit, vegetable, milk and salt questions, and Indigenous persons aged 18 years and over for fruit, vegetable, milk, salt and food security.

Data items

As follows:

Main type of milk usually consumed
Usual daily serves of vegetables (non-remote)
Usual dail serves of fruit (non-remote)
Whether usually eats fruit
Whether usually eats vegetables
Frequency of adding salt after cooking
Food security
Whether went without meals

Output categories for these items are available from the list of output data items contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package, 2004–05* (cat. no. 4363.0.55.002) available from the ABS web site.

Interpretation

Points to be considered in interpreting data for this topic include the following:

- Data on type of milk usually consumed was obtained as an indicator of fat intake. Data recorded are based on the information provided by respondents against a defined classification of milk type categories. The variety of milk products available, and the various terminologies used to label milk products may have led to some misreporting and incorrect classification.

Interpretation continued

- Questions on intake of fruit and vegetables in non-remote areas are based on short questions used in the 1995 National Nutrition Survey (NNS). An analysis of data collected in the 1995 NNS which compared data collected using short questions with data collected from the detailed recall methodology concluded that the "the responses to the short questions on fruit and vegetable intake can provide reliable information on fruit and vegetable intake across a range of population sub-groups which is generally consistent with group level differences in fruit and vegetable intake as determined by 24-hour recall" (Ingrid Coles-Rutishauser, Australian Food and Nutrition Monitoring Unit, 2/3/2000).
- The questions however are complex as respondents needed to understand and apply the inclusions/exclusions, understand the concept of a serve and assess their consumption levels accordingly, and think about their total consumption in what would constitute an average day. The questions were subject to cognitive testing, and were a particular focus in pilot tests. Interviewers were instructed to prompt/assist respondents in a standard way if necessary.
- Overall, it is considered that the indicators of vegetable and fruit intake in the non-remote component of the 2004-05 NATSIHS are of a lower quality than most other items from the survey, but are considered sufficiently reliable for the purposes of assessing broad intake levels for population groups, and comparisons between population groups. Use of the data for other purposes should be undertaken with care.
- Data for all those aged 12 to 14 years, and 68% of those aged 15 to 17 years, was provided by a proxy, usually a parent. As a result the data reflects the parent's knowledge of the child's consumption; this is likely to be less accurate for usual consumption of fruit items than for the type of milk and usual consumption of vegetables items collected in non-remote areas.

Comparability with 2001 NHS(I)

The 2001 NHS(I) did not collect any information on dietary behaviour in remote areas. For non-remote areas, similar dietary indicators collected in the 2004–05 NATSIHS were obtained in the 2001 NHS(I) and the data for those common items are considered broadly comparable, within the general limits of comparability resulting from a change in the means of data collection (see Chapter 7: Data quality and interpretation of results). However the following points should be noted:

- As outlined above, 32% of children aged 15 to 17 years in the 2004–05 NATSIHS answered for themselves while in the 2001 NHS(I) all information for children aged 15 to 17 years was provided by a proxy (with or without the child's involvement).
- In the non-remote component of the 2004–05 NATSIHS, the usual daily consumption of vegetables and fruit was recorded as: 1 serve or less, 2, 3, 4, 5, 6 serves or more, does not eat vegetables/fruit.
- In the non-remote component of the 2001 NHS(I), this information was recorded partly in ranges: 1 serve or less, 2–3, 4–5, 6 serves or more, does not eat vegetables/fruit.
- In 2004–05 a new category of 'Does not drink milk' was added to the milk question. This category, along with the identification of those people who do drink milk, cannot be drawn from 2001 data due to those people who do not drink milk being contained in the none of the above category with those people who drank milk but not any of the types identified.

Comparability with 2001 NHS(I) continued

The approach used in the 2004–05 NATSIHS enables survey results to be better aligned with the thresholds for recommended daily intakes (for vegetables – 4 serves for those aged 12 to 17, 5 serves for adults; for fruit – 2 serves). However, due to the difficulties respondents have in answering these questions, and the data quality issues which ensue, care should be taken in using/interpreting data at the individual number of serves level and apparent changes in consumption levels/patterns between surveys.

In addition to the points above, there were several difference in the items collected in the two surveys, as shown in the table below.

Item	*2004–05*	*2001*
Whether eaten foods because had added folate	Not collected	Collected
Whether had beverages because had added folate	Not collected	Collected
Whether had vitamin and mineral supplements because they contained folate/folic acid	Not collected	Collected
Whether went without food	Collected	Not collected

ADULT IMMUNISATION

Definition

This topic refers to the immunisation status of Indigenous persons aged 15 years and over against influenza and pneumococcal disease.

Influenza vaccinations are available free of charge to Aboriginal and Torres Strait Islander people aged 50 years and over, and younger Indigenous people with predisposing risk factors. Annual vaccinations are recommended to retain coverage.

Pneumococcal disease is a major cause of death and morbidity, being linked with meningitis, pneumonia and other upper respiratory tract infections such as otitis media and sinusitis. The NH&MRC recommend routine pneumococcal vaccination, at least every 5 years.

Methodology

Indigenous adults and children aged 15-17 years were asked whether they had ever had an influenza vaccination and whether they had had that vaccination in the last 12 months. Non-remote respondents were also asked whether the vaccine was obtained free of charge. Vaccinations at consultations for which the respondents were bulk billed were recorded as free of charge, as are consultations where the respondent was charged for the consultation but received the vaccine free of charge.

Non-remote respondents were further asked if they had ever had a pneumococcus or pneumovax vaccination, and whether they had received a vaccination in the last 5 years. Respondents who reported having a pneumonia vaccination were included. In remote areas respondents were asked if they had ever had a pneumonia needle and whether they had had this in the last 5 years.

Population

Information was obtained from all Indigenous persons aged 15 years and over.

Data items

As follows:

- Influenza vaccination status
- Whether influenza vaccination obtained free of charge (non-remote)
- Pneumococcus vaccination status

Data items continued

Output categories for these items are available from the list of output data items contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package, 2004–05* (cat. no. 4363.0.55.002) available from the ABS web site.

Interpretation

Points to be considered in interpreting data for this topic:

- During early testing it was found that some respondents were unfamiliar with the term 'pneumococcus' and some were confused between the influenza and pneumoccocus vaccinations. However, it was found these difficulties were mainly amoung those who had not had either vaccination and that those who had been vaccinated could generally report with certainty. Just under 2% of respondents aged 15 years and over reported they did not know if they had an influenza vaccination and just over 5% a pneumoccocus vaccination. Nevertheless the possibility that some misreporting may have occurred should be considered in interpreting the data. Where this occurred, the order of the questions, influenza first then pneumnococcal, would most likely have led to overreporting of influenza vaccinations and underreporting of pneumoccocus vaccinations.
- The item relating to whether or not the influenza vaccine was administered free of charge should be interpreted with care as the circumstances under which a vaccination was received could differ significantly such that various combinations of responses to these items could legitimately apply. Whether or not the vaccine was free of charge may, for some respondents, have been difficult to accurately report; for example, where a consultation was bulk billed the respondent may not be aware of the charges levied, or where a fee was charged for a consultation at which a vaccination was received, it may not be clear what that fee related to; i.e. the consultation, the vaccine, and/or the giving of the vaccination.
- The 12 month recall period may have posed problems for those who have irregular influenza vaccinations. The five year recall period used for pneumoccocus vaccinations, while appropriate to the recommended frequency of vaccination, may have also posed recall difficulties for some respondents.

Comparability with 2001 NHS(I)

Results for this topic from the 2004–05 NATSIHS are considered directly comparable with those from the 2001 NHS(I), within the general limits of comparability resulting from a change in the means of data collection (see Chapter 7: Data quality and interpretation of results). The only difference between surveys is that, in non-remote areas for the 2004–05 NATSIHS, details regarding whether the influenza vaccination required a prescription was not collected.

CHILDREN'S IMMUNISATION (NON-REMOTE ONLY)

Definition

This topic refers to the immunisation status of Indigenous children aged 0–6 years in non-remote areas. Data was collected relative to the recommended schedule for Diphtheria, Pertussis (whooping cough), Tetanus, Hepatitis B, Poliomyelitis, Measles, Mumps and Rubella, Haemophilus Influenzae Type B, and Pneumococcal. Information regarding Meningococcal C which was introduced onto the schedule for children born from 1 January 2002 was not collected.

Data regarding Hepatitis B vaccine for adolescents was also collected from children aged 10 to 17 years in non-remote areas.

Definition continued

Data on childrens immunisation was not collected in remote areas.

Methodology

A nominated adult reported on behalf of children. Information about childhood immunisation was collected for all non-remote children aged 0–6 years.

Respondents were encouraged to refer to immunisation records or other information to assist them in accurately answering the immunisation questions. Data were obtained about the type of record consulted, the reported immunisation status of the child, the reasons not immunising and about factors which influence decisions regarding children's immunisation.

Respondents who were able to refer to an immunisation record or some other source were then asked a series of questions about specific vaccinations, including the number (including boosters) and types (including brand name for some types) received, from which immunisation status was derived separately for each vaccine, disease and overall for the schedules (as discussed above). Overall immunisation status is defined as follows:

- Fully immunised includes only children that have received every vaccination appropriate to their age as indicated on the appropriate schedule.
- Partially immunised includes children that have received some vaccinations appropriate to their age but not all as indicated on the appropriate schedule.
- Not known if fully or partly immunised includes children who had received some vaccinations appropriate to their age but the number was not known.
- Not immunised includes those children that have not received any vaccinations.
- Not known if immunised includes children for whom no immunisation data were recorded.

The way derivations were designed gave each child time to 'catch up' to the relevant schedule. This 'catch up' allowance was one month after the age at which the vaccination was due, according to the appropriate schedule they were following. For example, under the 2005 Schedule, a child should receive a Diphtheria/Tetanus/Pertussis (DTP) vaccination at 2, 4 and 6 months of age. A child aged 5 months (or more) would not be regarded as fully immunised unless they had at least 2 DTP vaccinations, but a child aged less than 5 months (e.g. 4 months and 27 days) would be deemed to be fully vaccinated with at least 1 DTP vaccination. Although for survey output age of children is available in months only, for the purposes of deriving children's immunisation status, exact age was derived from date of interview and date of birth information.

Respondents who were unable to refer to an immunisation record were sequenced, after responding to decisions regarding their child's immunisation, to the questions on pneumococcal vaccinations. Detailed information on other vaccinations was not collected.

For children aged 10 to 17 years, information was obtained about whether they had received any adolescent Hepatitis B vaccinations (Hep B), and whether they had received the full course (3 doses).

Population

All Indigenous persons aged 0 to 6 years and 10 to 17 years in non-remote areas.

Data items

Indigenous children aged 0–6 years in non-remote areas

Whether cards/records used at interview

Data items continued

Reported immunisation level
Factors influencing decision to immunise
Main reason did not complete immunisation schedule
Main reason have not been immunised
Whether ever received a pneumococcal vaccination
Number of pneumococcal vaccinations

Indigenous children aged 0–6 years in non-remote areas who referred to an immunisation card

Immunisation status
- overall
- Measles, Mumps, Rubella
- Diphtheria
- Hepatitis B
- Haemophilus influenzae (type B) (HiB)
- Polio
- Tetanus
- Pertussis
- Pneumococcal
- Combined Diphtheria and Tetanus (CDT)
- Diphtheria, Tetanus, and Pertussis (DTP)

Reported vs derived immunisation status
Number of CDT vaccinations
Number of diphtheria, tetanus, and pertussis vaccinations
Number of HiB vaccinations
Number of HiB vaccinations which included Hepatitis B
Brand of HiB vaccination
Number of measles, mumps and rubella vaccinations
Number of polio vaccinations
Number of separate Hepatitis B vaccinations
Number of diphtheria, tetanus and whooping cough vaccinations
Whether ever received a DTP or triple antigen vaccination
Whether ever received a HiB vaccination
Whether ever received a measles, mumps and rubellla vaccination
Whether ever received a polio vaccination
Whether ever received a separate Hepatitis B vaccination
Whether ever received a separate tetanus vaccination
Whether ever received a combined diphtheria/tetanus vaccination
Whether HiB vaccination included Hepatitis B
Whether received vaccination against diphtheria

Indigenous children aged 10–17 years in non-remote areas

Whether completed a course of adolescent Hepatitus B vaccinations

Output categories for these items are available from the list of output data items contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package, 2004–05* (cat. no. 4363.0.55.002) available from the ABS web site.

Interpretation

Respondents were asked to refer to the child's immunisation records whenever possible, to assist them in providing complete and accurate data. Only 41% of respondents had some type of immunisation record they referred to. However, the use of records did not necessarily ensure accurate reporting since some records were incomplete or poorly completed. Interviewers were instructed that if there was at least a date in the relevant section of the record then it should be considered that the child received that particular vaccine.

As noted above, the age group covered in the survey spanned 4 editions of the recommended childhood immunisation schedule, which is set out below.

Age	*2005 Schedule*	*2004 Schedule*	*2000 Schedule*	*1995 Schedule*
Birth	Hepatitis B	Hepatitis B	Hepatitis B	
2 months	Diphtheria, tetanus and pertussis	Diphtheria, tetanus and pertussis	Diphtheria, tetanus and pertussis	Diphtheria, tetanus and pertussis
	Hepatitis B	Hepatitis B	Hepatitis B	
	Hib	Hib	Hib	Hib (HbOC or PRP-OMP)
	Polio	Polio	Polio	Polio
	Pneumococcal			
4 months	Diphtheria, tetanus and pertussis	Diphtheria, tetanus and pertussis	Diphtheria, tetanus and pertussis	Diphtheria, tetanus and pertussis
	Hepatitis B	Hepatitis B	Hepatitis B	
	Hib	Hib	Hib	Hib (HbOC or PRP-OMP)
	Polio	Polio	Polio	Polio
	Pneumococcal			
6 months	Diphtheria, tetanus and pertussis	Diphtheria, tetanus and pertussis	Diphtheria, tetanus and pertussis	Diphtheria, tetanus and pertussis
	Hepatitis B - or at 12 months	Hepatitis B - or at 12 months	Hepatitis B - or at 12 months	Hepatitis B - or at 12 months
	Polio	Polio	Polio	Polio
	Pneumococcal			
12 months	Measles, mumps & rubella	Measles, mumps & rubella	Measles, mumps & rubella	Measles, mumps & rubella
	Hepatitis B - or at 6 months	Hepatitis B - or at 6 months	Hepatitis B - or at 6 months	
	Hib	Hib	Hib	Hib (PRP-OMP schedule only)
	Meningococcal C	Meningococcal C		
18 months			Diphtheria, tetanus and pertussis	Diphtheria, tetanus and pertussis
				Hib (HbOC schedule only)
4 years	Diphtheria, tetanus and pertussis	Diphtheria, tetanus and pertussis	Diphtheria, tetanus and pertussis	
	Polio	Polio	Polio	
	Measles, mumps & rubella	Measles, mumps & rubella	Measles, mumps & rubella	
4–5 years				Diphtheria, tetanus and pertussis
				Polio
				Measles, mumps & rubella

Comparability with 2001 NHS(I)

The items collected in the non-remote areas 2004–05 NATSIHS are considered directly comparable with those from the 2001 NHS(I). However, the population who responded to the questions differed. Detailed vaccination data was only collected from 0–6 year olds where an immunisation record card or similar could be used. As such, for data from 2001 to be comparable with 2004–05 this population restriction must also be applied.

There were two extra items collected in the 2004–05 NATSIHS compared to the 2001 NHS(I). These were:

- whether completed a course of adolescent Hepatitis B vaccinations (which was asked of Indigenous children aged 10–17 years)
- whether ever received a pneumococcus vaccination (which was asked of Indigenous children aged 0–6 years).

BREASTFEEDING

Definition

This topic refers to the breastfeeding of infants and focuses on the duration of breastfeeding. It is a similar module to that used in the 2001 NHS(I).

Methodology

Questions on breastfeeding were asked in respect of children aged three years and under at the time of the survey. Questions were answered on their behalf by a parent, usually the mother.

All respondents were asked if the child had been and was currently being breastfed, and breastfeeding was the main source of food. Non-remote respondents were also asked additional questions about use of infant formula, cows milk, milk substitute, solid food, amount of time child was breastfed and main reason stopped breastfeeding. Regular was defined as at least once per day; occasional use was excluded.

Population

Information was collected for all Indigenous children aged 0–3 years.

Data items

As follows:

Whether ever breastfed
Whether currently being breastfed
Breastfeeding status
Whether breastfed when came home (non-remote only)
Whether ever been given infant formula (non-remote only)
Age at which infant formula first given (non-remote only)
Whether ever been given cows milk (non-remote only)
Age at which cows milk first given (non-remote only)
Whether ever given other milk substitute (non-remote only)
Type of milk substitute given (non-remote only)
Age at which milk substitute first given (non-remote only)
Whether ever been given solid food (non-remote only)
Age at which solid food first given regularly (non-remote only)
Total time exclusively or partially breastfed (non-remote only)
Main reason stopped breastfeeding (non-remote only)
Type of product first given (non-remote only)
Age at which anything other than breast milk given (non-remote only)
Type of breast milk substitute first given (non-remote only)
Whether breastfeeding is main source

Data items continued

Other sources of food received (non-remote only)

Output categories for these items are available from the list of output data items contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package, 2004–05* (cat. no. 4363.0.55.002) available from the ABS web site. Age in months and time breastfed in weeks are stored on the main data file, and can be grouped for output to suit individual requirements.

Interpretation

Points to be considered in interpreting data for this topic:

- Information is 'as reported' by respondents. No analysis has been undertaken regarding the accuracy of these reported data and whether the accuracy of recall declines as the child gets older.
- In addition, the accuracy of the data may be reduced in cases where an adult other than the child's mother, responded for the child; this occurred for around 27% of children aged 0–3 years (21% non-remote, 33% remote).
- Issues relating to the benefits of breastfeeding have been widely promoted in the community and some respondents may have tended to report recommended practices rather than actual practices.

Comparability with 2001 NHS(I)

Results for those items common to both surveys are considered broadly comparable between the 2004-05 NATSIHS and 2001 NHS(I), within the general limits of comparability resulting from a change in the means of data collection (see Chapter 7: Data quality and interpretation of results).

There were two extra items collected in the 2004–05 NATSIHS compared with the 2001 NHS(I) for children aged 0–2 years who were currently being breastfed. These were:

Whether breastfeeding is main source

Other sources of food received (non-remote only)

WOMENS HEALTH SUPPLEMENTARY FORM

Methodology

Aspects of women's health are addressed in a number of the topics included in the 2004–05 NATSIHS. This section outlines additional topics which were covered in the women's supplementary survey form. Note that in remote areas the women's section formed part of the main questionnaire. Topics covered were:

- screening for breast and cervical cancer
- breastfeeding history
- contraception

Although not specifically a women's health topic, contraception/protection has been included in this section, because the methodology used to collect the information was the same as that used to collect information on the supplementary women's health topics.

General methodology

At the completion of their survey interview, non-remote female respondents aged 18 years and over were invited to complete an additional women's health questionnaire relating to the specific women's health issues outlined above. Women who agreed to participate were asked to complete the questionnaire themselves and return it to the interviewer in a sealed envelope provided. This methodology was adopted in recognition of the potential sensitivity of some of the questions asked; it has been used successfully in previous national health surveys. Information from each form was data entered to

General methodology continued

create an electronic record, which was then matched and combined with the main health survey record for each respondent. This enables cross-classification of data from this supplementary questionnaire with all data items from the main survey questionnaire, as appropriate.

As referred to above, in the remote 2004–05 NATSIHS, the women's section formed part of the main questionnaire and was collected through personal interview. Respondents were informed of the potential sensitivity and voluntary nature of the questions.

Approximately 85% of adult female respondents in non-remote areas agreed to complete the questionnaire. The questionnaire contained a maximum of 21 questions in non-remote areas, 17 in remote areas. The number of questions to answer depended on the age and responses provided, and was designed and refined through testing to be as simple and straightforward as possible. However, there may have been some problems if the respondent had difficulty reading English or if some of the terms (e.g. Pap smear test) were not familiar. These problems may have affected the reliability of information reported.

SCREENING FOR BREAST AND CERVICAL CANCER

This topic refers to breast examinations and Pap smear tests by women to detect breast and cervical cancer or the presence of pre-cancerous cells, and focusses on the regularity and frequency of screening practices.The term 'screening' is used in the following description to include all tests/actions, regardless of the purpose or reason for the test/action.

All Indigenous female respondents aged 18 years and over were asked a series of questions about mammograms, including whether they understood the concept of a mammogram. Information was collected about the regularity of these tests or usual frequency of tests. Similar questions were asked about Pap Smear tests.

Indigenous women in non-remote areas who reported having had a mammogram were also asked how long it was since they had had a mammogram and the reasons for their most recent mammogram.

BREASTFEEDING HISTORY

Information about the current or recent breastfeeding of children aged 0 to 3 years at the time of the survey is provided earlier in this Chapter under 'Breastfeeding'. This topic refers to the breastfeeding history of women aged 18 to 64 years.

Respondents were asked whether they had ever had a baby, and whether they had ever breastfed any of their children.

CONTRACEPTION/PROTECTION

This topic refers primarily to the current use of contraceptive methods. Although it includes items which may be indicative of some protective or safe-sex practices, the data are not designed for this purpose, and any inferences drawn about sexual behaviours or use of safe sexual practices should be done with care.

General methodology continued

CONTRACEPTION/PROTECTION *continued*

Questions on contraception were included on the Women's Supplementary Health Form. The self completion methodology was adopted in recognition of the potential sensitivity of the topic.

Women aged 18 to 49 years were asked whether they had ever taken the oral contraceptive pill for any reason, whether they were currently taking the contraceptive pill and their age when they first started taking the pill. Non-remote women were also asked about why they were taking the pill.

All women were asked a general question which covered contraceptive practices, aspects of fertility and aspects of sexual behaviours, as shown below. Women were asked 'Do any of the following apply to you now?' and to mark all the categories which applied.

- Use condoms as protection against STIs
- Use condoms as contraception
- Had a hysterectomy
- Had an implant (eg Implanon)
- Use a diaphragm
- Use natural, rhythm or Billings method
- Use withdrawal method
- Had a contraceptive injection (eg DepoProvera)
- Take the morning after pill
- Had a tubal ligation/tubes tied
- Partner has been sterilised (including vasectomy)
- Menopause (going or gone through)
- Infertile (self or partner)
- Other medical reason limiting likelihood of pregnancy
- Trying to get pregnant
- Currently pregnant
- Currently breastfeeding
- Can't afford to pay for birth control
- Don't like to use contraceptives or believe it's not good for health or religous reasons
- Not sexually active
- None of these apply

A 'write-in' box was provided for women who wanted to list something extra.

These questions were asked in a less structured form than most questions in the survey, to encourage and enable respondents to report their situation/practices without implying any judgements about the purposes or combinations of contraceptive practices, which may occur through formal questions. This approach was tested in the lead up to the survey and was found to be acceptable to respondents, and to yield data required by users.

In remote NATSIHS less categories were collected from those above

Population

Indigenous women aged 18 years or more (mammograms/pap smears), 18 to 64 years (breastfeeding), 18 to 49 years (contraceptions/protection).

Data items

As follows:

- Whether know what a mammogram is
- Time since last mammogram (non-remote only)
- Reasons for last mammogram (non-remote only)
- Whether have regular mammograms
- Time between regular mammograms
- Frequency of mammograms
- Whether know what pap smear test is
- Whether ever had pap smear test
- Time since last pap smear test (non-remote only)
- Whether have regular pap smear tests
- Time between regular pap smear tests
- Frequency of pap smear tests
- Whether had any babies
- Whether breastfed any of your children
- Whether ever taken oral contraceptive
- Main reason currently taking contraceptive pill
- Whether currently taking oral contraceptive
- Age first started taking oral contraceptive
- Protection from pregnancy and sexually transmitted infections

Output categories for these items are available from the list of output data items contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package, 2004–05* (cat. no. 4363.0.55.002) available from the ABS web site. Age in months and time breastfed in weeks are stored on the main data file, and can be grouped for output to suit individual requirements.

Interpretation

In interpreting the data it should be noted that although non-remote respondents self completed the questionnaire the potential sensitivity of the questions may have influenced the responses provided. For remote persons where the questions were collected by personal interview, the prescence of other household members at the interview or even the interviewer asking the questions, may have also influenced the responses provided.

BREAST AND CERVICAL CANCER/BREASTFEEDING

Breast and cervical cancer and breastfeeding have been the focus of major public health education programs in recent years. Despite the confidential nature of the questionnaire there may have been a tendency for some respondents, particularly in non-remote areas to report recommended or desirable screening and breastfeeding patterns rather than actual practices.

CONTRACEPTION/PROTECTION

- The data relate to contraceptive practices and should not be interpreted as necessarily indicative of sexual patterns.

Interpretation continued

CONTRACEPTION/PROTECTION *continued*

- The data relate primarily to the contraceptive practices/situation current at the time of the survey, which may differ from the respondent's usual practices/situation. As a result, the data provide a point in time picture of practices/situation in the adult population, but care should be taken in relating those characteristics with other health characteristics described in the survey for individual respondents.
- The non-remote self completion questionnaire ensured respondents privacy in reporting this information, although this may have been effected by the presence of other household members at interview. The potentially sensitive and personal nature of these questions may have impacted on respondents willingness to respond, and on the nature of those responses
- Some respondents indicated responses in the general question on contraception/protection use which contradicted their other responses. For example, respondents may have indicated the use of contraceptive methods, but also indicated that they had had a hysterectomy, were not sexually active, were trying to get pregnant or were pregnant. The data item called Combined contraceptive practices item allows some of these conflicting responses to be presented. However prior to this item we have removed highly unlikely combinations, including using a condom but not being sexually active, or trying to get pregnant but using contraception (other than permanent contraceptive methods, in which case we have removed the trying to get pregnant response). However responses such as not sexually active but have had a hysterectomy or tubal ligation were left as these were plausible situations.
- When producing the items regarding 'type of contraception currently used', and 'reason contraception not used', we've followed a series of rules to determine which population a respondent should go into particularly when they could go into both.

Contraception		*Non-contraception*	
group 1	Use condoms	group 4	Currently breastfeeding
	Use a diaphragm	group 5	Had a hysterectomy
	Use Natural, rhythm or Billings method		Trying to get pregnant
	Use withdrawal method		Currently pregnant
	Use morning after pill	group 6	Menopause (going or gone through)
group 2	Take contraceptive pill		Infertile
	Had an implant		Other medical reason limiting likelihood of pregnancy
	Had a contraceptive injection	group 7	Can't afford to pay for birth control
	Had a tubal ligation/tubes tied		Don't like to use contraceptives or believe it's not good for health or religious reasons
group 3	Partner has been sterilised	group 8	Other
		group 9	Not sexually active

DERIVATION RULES:

- Group 5 go into non-contraception no matter what other responses they have - they are not trying to prevent pregnancy because they are trying to become pregnant, or are pregnant or cannot get pregnant.
- Group 9 go into non-contraception no matter what other responses they have - they are not trying to prevent pregnancy.

Interpretation continued

DERIVATION RULES: *continued*

- Groups 1, 2 & 3 override all other responses, except Group 5 and Group 9, and go into Contraception.
- Group 6 go into Non-contraception unless they indicate contraceptive use (Groups 1-3), as they may be using 'just in case'.
- Group 7 go into Non-contraception unless they indicate contraceptive use (Groups 1-3) because, although they have expressed a general feeling, clearly there is something they are comfortable enough using.
- Group 4 is put into Non-contraception unless they indicate contraceptive use (groups 1-3) as although under certain conditions breastfeeding could be used as a contraceptive, we cannot distinguish between those that are following the contraceptive guidelines for breastfeeding and those who are merely just breastfeeding.
- Group 8 are decided on a case by case basis, depending on comments provided in the text box. If no comment was entered, they go into Non-contraception.

Comparability with 2001 NHS(I)

Results for common items in mammograms, pap smear tests and breastfeeding from the 2004–05 NATSIHS are considered directly comparable with those from the 2001 NHS(I), within the general limits of comparability resulting from a change in the means of data collection (see Chapter 7: Data quality and interpretation of results).

Results regarding contraception/protection should be used with care due to the different nature of items. The following issues should be considered:

- In 2001, data was primarily left as reported. Data were collected using two questions, a contraception question and a reasons did not use contraception question. Many respondents identified response categories for both questions, thus not allowing a clear distinction between the two populations. The non-use question in 2001 was considered to be too unreliable for general use. In 2004–05 only one question was asked with the intention of separating the populations during processing. The guidelines followed are set out above. To get a more relevant comparison between the two surveys, the item of 'combined contraceptive practices' should be used for non-remote areas, as the data for 2004–05 reflects more closely the irregular responses available from the 2001 survey. Care should still be used as the 2004–05 will have significantly less irregular responses. However, for 2004–05 non-remote data when not compared to the 2001 survey, it is recommended to use the other items available which separate the two populations: Forms of contraception currently used and Reasons contraception not currently used.
- Remote data is available in both 2001 and 2004–05 only for 'type/forms of contraception currently used' and should be used for these areas. Remote area questions focussed on only the contraception practices, not the non-use practices and so the quality issues found in non-remote areas are not as great.

The main differences between the two surveys are set out below:

Data item	*2004–05 NATSIHS*	*2001 NHS(I)*
Hysterectomy	Not collected	Collected
Breast examination	Self examination not collected	Collected (self examination not collected in remote areas)
	Mammogram:	
	Collected, additional data items	
	Remote - time between regular mammograms, frequency of mammograms	
	Non-remote - frequency of mammograms	
Breastfeeding history	Reduced content	Collected
Contraception/protection	Collected - revised collection format	Collected
Pap Smear Test	Collected, additional data items	Collected
	Remote - time between regular pap smear tests, frequency of pap smear tests	
	Non-remote - frequency of mammograms	

CHAPTER 6 POPULATION CHARACTERISTICS

CONTENTS

DEMOGRAPHIC AND SOCIOECONOMIC CHARACTERISTICS OVERVIEW

In addition to the specific health information collected, the 2004–05 NATSIHS obtained a range of information describing the demographic and socioeconomic characteristics of the Indigenous population. These characteristics can be linked with the health data obtained in the survey to analyse the health status and other health characteristics of particular Indigenous groups in the community e.g. children, the aged, low income earners, etc. For presentation in this publication the characteristics obtained have been grouped under the following headings: demographics, education, employment, income (including financial stress), health insurance, housing and family/household/income unit.

Only the more commonly used output data items available from the survey are outlined below; for a full list of available demographic and socioeconomic variables see the list of output data items contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package, 2004–05* (cat. no. 4363.0.55.002) available from the ABS web site.

In considering the available demographic and socioeconomic characteristics, there are some general points about aspects of the sampling within households, collection methodology, definitions and processing arrangements which need to be borne in mind, because they effect the data recorded for these characteristics:

- Summary characteristics of all usual residents of selected Indigenous households were recorded from information supplied by a 'responsible adult' (ARA) resident of the household. Characteristics recorded were sex, age, marital status, whether currently attending school/educational institution, Indigenous status and relationship to other household members.
- Those selected as respondents were asked additional questions regarding their education, language, labour force, and income characteristics.
- Within Indigenous households one adult and one child (aged 0-17 years) were enumerated in remote (i.e. community) areas while in non-remote (i.e. non-community) areas up to two adults and two children were enumerated.
- The selected adult was selected by the survey instrument or by interviewers using a random number instrument. Therefore in households with parents and adult children, the selected adult may have been one of those children.
- In households with children under 15 years of age, an adult was nominated by the household to respond about the selected child — this person is referred to as the child proxy. This may have been the selected adult or may have been another adult member of the household. Children aged 15–17 years answered their own questionnaire if permission was granted by the parent or guardian. If permission was not received then a child proxy answered on their behalf.
- Details of the income of each household member (except the selected adult(s) and selected child(ren) aged 15 to 17 years), was provided by a household spokesperson. The spokesperson was nominated by the ARA as the person most likely to be able to provide the information requested. Income details for the selected adult(s) and selected child(ren) were collected as part of their separate interviews.
- Details on financial stress and housing information, including location, structure, number of bedrooms and tenure was also obtained from the household spokesperson.

DEMOGRAPHIC AND SOCIOECONOMIC CHARACTERISTICS OVERVIEW *continued*

As a result of these arrangements, not all the data items described below are available for all adults, child proxies or children enumerated. The availability of items is summarised at the end of each section.

Although basic demographic information was collected about all household members in both the 2001 NHS(I) and 2004–05 NATSIHS, processing arrangements in place at the time did not allow these details to be retained on the final survey data file in 2001. In the 2004–05 NATSIHS, in addition to the comprehensive set of demographic and socioeconomic information about the survey respondents, basic demographic and income details are available for all persons in the sampled dwellings.

DEMOGRAPHIC CHARACTERISTICS

Sex

Male or female as reported.

Age

Reported age was recorded in single years and single months if aged less than two years. Date of birth was recorded in non-remote areas, which, in conjunction with date of interview, enables exact age to be derived if required. Where discrepancies occurred between derived and reported age for children, reported age was used where appropriate since this was the age on which respondents were sequenced through the questionnaire. An exception was child immunisation where derived age was used to more closely match with the immunisation schedule dates.

Standard output categories differ according to the topic to which the data relates. Age in five or ten year groups is most commonly used in survey output. Other non-standard groupings are available on request.

Social marital status

Social marital status was derived for persons aged 15 years and over, and was classified as:

- Married - if living with another person in a couple relationship, which was reported as either a registered marriage or a defacto marriage. Included are persons living with a person of the same sex in a couple relationship.
- Not married - if not living with another person in a couple relationship. Includes persons living alone, with other family members, in shared accommodation. Included are persons in a registered or defacto marriage but whose partners are not usually resident in the household.

Indigenous status

Refers to whether the person is of Aboriginal and/or Torres Strait Islander origin, as identified by an adult spokesperson within each household i.e. not necessarily self-identification. Status is classified as Aboriginal, Torres Strait Islander, both Aboriginal and Torres Strait Islander, and neither Aboriginal or Torres Strait Islander. Persons identified as of Kanak descent, from Papua or New Guinea or other Pacific Island origin, are recorded as neither Aboriginal or Torres Strait Islander.

Language mainly spoken at home

Obtained for adults only, as reported. Language was classified at the finest level of the AUSTRALIAN STANDARD CLASSIFICATION OF LANGUAGES. However due to the collection methodology in remote areas (where only the categories of English, An Aboriginal Language (not further defined), A Torres Strait Islander language (not further defined)

Language mainly spoken at home continued

and Other language (text box) were collected) and data obtained from non-remote areas, data from this survey primarily supports release of the categories of English, Australian Indigenous languages and Other.

Relationship to child

This item refers to the relationship of the child to the adult reporting for the child (selected adult or other child proxy). In most cases this was derived from information about household composition and relationships within the household; where this was not possible the adult reporting for the child was asked what was their relationship to the child. The output categories are: mother, step mother, father, step father, grandparent, other relative, other.

EDUCATION

Children aged 5–14 years were assumed to be attending school (while 5 year olds may not be attending school in all states, it was assumed for the purpose of sequencing for Days away from school/study items (see Chapter 4)). For persons aged 15 years and over information was obtained about study at school or another educational institution and the highest non-school educational qualification they had obtained.

Current study

Current study was obtained for persons aged 15 to 19 years not currently attending school, and for persons 20 years and over. It included study at school, university, TAFE/technical college or other educational institution. Current study included persons currently enrolled full or part-time, including apprentices attending one day a week or on block release. Enrolment in adult education courses, hobby and recreation courses are excluded.

Information is collected about the type of educational institution at which currently enrolled (secondary school, university/other higher education, TAFE/technical college, business college, industry skills centre, other) and whether the current study is full-time or part-time. This is determined by how their enrolment is classified by the education institution they are attending; if uncertain, the respondent's reported status was recorded. Apprentices who attend one day per week or on block release are classified as in part-time study.

Highest year of school completed

Obtained for persons aged 15 to 19 years not attending school, and for persons 20 years and over. For years up to and including Year 11 the term 'completed' means to attend for the full school year such that progression to the following year of school is enabled; for Year 12, completed requires only attendance for the full year. Further details of the definitions used are available on request.

Categories are: Year 12, Year 11, Year 10, Year 9, Year 8 or below, Never attended school, Not stated, Not asked (still at school).

Educational attainment

Persons aged 15 to 19 years not attending school, and persons 20 years and over were asked if they had completed a trade certificate, diploma, degree or any other educational qualification. Those who answered Yes were asked to provide details of that qualification, including level and field of study. Several output data items, relating to the level and field of study are derived from the text descriptions recorded by interviewers.

- Whether has a non-school qualification
- Level of highest non-school qualification

Educational attainment continued

- This item refers to the qualification level as classified to the AUSTRALIAN STANDARD CLASSIFICATION OF EDUCATION (ASCED). For standard survey output detailed categories are commonly grouped as shown below:
  - Postgraduate Degree
  - Graduate Diploma/Graduate Certificate
  - Bachelor Degree
  - Advanced Diploma/Diploma
  - Certificate
  - Inadequately described
  - Non non-school qualification
  - Not asked (still at school)

- Main field of highest non-school qualification
  - This item refers to the field of study of the highest non-school qualification reported as classified to the field component of the Australian Standard Classification of Education (ASCED). For standard survey output detailed categories are commonly grouped as shown below:
    - Natural and physical sciences
    - Information technology
    - Engineering and related technologies
    - Architecture and building
    - Agriculture, environmental and related studies
    - Health
    - Education
    - Management and commerce
    - Society and culture
    - Creative arts
    - Food, hospitality and personal services
    - Mixed field programmes
    - Inadequately described
    - No non-school qualification
    - Not asked (still at school)

- Highest level of post-school educational attainment
  - This item refers to the level of the highest post-school qualification reported, as classified to the ABS Classification of Qualifications. Although this classification has been replaced by ASCED this item has been retained for the 2004–05 NATSIHS to provide greater comparability with the 2001 NHS(I).
    - Higher degree
    - Postgraduate diploma
    - Bachelor degree
    - Undergraduate diploma
    - Associate diploma
    - Skilled vocational qualification
    - Basic vocational qualification
    - Inadequately described
    - No post-school qualification
    - Not asked (still at school)

EMPLOYMENT

Information about employment was obtained about Indigenous persons aged 15 years and over. The questions used in the 2004–05 NATSIHS are a reduced version of the questions used in the ABS Monthly Labour Force Survey. Use of the reduced set of questions may have resulted in small differences in classification of labour force status and full-time/part-time employment, compared with the results that would have been derived had the full standard question module be used.

Some of the employment items below (e.g. occupation, industry, working arrangements) relate to the respondent's main job. For those respondents who had more than one job at the time of the interview, main job was defined as the paid job in which they usually worked the most hours .

Labour force status

Indigenous persons were classified as either employed, unemployed or not in the labour force based on criteria relating to whether the person had a job in the week prior to interview, whether those who did not have a job were actively seeking work, and whether those actively seeking work were available to start work.

- Employed persons were those who reported that in the preceding week they had worked in a job, business or farm or who had a job but were absent during that week. It includes people who reported they had a job but who also reported they usually worked no hours. It also includes Indigenous persons employed in a Community Development Employment Project (CDEP). CDEP is a program which allows Indigenous communities to exchange unemployment benefits for opportunities to work or train in activities which are managed by a local Aboriginal or Torres Strait Islander organisation.
- Unemployed persons were those who were not employed in the reference week, and who actively looked for work some time during the previous four weeks and were available to start, or waiting to start within the following four weeks.
- Persons who were neither employed nor unemployed as defined above were classified as not in the labour force.

Labour force status, as defined for this survey, also incorporates the characteristic of whether full-time or part-time work is involved, as follows:

- Employed full-time if they usually work 35 hours or more a week (in all jobs).
- Employed part-time if they usually worked less than 35 hours a week (in all jobs).
- Unemployed actively seeking full-time work in last 4 weeks.
- Unemployed actively seeking part-time work only in last 4 weeks.

Labour force status is categorised as: employed full-time, employed part-time, unemployed looking for full-time work, unemployed looking for part-time work, not in the labour force.

Status in employment (non-remote only)

This item was collected in non-remote areas only. It refers to a respondent's position in relation to the main employment (job) in the enterprise in which he or she works and is determined by the following criteria:

- whether a person operates his/her own economic enterprise or engages independently in a profession or trade, and hires one or more employees;
- whether a person operates his/her own economic enterprise or engages independently in a profession or trade and hires no employees;

Status in employment (non-remote only) continued

- whether a person works for a public or private employer and receives remuneration; and
- whether a person works in an economic enterprise operated by a relative without remuneration.

Four output categories are available:

- Employee: A person who works for a public or private employer and receives remuneration in wages, salary, a retainer fee by their employer while working on a commission basis, tips, piece-rates or payment in kind, or a person who operates his or her own incorporated enterprise with or without hiring employees.
- Employer: A person who operates his or her own unincorporated economic enterprise or engages independently in a profession or trade, and hires one or more employees.
- Own Account Worker: A person who operates his or her own unincorporated economic enterprise or engages independently in a profession or trade and hires no employees.
- Contributing Family Worker: A person who works without pay in an economic enterprise operated by a relative.

Working arrangements (non-remote only)

This item was collected in non-remote areas and refers to the working or payment arrangements of the respondent in their current main job.

Data are recorded as reported by respondents against the following categories: unpaid voluntary work; contractor/sub-contractor; own business/partnership; commission only; commission with retainer; family business without pay; payment in kind; paid by piece/item produced; wage/salary earner; Other

Occupation

Office coded to the Australian Standard Classification of Occupations (ASCO) from the respondent's description of their occupation in their main job or business and of the main tasks or duties performed. Occupation was classified to the full four-digit level of ASCO, and details can be made available at this level on request (although for many categories observations in the survey are relatively few, and therefore the reliability of the data will be significantly reduced).

For most output purposes occupation classified to the eight major groups (see below) or sub-major group level (see Appendix 4) are the most suitable detailed levels.

ASCO Major Groups: managers and administrators; professionals; paraprofessionals; tradespersons; clerks; salespersons and personal service workers; plant and machine operators and drivers; and labourers and related workers.

Industry of employment

Office coded to the Australia and New Zealand Standard Industrial Classification (ANZSIC) (1993 edition) based on the description provided by the respondent of the business or activity carried out by their business/employer where they work, and the name of the business/employer. Industry was classified to the 3 digit "Group" level of ANZSIC, and details can be made available at this level on request (although for many groups observations in the survey are relatively few, and therefore the reliability of the data will be significantly reduced).

Industry of employment continued

For most output purposes industry classified to the 17 Divisions of the classification is the most detailed level suitable. These divisions are:

- Agriculture, Forestry and Fishing;
- Mining;
- Manufacturing;
- Electricity, Gas and Water Supply ;
- Construction;
- Wholesale Trade;
- Retail Trade;
- Accommodation, Cafes and Restaurants;
- Transport and Storage;
- Communication Services;
- Finance and Insurance;
- Property and Business Services;
- Government Administration and Defence;
- Education;
- Health and Community Services;
- Cultural and Recreational Services;
- Personal and Other Services.

See also Appendix 5.

Industry sector

This item was office coded for respondents who were wage and salary earners or owners of a limited liability company in their current main job, and refers to the sector - Government, Private or Australian Defence Forces, in which their business/employer operates.

Hours worked

Refers to reported hours usually worked (in all jobs) per week by Indigenous persons currently employed.

Hours in single units are recorded, but are grouped for standard outputs, as follows:

No hours or less than 1, 1–15 hrs, 16–24 hrs, 25–34 hrs, 35–39 hrs, 40 hrs, 41–48 hrs, 49 hrs or more.

Duration of unemployment

Derived for Indigenous persons classified as unemployed at the time of the survey. This item refers to the period from the time a person began looking for work or was stood down, to the end of the survey reference week. For persons who began looking for work while still employed, the item refers to the period from the time the person last worked full time for two weeks or more until the end of the reference week. The item is a continuous variable, measured in completed weeks.

For standard output duration periods are grouped as follows:

Less than 4 weeks, 4 to less than 8 weeks, 8 to less than 13 weeks, 13 to less than 26 weeks, 26 to less than 52 weeks, 52 weeks or more. Long term unemployment is defined as unemployment for a period of 52 weeks or more.

CDEP Status

This item was collected from employed Indigenous persons. In non-remote areas a question was asked regarding whether their job was CDEP. For those people who identified they had more than one job, they were asked if it was their main job. In remote areas it was assumed that respondents only had one job and so only the initial question was asked.

The output for the item is: CDEP is main or only job; CDEP is other job; Not on CDEP.

INCOME

In the 2004–05 NATSIHS, income information was obtained for all selected persons aged 15 years and over. The data relates primarily to regular/recurring cash income only.

Information was collected about the personal income of the selected adult(s) and selected child(ren) aged 15–17 years (where applicable) in each sampled dwelling. An adult within each household was asked to provide information about the income of all other household members aged 15 years or more. In non-remote areas in cases where income was not reported, values were estimated for those who reported that they were on government benefits or CDEP based on general payment amounts specified by the applicable Government department. For those on wages and salaries or other source of income missing data appears as not stated values in survey output. In remote areas, where income was unknown for a household member interviewers were asked to indicate the source of income. The same process was then followed as for non-remote areas.

Source(s) of cash income

Using a prompt card, non-remote Indigenous persons were first asked whether they had received income from the following sources in the last financial year:

- profit or loss from own unincorporated business or share in partnership (excluding wages/salary drawn from own limited liability company(s));
- profit or loss from rental property; or
- dividends or interest, including dividends from own limited liability business as well as other companies, but excludes bonus share values received with or in lieu of dividends.

Income from share trading, where the respondent was a registered dealer, was recorded as business income. In other cases, income from share trading was recorded as 'other regular income' - see below.

Persons who reported income from any of these sources were asked to report the total amount received from these sources in the last financial year (before tax but after business expenses). Don't know and refusal options were allowed.

Also using a prompt card in non-remote areas, and verbal prompting in remote areas, Indigenous persons were then asked whether they currently received income from:

- Community Development Employment Program (CDEP);
- wages or salary, includes wages, salary or fees paid to owner of limited liability company, but excludes payments received under Newstart or youth training allowance;
- a government pension or allowance (including payments from overseas governments);
- child support or maintenance (cash only payments) (non-remote only);

Source(s) of cash income continued

- superannuation or annuity, excluding lump sum payments and government benefits (non-remote only);
- workers' compensation (non-remote only);
- or any other regular source, where regular was defined as at least once per year.

Persons were recorded against each source of income they reported, as appropriate, and all sources identified above are available in survey output. Note that some of the income sources were only collected in non-remote areas. Persons who reported income from any of these sources were asked to report the total $ amount received from all these sources (before tax). Don't know and refusal options were allowed.

Main source of cash income

In non-remote areas respondents who reported income from more than one source (of regular cash income and/or income last year) were asked to identify their main source of income; this is available as a separate output item. Where a source of income was reported in regular income and one source in income last year, main source was derived by comparing the $ income reported from each source. In these cases, main source could not be determined whether either of the $ income amounts was not stated.

In remote areas, income was collected separately for each type of income identified and then added together to get total income. Main source of income was derived based on the type of income source with the highest income.

As noted above, an adult within each household was asked to report income details for each member of their household aged 15 years or more. In non-remote areas, a single source of income question was used, incorporating the following categories:

- Community Development Employment Program (CDEP);
- wages or salary;
- profit or loss from own unincorporated business or share in partnership;
- a government pension or allowance (including Family Tax Benefit if received as a payment from Centrelink);
- or any other regular source.

Don't know and refusal options were allowed. Information about the main source of income of each household member was also collected in non-remote areas. At the household and income unit levels all sources of income can be identified. However, because constructing main source of income at the household or income unit level would involve a range of different assumptions taking account of household/unit composition, $ income amounts and the source mix across the household or unit members, main source of income of households or income units has not been derived for output from the survey; but information to enable users to do their own analysis is available.

Details regarding main source or source(s) of income for non-selected household members was not collected in remote areas.

Type of pension, benefit or allowance

Indigenous respondents who reported they currently received income from a government pension or allowance were asked the type of pension, benefit or allowance received. Prompt cards were used in non-remote areas to assist respondents. Information was recorded against two lists:

Type of pension, benefit or allowance continued

PENSIONS/BENEFITS/ALLOWANCES

List A	*List B*
Australian age pension	Family tax benefit
Newstart allowance	Parenting payment
Mature age allowance	War widow(er)'s pension (DVA)
Service pension (DVA)	Disability pension (DVA)
Disability support pension (Centrelink)	Carer allowance
Wife pension	Child disability allowance
Carer pension	Youth allowance
Sickness allowance	Austudy
Widow allowance (Centrelink)	Abstudy
Widow B pension (Centrelink)	Overseas pensions/benefits
Special benefit	Other (specify)
Partner allowance	

Respondents could report one only from list A, but as many as applied from list B. Categories from both lists are combined for output.

Remote respondents were asked if they received:

- Government family payment;
- Other government pension, benefit or allowance.

A text box was available to insert the pension, benefit or allowance type. This was then coded to the same categories as non-remote during data entry.

Gross cash income

Gross cash income refers to total cash income from all sources before tax or anything else (except business expenses) is taken out.

Non-remote Indigenous respondents were asked to report cash $ income they received in two parts:

- income received last financial year from profit or loss from own unincorporated business or share in partnership, profit or loss from rental property or from dividends or interest. Provision was made to record nil income, and whether profit or loss.
- usual income from CDEP, wages or salary, a government pension or allowance, child support or maintenance, superannuation or annuity, worker's compensation or any other regular source. The period to which that reported income related was also recorded in weeks or months.

For output, these two incomes are combined to produce a total personal cash income, which is usually expressed for output in annual or weekly income ranges. Incomes in reported $ amounts and in deciles are stored on the data file.

Remote respondents were asked to report cash $ income received from:

- CDEP;
- a wage or salary;
- the government family payment;
- some other government pension, benefit or allowance; and
- any other regular source (specify).

Income from these sources are combined to produce a total personal cash income. Output is expressed as for non-remote areas.

Gross cash income continued

Total cash income at the household and income unit levels are also available, in $ amounts and deciles. These are further explained in the section of this Guide entitled Household, Family and Income unit level characteristics. The dollar ($) ranges covered by deciles for all income items are shown in Appendix 7.

PRIVATE HEALTH INSURANCE (NON-REMOTE ONLY)

Definition

Private health insurance cover is additional to that provided under Medicare. It is offered by private health organisations registered under the National Health Act to reimburse all or part of the cost of hospital and/or ancillary services. Information was obtained about the private health insurance arrangements current at the time of the survey.

Cover provided or arranged through employers was included. Ambulance only cover, and cover arranged under Veteran's Affairs or other government health benefits cards was excluded.

Methodology

Data regarding private health insurance were only collected in non-remote areas. Respondents were asked if they were currently covered by private health insurance and the type of cover they had. Persons with private cover were also asked the reasons they had cover, and those without cover were asked the reasons why not. Interviewers prompted respondents in both these 'reasons' questions, to ensure that all reasons were recorded.

Type of cover refers to whether persons were covered for hospital expenses, expenses for ancillary services, for both hospital and ancillary or had no private health insurance. Private insurance for hospital expenses provides cover for the costs of accommodation in private hospitals and private accommodation in public hospitals. Ancillary cover includes services such as dental, physiotherapy, optical, acupuncture, etc. The range of services and the level of cover provided for each service may vary.

Population

Indigenous persons aged 15 years and over in non-remote areas.

Data items

As follows:

- Whether currently covered by private health insurance
- Type of insurance cover
- Reasons covered by private health insurance
- Reasons not covered by private health insurance

Output categories for the items above are shown in the list of output data items contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package, 2004–05* (cat.no. 4363.0.55.002) available from the ABS web site.

Interpretation

Points to consider in interpreting data for this topic include the following:

- While efforts are made to ensure that only legitimate private health insurance was reported, some respondents may have reported life, accident or other forms of insurance.

Interpretation continued

- Overall results from this survey show average reported insurance levels in 2004–05, and reflect people's perception of their insurance cover which may not correspond to their actual cover. As a result the data from this topic are not directly comparable with statistics on health insurance levels compile from fund membership information and published quarterly by the Private Health Insurance Administrative Council.
- Depending on the person in the household chosen as the selected adult, they may have been unaware of their coverage/or lack of coverage under another person's (e.g. a parent's) private health insurance.
- The type of insurance held is only available at the very broad level of hospital only, ancillary only, both hospital and ancillary. Within each of these categories, the actual type and level of cover provided can differ significantly. This needs to be borne in mind when aggregating these data for population groups.

Comparability with 2001

Questions asked in non-remote areas of 2004–05 NATSIHS were identical with those in non-remote areas of 2001 NHS(I), except that type of private health insurance membership and length of private health insurance membership were not collected in the 2004–05 NATSIHS.

Data for those questions which remained the same in 2001 are considered directly comparable

HEALTH CARDS (NON-REMOTE ONLY)

Definition

This topic refers to coverage by specific government issued cards which entitle the card holder, and in some cases their dependents, to a variety of health benefits or concessions (e.g. medical care, hospital treatment/accommodation, supply of pharmaceuticals, free of charge or at reduced rates). Cards are provided primarily to recipients of Australian government pensions or benefits.

The specific cards covered in the 2004–05 NATSIHS were:

- Health Care Card (including the low income health care card);
- Pensioner Concession Card; and
- Commonwealth Seniors Health Card.

Readers should contact the relevant authority for details of the persons eligible for these cards (or coverage under these cards) and the range of entitlements available to card holders.

Methodology

Data regarding health card were only collected in non-remote areas. Respondents were asked if they were covered by a range of government health concession cards. Multiple cards could be reported. A picture prompt card showing examples of the card types listed above was shown to respondents to assist them in reporting. Interviewers were supplied with supplementary information about the cards to assist if queried by respondents.

Population

Information was obtained for all Indigenous persons aged 15 years and over in non-remote areas.

Data items

As follows:

Whether currently covered by other Government health card

Data items continued

Type(s) of Government health card

Output categories for the items above are shown in the list of output data items contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package 2004–05* (cat.no. 4363.0.55.002) available from the ABS web site.

Interpretation

Points to be considered in interpreting data for this topic include the following:

- Although picture prompt cards were used some respondents may have incorrectly reported other types of cards in answer to these questions; for example State Seniors Cards which provide access to non-health services or entitlements (e.g. transport)
- Depending on the person in the household chosen as the selected adult, they may have been unaware of their coverage under another person's (e.g. a parent's) card.

Comparability with 2001

At the broadest level of whether has/covered by a Government Health Card, the data are considered directly comparable between surveys. However in making comparisons consideration should be given to changes which may have occurred between 2001 and 2004–05 in terms of eligibility for cards, and the levels and types of entitlements they provide. In 2004–05, details regarding Department of Veterans Affairs (DVA) cards were not collected.

HOUSING

Definition

This topic refers to the dwelling type and location and number of bedrooms of the dwelling in which respondents were enumerated, i.e. their usual place of residence in most cases, and the tenure type of the dwelling.

Methodology

Dwelling type refers to the structure in which the household resides, as recorded by interviewers and based on their observations at the time of the interview. Information was recorded against the following categories:

Separate house;
Semi-detached/row or terrace house/town house — one storey; two or more storeys;
Flat attached to house;
Other flat or apartment — in 1 or 2 storey block; in 3 storey block; in 4 or more storey block;
Caravan, cabin or houseboat;
Improvised home, tent, camper out; and
House or flat attached to shop, office, etc.

Dwelling location refers to where the dwelling was situated, as recorded by the interviewer. Categories are caravan park, marina, manufactured home estate, self-care accommodation for the retired or aged or other.

The household spokesperson was asked to report the number of bedrooms in the dwelling. The item refers to the number of rooms on the dwelling plans as bedrooms, even though they may be currently used for other purposes. They were also asked about housing tenure. They were asked whether

Methodology continued

- the dwelling was being paid off, was owned outright, was being rented, or was being purchased under a rent/buy or shared equity scheme, by someone in the household, or
- someone in the household occupied the dwelling under a life tenure, or paid board, or lived there rent free.

Information from these questions was recorded at the household level, and can be accessed in relation to each person in the household.

Population

Indigenous persons aged 18 years and over who were the household spokesperson. Details of these item are attached to all records.

Data items

As follows:

Dwelling location
Dwelling type
Number of bedrooms
Tenure type

Output categories for the items above are shown in the list of output data items contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package, 2004–05* (cat.no. 4363.0.55.002) available from the ABS web site.

Interpretation

Points to be considered in interpreting data for this topic include:

- Data is collected from a household spokesperson. They may not know the overall status of tenure for the household and may report personal status.
- Some respondents may not be aware of the designated usage of rooms specified in building plans, and hence may report other rooms currently used as bedrooms in some cases.
- Some care should be taken in relating the health characteristics of respondents with their housing characteristics, since information is not available from the survey to indicate their length of residence in that dwelling.

Comparability with 2001

Data for dwelling type and number of bedrooms is considered directly comparable between the 2004–05 NATSIHS and the 2001 NHS(I). Information about housing tenure was not collected in the 2001 NHS(I).

HOUSEHOLD, FAMILY AND INCOME UNIT LEVEL CHARACTERISTICS

In addition to data obtained about individual respondents in the survey, other data are available about the households, families or income units to which they belong. This information is important to understanding the situation in which people live, and which may impact their health and related characteristics.

In the 2004–05 NATSIHS, only selected people in each dwelling were enumerated; up to one adult and one child aged 0 to 17 years in remote (community) areas and up to two adults and two children in non-remote (non-community) areas. Therefore, it is not possible to bring together the records for all usual residents of a dwelling to determine household, family or income unit characteristics. Instead a range of characteristics was collected or derived from other data collected and these are contained on each person record from the survey. These characteristics are outlined below.

HOUSEHOLD, FAMILY AND INCOME UNIT LEVEL CHARACTERISTICS *continued*

While this approach enables the health characteristics of individuals and populations of individuals to be analysed in terms of their household, family or income unit characteristics, data from this survey are not available compiled for households, families or income units.

Household characteristics

A household is defined as one or more persons, at least one of whom is aged 15 years and over, usually resident in the same private dwelling; in the 2004–05 NATSIHS only households with at least one person aged 18 years and over and at least one Indigenous person were regarded as in scope of the survey. The ABS does not seek to differentiate multi-household dwellings from single-household dwellings; the number of households in a private dwelling is always regarded as one.

Selected household characteristics are compiled and are available for use as person level characteristics or household level characteristics. Household level data items are available covering issues such as household size, type and composition, geographic location, dwelling characteristics, income, financial stress, housing tenure and SEIFA characteristics of the area in which the dwelling is located. Selected items are discussed below: a full list of output data items is contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package 2004–05* (cat.no. 4363.0.55.002) available from the ABS web site.

In addition to these items describing the characteristics of household units basic information is available about each member of the selected households. This enables the circumstances of the respondent to be better understood and provides scope to rework some items (e.g. equivalised income) to suit particular needs. Information which is available for each member of the selected households is sex, age, Indigenous status, relationship in household, survey status, and personal income: $ amounts and, in non-remote areas, sources of income.

HOUSEHOLD COMPOSITION

This item was previously known as household type. Households are allocated to categories of the 'Household composition' classification on the basis of:

- the number of families identified in the household and whether unrelated household members are present in a family household; and
- whether, in a non-family household, the number of household members is greater than one.

The standard 'Household composition' classification comprises the following categories:

One family household
- One family household with only family members present
- One family household with non-family members present

Multiple family household
- Two family household
  - Two family household with only family members present
  - Two family household with non-family members present
- Three or more family household
  - Three or more family household with only family members present
  - Three or more family household with non-family members present

Household characteristics continued

HOUSEHOLD COMPOSITION *continued*

Non-family household
- Lone person household
- Group household

Where a family is two or more related people who usually live together - see Characteristics of families below.

HOUSEHOLD STRUCTURE

This is a non-standard item referring to the composition of the household, as recorded by interviewers, based on the information about the residents of the household provided by the adult initially contacted within the household (ARA). Categories are:
- Person living alone
- Couple only
- Couple with unmarried children aged 15 years and over
- Couple with children aged 0–14 years
- Couple with children aged 0–14 years and unmarried children aged 15 years and over
- One person with unmarried children aged 15 years and over
- One person with children aged 0–14 years
- One person with children aged 0–14 years and unmarried children aged 15 years and over
- All other households

RELATIONSHIP IN HOUSEHOLD

This item was derived from information supplied by the ARA, about all usual residents of the household. This item describes the relationship of each person in a family to the family reference person (the person identified as being a family relation on the household form) or where a person is not part of a family that person's relationship to the household reference person (the person first entered onto the household form). Further details of the input coding can be made available on request. In the 2004–05 NATSIHS, the following categories are available:
- Husband, wife or partner
- Lone parent
- Child aged less than 15 years
- Dependent student
- Non-dependent child
- Other related person
- Non-family member
- Visitor

NUMBER OF PERSONS IN HOUSEHOLD

This refers simply to a count of persons who are usual residents of the household dwelling and members of the household to which the respondent belongs.

Household characteristics continued

NUMBER OF REGULAR SMOKERS IN HOUSEHOLD

As reported by the selected adult respondent in non-remote areas, and household spokesperson in remote areas — see Smoking, in Chapter 5: Health Risk Factors.

FINANCIAL STRESS

The economic well being of a household can impact on their health circumstances. Information was obtained from the household spokesperson on their assessment of their financial situation.

The household spokesperson was asked if they had to get $2,000 for something important, if they could obtain the money within a week. They were also asked if they had run out of money for food, clothing or bills in the last two weeks or the last year.

HOUSEHOLD INCOME

Household income characteristics were derived from the income details (amount of income and sources of income) reported for each person aged 15 years or more in the household. Income was reported as follows:

- personal income was reported by the selected adult enumerated in the household;
- personal income of the child enumerated (where applicable) was reported by the child or by the adult answering on the child's behalf;
- personal income of all other household members (aged 15 years or more) was reported by the household spokesperson.

Items are available showing the amount of household income (in $ amounts and deciles, in 'as reported' and equivalised form) and sources of income. For further information about household income items see the discussion on income unit income below.

Information about household income was not available from the 2001 NHS(I), and although the items are available from the 2004–05 NATSIHS survey some care should be taken in interpreting the data. As it was not practical to collect income from each household member personally, the approach used in the survey relies on the household spokesperson's knowledge of the income of other household members, and their willingness to report information about other household members which they may see as sensitive.

In non-remote areas, where the household spokesperson was not aware of the actual income of another household member, and that person received the government family payment and/or other government pensions or allowances, this was estimated based on information available from the Centrelink or other Government department web sites. No attempt was made to estimate information relating to income from wages and salaries or other sources of income. In remote areas, interviewers were instructed to, where possible, write the type of payment received against a non-response for estimating in the office. Interviewers were also instructed that, where possible, they should try to follow up non-response with the actual household member.

Characteristics of families

A 'family' is defined as two or more persons, one of whom is at least 15 years of age, who are related by blood, marriage (registered or de facto), adoption, step or fostering, and who are usually resident in the same household. The basis of a family is formed by identifying the presence of a couple relationship, lone parent-child relationship or other blood relationship. Some households, therefore, contain more than one family.

This is a more restrictive definition than the ordinary notion of the term 'family' which generally includes relatives whether they live together or not. This is a reflection of the fact that for survey-based research it is necessary to place some physical bound on the extent of family for the purposes of being able to collect family data.

Two family characteristic items are available; number of families, and family composition.

NUMBER OF FAMILIES

This is simply a count of families in the household, office coded from the information recorded about the usual residents of the household.

FAMILY COMPOSITION

This item was previously known as family type. Family composition is defined as the differentiation of families based on the presence or absence of couple relationships, parent-child relationships, child dependency relationships or other familial relationships, in that order of precedence. The 'family composition' of a particular family is operationalised by enumerating certain relationships that exist between a single 'family reference person' and each other member of that family. 'Family composition' is then allocated on the basis of whether the types of relationships given below are present or not in the family in the following order of precedence.

- Couple relationship — defined as a registered or de factor marriage.
- Parent–child relationship — defined as a relationship between two persons usually resident in the same household. The child is attached to the parent via a natural, adoptive, step, foster or child dependency relationship. For information on 'nominal children' see the section on Discussion of conceptual issues below.
- Child dependency relationship — defined as including all children under the age of 15 (whether related or unrelated to the family reference person) and those natural, step, adopted or foster children who are full-time students 15–24 years of age.
- Other relationships — defined as including all those persons related by blood or by marriage who are not covered by the above relationships.

Family composition is categorised as follows:

Couple family with no children under 15

- Couple family with no children under 15 and no dependent students

Couple family with children under 15

- Couple family with children under 15 and dependent students
- Couple family with children under 15, dependent students and non-dependent children
- Couple family with children under 15, dependent students and no non-dependent children

Characteristics of families continued

FAMILY COMPOSITION *continued*

Couple family with children under 15 and no dependent students
- Couple family with children under 15, no dependent students and with non-dependent children
- Couple family with children under 15, no dependent students and no non-dependent children

Couple family with no children under 15
- Couple family with no children under 15 and with dependent students
- Couple family with no children under 15, and with dependent students and non-dependent children
- Couple family with no children under 15, and with dependent students and no non-dependent children

Couple family with no children under 15 and no dependent students
- Couple family with no children under 15, no dependent students and with non-dependent children

One parent family with children under 15
- One parent family with children under 15 and dependent students
- One parent family with children under 15, dependent students and non-dependent children
- One parent family with children under 15, dependent students and no non-dependent children

One parent family with children under 15 and no dependent students
- One parent family with children under 15, no dependent students and with non-dependent children
- One parent family with children under 15, no dependent students and no non-dependent children

One parent family with no children under 15
- One parent family with no children under 15 and with dependent students
- One parent family with no children under 15, with dependent students and non-dependent children
- One parent family with no children under 15, with dependent students and no non-dependent children

One parent family with no children under 15 and no dependent students
- One parent family with no children under 15, no dependent students and with non-dependent children

Other family

For the purposes of this and following items, a dependent child is defined as including all children under the age of 15 (whether related or unrelated to the family reference person) and those natural, step, adopted or foster children who are full-time students 15–24 years of age.

Characteristics of income units

An income unit may comprise one person, or a group of related persons, within a household, whose command over income is shared, or is assumed to be shared. The relationships allowed for in the definition of income unit, are restricted to those of marriage (registered or de facto) and of parent/dependent child. Income units can therefore include the partner (for couples), all children aged less than 15 years, and unmarried children who are full-time students aged 15–24 years who don't have children of their own. All other persons were considered to be non-dependent and hence to form their own separate income units. Each household and each family unit can contain numerous income units.

INCOME UNIT TYPE

Derived from household composition and relationship in household together with information on the age and student status of children, and classified as follows:

- Couple with dependent child(ren);
- Couple without dependent child(ren);
- Single person with dependent child(ren);
- Single person;
- Not known.

INCOME OF INCOME UNIT

The personal income for each household member aged 15 years or more was recorded, as reported by an adult member of the household. The income of income unit was derived by summing the personal income (in $) for each person in the income unit (as defined above).

Income of income unit is contained on each respondent's record as a personal characteristic. Standard output groupings are shown in the output data items list contained in the *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey: Data Reference Package 2004–05* (cat.no. 4363.0.55.002) available from the ABS web site. Data can be compiled in different groups to suit individual data needs if required.

Income unit income is not available for all respondents because complete details of the income of all household members were not provided in some cases. As stated earlier, missing income details from persons on CDEP, government family payments and other government pensions or allowances were estimated. However, no attempt was made to estimate wages and salaries or other source of income where the information was not provided.

Equivalised income

Differences in household types and compositions and their assumed requirements relative to income can be taken into account by the application of equivalence scales. These scales are a set of ratios which when applied to the income of different household or income unit types, produce standardised estimates of income which reflect the households' relative wellbeing.

Equivalised income continued

There are various scales in general use throughout the world. For the 2004–05 NATSIHS the OECD scale, which requires information about income and household composition, was used. Equivalised income was derived at both the household and income unit levels. From the data available from the 2001 NHS(I) it was possible to derive equivalised income at the income unit level only.

Equivalised income is derived by calculating an equivalence factor and then dividing income by that factor. The equivalence factor is built up by allocating points to each person in the unit (household or income unit) and summing those points. One point is allocated to the first adult in the unit, 0.5 points for each other person aged 15 years and over, and 0.3 points for each person aged less than 15 years - for example,

- a single person household has a factor of one : equivalised income is therefore the same as reported income.
- a household comprising two adults and a child aged less than 15 years would have a factor of 1.8: equivalised income for this household is the household income divided by 1.8.

Equivalised income from the 2004–05 NATSIHS for households and income units has been standardised to a single person household, reflecting recent use of the OECD scale.

As a result of the different units (households x income units) and different standardisation (single person x two adults/two children), care should be taken in making comparisons between surveys to ensure the items used are directly comparable.

Equivalised income is available in $ amounts, and by decile. For equivalised income of households and income units, deciles were based on the ranges derived from the NHS survey sample so that the income position of the Indigenous population within the Australian population is presented.

SOCIOECONOMIC INDEXES FOR AREAS (SEIFAS)

From information collected in the Census of Population and Housing, the ABS has developed indexes to allow ranking of regions/areas, providing a method of determining the level of social and economic well-being in that region. The 2004–05 NATSIHS produced an Index of Disadvantage which focuses on low income earners, relatively lower educational attainment and high unemployment.

It should be emphasised that these indexes relate to the area in which the survey respondent lived, and were not necessarily indicative of an individual respondent's socioeconomic status. The Index scores have been mapped to the NATSIHS sample at both the CD and SLA levels.

For further information about the indexes, see *Information Paper: Census of Population and Housing - Socio-Economic Indexes for Areas, Australia* (cat. no. 2039.0).

Interpretation

Confusion can arise about the ordering of the deciles/quintiles created from SEIFA indexes. The ABS constructs the indexes so that relatively disadvantages areas (e.g. areas with many low income recipients) have low index values, and relatively advantages areas (e.g. areas with many high income recipients) have high index values. Correspondingly, in ABS publications and other outputs, SEIFA deciles are numbered from decile 1 (most disadvantaged to decile 10 (least disadvantaged): quintiles are labelled similarly.

Interpretation continued

For the Index of Disadvantage Quintile 1 refers to the most disadvantaged group while Quintile 5 refers to the most advantaged group. Care needs to be taken in comparing SEIFA analysis undertaken by different agencies, as quintiles or deciles may be labelled in reverse order to the standard ABS order.

GEOGRAPHIC CLASSIFICATIONS

Geographic information available from the 2004–05 NATSIHS relates to the location of the sampled dwelling at which respondents were enumerated. As a result of the scope rules applied for this survey most respondents were surveyed at their place of usual residence.

Several standard classifications of geographic area are available for use in output from this survey, based on the July 2001 edition of the Australian Standard Geographical Classification (ASGC). The ASGC is a hierarchical system for the classification of statistical units by geographic areas. The basic spatial unit of the classification is the Census Collector's District (CD). Statistical Local Areas (SLAs) are the next level of the classification, and comprise one or more CDs; they are similar in size to local government areas (i.e. Legal LGAs). Under the hierarchical system of the ASGC, SLAs can be further grouped into larger units called Statistical Sub-Divisions, then still larger Statistical Division units. At each level of the classification the units in aggregate cover the whole of Australia without gaps or overlaps. The ASGC defines 65 Statistical Divisions across Australia. The ASGC also contains units based on populations and remoteness from services.

Further details of the units defined in the ASGC and of the areas covered by them are contained in the publication Australian Standard Geographical Classification (1216.0) which is available from the ABS web site.

The standard classifications of geographic area available for the 2004–05 NATSIHS are:

- States, Territories and Australia;
- Remoteness. The ASGC Remoteness classification, which is based on the plus version of the Accessibility/Remoteness Index of Australia (ARIA+) mapped to CDs from the 2001 Census of Population and Housing, and classified to the following categories:

ASGC remoteness category	*Index values*
Major cities of Australia	0 up to and including 0.2
Inner regional Australia	Greater than 0.2 up to and including 2.4
Outer regional Australia	Greater than 2.4 up to and including 5.92
Remote Australia	Greater than 5.92 up to and including 10.53
Very remote Australia	Greater than 10.53

Each respondent is classified to the full five category classification above, based on the CD in which they resided (and were enumerated). Generally output categories for the survey are non-remote (Major city, inner and outer regional) and remote (remote and very remote). However use of the full five category classification is possible.

GEOGRAPHIC CLASSIFICATIONS *continued*

Although provision has been made to compile statistics from the survey in respect of geographic areas within States and Territories, there are limits to the extent to which survey data can usefully be compiled for those areas, particularly for areas with smaller populations. The ability of the survey to provide reliable estimates for sub-State areas varies from area to area according to the number of persons in the area which were included in the sample and the level of data disaggregation (e.g. number of variables cross-classified, level of detail required for each variable) attempted.

In addition to the geographic classifications outlined above, data from the 2004–05 NATSIHS may be compiled in respect of other geographic units (to suit individual user requirements) on request. Such requests will be considered on a case-by-case basis considering sampling, data reliability and confidentiality issues and the additional costs to the user involved in programming to create the units.

CHAPTER 7 DATA QUALITY AND INTERPRETATION OF RESULTS

CONTENTS

DATA QUALITY

Although care was taken to ensure that the results of the 2004–05 NATSIHS are as accurate as possible, there are certain factors which affect the reliability of the results and for which no adequate adjustments can be made. One such factor is known as sampling variability. Other factors are collectively referred to as non-sampling errors. These factors, which are discussed below, should be kept in mind in interpreting results of the survey.

Sampling variability

Since the estimates are based on information obtained from a sample of the population, they are subject to sampling variability (or sampling error), i.e. they may differ from the figures that would have been obtained from an enumeration of the entire population, using the same questionnaires and procedures. The magnitude of the sampling error associated with a sample estimate depends on the following factors:

- Sample design - there are many different methods which could have been used to obtain a sample from which to collect data on health status, health-related actions and health risk factors. The final design attempted to make survey results as accurate as possible within cost and operational constraints. (Details of sample design are contained in Chapter 2, under Sample Design and Selection)
- Sample size - the larger the sample on which the estimate is based, the smaller the associated sampling error
- Population variability - the third factor which influences sampling error is the extent to which people differ in regard to the particular characteristic being measured. This is referred to as the population variability for that characteristic. The smaller the population variability of a particular characteristic, the more likely it is that the population will be well represented by the sample, and therefore the smaller the sampling error. Conversely, the more variable the characteristic, the greater the sampling error.

Measure of sampling variability

One measure of sampling variability is the standard error. There are about two chances in three that a sample estimate will differ by less than one standard error from the figure that would have been obtained if all in-scope dwellings had been included in the survey, and about nineteen chances in twenty that the difference will be less than two standard errors. The relative standard error (RSE) is the standard error expressed as a percentage of the estimate to which it relates.

Very small estimates may be subject to such high relative standard errors as to detract seriously from their value for most reasonable purposes. Only estimates with relative standard errors less than 25% are considered sufficiently reliable for most purposes. However, estimates with relative standard errors of 25% or more are included in ABS publications of results from this survey: estimates with an RSE of 25% to 50% are preceded by the symbol * as a caution to indicate that they are subject to high relative standard errors, while estimates with an RSE greater than 50% are preceded by the symbol ** to indicate the estimate is too unreliable for general use.

Standard errors on estimates from this survey are available in 'actual' form. This is obtained through a process called replicate weighting. This is a process whereby a small group of households in the sample are assigned a zero weight and then the remaining records are reweighted to the survey benchmark population. For the 2004–05 NATSIHS this process was repeated 250 times to produce 250 replicate weights. These replicate

Measure of sampling variability continued

weights are used for calculating the variances of the estimate for each replicate group and the original estimate, by squaring the difference and summing these differences over all of the 250 replicate groups. The difference between the replicate estimate and the original estimate is then used in calculating the standard error of the estimate. In the 2004–05 NATSIHS the Jackknife method was used for calculating the standard errors of survey estimates. See Appendix 7 for further details.

This process enables the calculation of an actual standard error on every estimate produced from a survey. High RSEs are identified in the *National Aboriginal and Torres Strait Islander Health Survey, 2004–05* (cat. no. 4715.0), using the * and ** symbols. Publication tables containing actual RSEs calculated using the replicate weight methodology are contained in spreadsheets in *National Aboriginal and Torres Strait Islander Health Survey, Australia, 2004–05* (cat. no. 4715.0.55.005).

Significance testing on differences between survey estimates

For comparing estimates between surveys or between populations within a survey (such as comparisons between States or Remoteness Area) it is useful to determine whether apparent differences are 'real' differences between the corresponding population characteristics or simply the product of differences between the survey samples. One way to examine this is to determine whether the difference between the estimates is statistically significant. This may be done by calculating the standard error of the difference between the estimates (x and y) and using that to calculate a test statistic given in the formula below:

$$\frac{|x-y|}{SE(x-y)}$$

If the value of this test statistic is greater than 1.96 then we may say there is good evidence of a real difference in the two populations with respect to that characteristic. Otherwise, it cannot be stated with confidence that there is a real difference between the populations.

Estimates in tables 1, 4 and 6 of the Summary Publication from this survey are annotated to indicate whether or not the estimates which have been compared are statistically significantly different from each other with respect to the test statistic. In all other tables which do not show the results of significance testing, users should take account of RSEs when comparing estimates for different populations.

Age standardisation

Another useful tool for comparing estimates between surveys or between populations within a survey (such as comparisons between non-remote and remote areas) is to age standardise the estimates being compared. As many health characteristics are strongly age-related, an apparent difference between estimates may be (in part) due to a different age profile of the populations being compared. This is particularly the case in comparing the health characteristics of Indigenous Australians with the non-Indigenous population, because the Indigenous population has a much younger age profile. Age standardisation is a technique whereby the estimates are rederived according to a single common population age profile with the goal of ruling out age as a factor influencing the differences observed between the estimates. The age standardised estimates of prevalence are those estimates that 'would have occurred' if the estimates being compared related to populations which had the standard age composition.

Age standardisation continued

In published output from the 2004-05 NATSIHS age standardisation has been carried out using the 'direct' standardisation technique. The standard (ie common) population used was the estimated resident population at 30 June 2001. Age standardised summary rates were calculated using the following formula:

$$C_{direct} = \sum_{a}(C_a \times P_{sa})$$

where:

- C_{direct} = the age standardised rate for the population of interest
- a = the age categories that have been used in the age standardisation
- C_a = the estimated rate for the population being standardised in age category a
- P_{sa} = the proportion of the standard population in age category a.

The age categories used in the standardisation for this publication were 0–4 years, 5–14 years, 15–24 years, 25–34 years, 35–44 years, 45–54 years, 55 years or over.

Age standardised summary rates may not be appropriate for particular variables, notwithstanding that the populations to compare have different age distributions and the variables in question are related to age. It is also necessary to check that the relationship between the variable of interest and age is broadly consistent across the populations. For example the rate of diabetes in the Indigenous population might be twice that of the non-Indigenous population in each age group. However, if the rates vary differently with age for the two populations this indicates an interaction between age and population and age standardised comparisons are not valid. For the summary publication analysis showed that the variables 'Ear/hearing problems/diseases' and 'Never visited the Dentist' were unsuitable for age standardisation. For these variables it is necessary to compare the unstandardised prevalences for each age group.

It should be noted that age standardised estimates are used for comparison purposes only; the estimates themselves do not represent any real population parameters.

Non-sampling errors

The imprecision due to sampling variability should not be confused with inaccuracies that may occur for other reasons, such as errors in response and reporting. Inaccuracies of this kind are referred to as non-sampling errors, and may occur in any enumeration whether it be a full count or a sample. The major sources of non-sampling error are:

- errors related to the survey scope;
- response errors such as incorrect interpretation or wording of questions, interviewer bias, etc.;
- bias due to non-response, because health status, health related behaviour and other characteristics of non-responding persons may differ from responding persons; and
- errors in processing such as mistakes in the recording or coding of the data obtained.

These sources of error are discussed below.

Non-sampling errors continued

ERRORS RELATED TO SURVEY SCOPE

Some dwellings may have been inadvertently included or excluded because, for example, the distinctions between whether they were private or non-private dwellings may have been unclear. All efforts were made to overcome such situations by constant updating of lists both before and during the survey. Also, some persons may have been inadvertently included or excluded because of difficulties in applying the scope rules concerning the identification of Aboriginal and Torres Strait Islanders and usual residents.

RESPONSE ERRORS

In this survey response errors may have arisen from three main sources: deficiencies in questionnaire design and methodology; deficiencies in interviewing technique; and inaccurate reporting by the respondent.

Errors may be caused by misleading or ambiguous questions, inadequate or inconsistent definitions of terminology used, or by poor overall survey design (for example context effects where responses to a question are directly influenced by the preceding questions). In order to overcome problems of this kind, individual questions and the questionnaire overall were thoroughly tested before being finalised for use in the survey. Testing comprised pre-testing, a pilot test and a dress rehearsal.

As a result of the testing, modifications were made to question design, wording, ordering and associated prompt cards, and some changes were made to survey procedures. In considering modifications it was sometimes necessary to balance better response to a particular item/topic against increased interview time or effects on other parts of the survey. The result is that in some instances it was necessary to adopt a workable/acceptable approach rather than an optimum approach. Although such changes would have had the effect of minimising response errors due to questionnaire design and content issues, some will inevitably have occurred in the final survey enumeration.

Reference periods used in relation to each topic were selected to suit the nature of the information being sought; in particular to strike the right balance between minimising recall errors while ensuring the period was meaningful and representative (from both respondent and data use perspectives) and would yield sufficient observations in the survey to support reliable estimates. It is likely that the reference periods did not suit every person for every topic and that difficulty with recall may have led to inaccurate reporting in some instances.

Reporting errors may also have occurred because the survey interview is quite long, and particularly for those respondents reporting for themselves and children, errors may have resulted from interviewer and/or respondent fatigue (i.e. loss of concentration).

While efforts were made to minimise errors arising from deliberate misreporting or non-reporting by respondents (e.g. through emphasising the importance of the data, and through checks on consistency within the survey instrument), some instances will have inevitably occurred.

Non-sampling errors continued

RESPONSE ERRORS *continued*

Lack of uniformity in interviewing standards may also result in non-sampling errors. Training and retraining programs, regular supervision and checking of interviewers' work were methods employed to achieve and maintain uniform interviewing practices and a high level of accuracy in recording answers on the survey questionnaire (see Data Collection: Interviews). The operation of the CAI instrument in non-remote areas, and the built in checks within it ensure that minimum data recording standards are maintained. The use of paper forms in remote areas, however, could have resulted in the incorrect sequencing of questions and other errors. Non-uniformity of the interviewers themselves is also a potential source of error in that the impression made upon respondents by personal characteristics of individual interviewers such as age, sex, appearance and manner, may influence the answers obtained.

NON-RESPONSE BIAS

Non-response may occur when people cannot or will not cooperate in the survey, or cannot be contacted by interviewers. Non-response can introduce a bias to the results obtained in that non-respondents may have different characteristics and behaviour patterns in relation to their health than those persons who responded to the survey. The magnitude of the bias depends on the extent of the differences and the level of non-response.

Data to accurately quantify the nature and extent of the differences in health characteristics between respondents in the survey and non-respondents are not available. Under or over-representation of particular demographic groups in the sample are compensated for by calibration to benchmark totals including at the state, remoteness area, sex and age group levels. As well, a non-response adjustment for the non-community sample was made based on the number of Indigenous persons in each Collection District. Other disparities are not adjusted for.

Individuals for whom a partial response was obtained were treated as fully responding for estimation purposes if sufficient information was recorded e.g. if the questionnaire was commenced and respondents were sequenced through the form to the end any non-response items were coded to 'not stated'. Partially responding households i.e. where one selected person was fully or adequately responding and others were non-response or partial responses, were retained as part of the survey sample also, in order to increase sample levels. However non-response and incomplete selected person records were removed from these households prior to weighting.

PROCESSING ERRORS

Errors may also occur during data processing, between the initial collection of the data and final compilation of statistics. These may be due to a failure of computer editing programs to detect errors in the data or may occur during the manipulation of raw data to produce the final survey data files, for example, in the course of deriving new data items from raw survey data or during the estimation procedures or weighting of the data file.

To minimise the likelihood of these errors occurring a number of quality assurance processes were employed. These included:

Non-sampling errors continued

PROCESSING ERRORS *continued*

- Comprehensive quality assurance procedures applied to the coding of conditions and alcohol data; initially manual coding and later in processing a partially automated coding system was introduced.
- computer editing — edits were devised to ensure that logical sequences were followed in the questionnaires, that necessary items were present and that specific values lay within certain ranges. These edits were designed to detect reporting and recording errors, incorrect relationships between data items or missing data items.
- Data file checks — at various stages during processing (such as after computer editing and subsequent amendments, weighting of the file and afer derivation of new data items) frequency counts and/or tabulations were obtained from the data file showing the distribution of persons for different characteristics. These were used as checks on the contents of the data file, to identify unusual values which may have significantly affected estimates and illogical relationships not previously identified by edits. Further checks were conducted to ensure consistency between related data items and in the relevant populations. In particular data was closely checked for remote areas and the Women's health and Substance user forms to identify errors which may have occurred during the entering of data from the original questionnaires. Where potential errors were identified, the original paper questionnaire was checked for confirmation of whether it was a data entry error or was 'as reported'.
- Where possible, checks of the data were also undertaken to ensure consistency of the survey outputs against results of the 2001 NHS(I) and data available from other sources.

Other factors affecting estimates

In addition to data quality issues, there are a number of other factors, both general and specific to individual topics, which should be considered in interpreting the results of this survey. The general factors affect all estimates obtained, but may affect topics to a greater or lesser degree depending on the nature of the topic and the uses to which the estimates are put. This section outlines these general factors. Additional issues relating to the interpretation of individual topics are discussed in the topic descriptions provided in other sections.

- Sampling variability: It is important to bear in mind that survey estimates are derived from a sample of the population and are, therefore, subject to sampling variability. Consideration should be given to whether estimates are sufficiently reliable for the uses to which they are to be put. Sampling variability and its implications for data reliability are discussed in Data Quality: Sampling Variability.
- Scope: The scope of the survey defines the boundaries of the population to which the estimates relate. The most important aspect of the survey scope affecting the interpretation of estimates from this survey is that institutionalised persons (including inpatients of hospitals, nursing homes and other health institutions) and other persons resident in non-private dwellings (e.g. hotels, motels, boarding houses) were excluded from the survey.

Other factors affecting estimates continued

- Personal interview and self assessment nature of the survey: The survey was designed using personal interview (with proxy interviews for children aged under 15 years), to obtain data on respondents' own perceptions of their state of health, their use of health services and aspects of their lifestyle. The information obtained is therefore not necessarily based on any professional opinion (e.g. a doctor, nurse, dentist, etc.) or on information available from records kept by respondents (except for details of child immunisation). For this reason data from this survey are not necessarily compatible with data from other sources or with data collected by other methods.
- Concepts and definitions: The scope of each topic and the concepts and definitions associated with individual pieces of information should be considered when interpreting survey results.
- Wording of questions: To enable accurate interpretation of survey results it is essential to bear in mind the precise wording of questions used to collect individual items of data, and particularly in those cases where the question involved a series of 'running prompts' or where a prompt card was used.
- Reporting of medical conditions is improved if direct questions are asked about that specific condition, or that condition is otherwise specifically identified (e.g. such as through a prompt card in non-remote areas or verbal prompts in remote areas), than if left to the respondent to identify in response to a general question. It is not practicable to mention all conditions in questions or prompts; the approach taken in the survey was to identify NHPA conditions and some other conditions of particular interest or known from previous surveys to require special attention. The fact then that some conditions are specifically identified in the questionnaire and others are not will affect the relative response levels (and possibly accuracy) between conditions, and where that level and nature of identification has changed between surveys, to also affect comparability over time.
- Reference periods: All results should be considered within the context of the time references that apply to the various topics. A variety of reference periods was used for specific topics (e.g. one week for alcohol consumption, two weeks for exercise and actions taken, four weeks for events resulting in injury, six months for long term conditions, etc). Caution should be exercised when attempting to extrapolate results of this survey to time periods other than those on which the estimates are based or when attempting to interpret cross-classifications of items which used different reference periods.
- Although it can be expected that a larger section of the population would have reported taking a certain action if a longer reference period had been used, the increase is not proportionate to the increase in time. While it is possible to produce reasonable estimates of the number of actions taken in a year by multiplying the estimate for two weeks by 26, it is not possible to produce, by this method, estimates of the number of persons who took those actions. This should be taken into consideration when comparing results from this survey to data from other sources where the data relates to different reference periods.

Other factors affecting estimates continued

- Coding framework: The coding framework (i.e. the classifications and categories) used in the survey provides an indication of the level of detail available in survey output. However, the coding framework adopted had to take account of the ability of respondents to provide the data, and may limit the amount of detail that can be provided in statistical output. For example, the output classifications of medical conditions reported by respondents were developed in recognition of the type of information reported (e.g. non-medical terminology, symptoms rather than conditions, generic rather than specific terminology, etc.). One result of this is that some caution should be used in interpreting counts from this survey of the number of medical conditions experienced, since such counts would, in part, be a function of the categories contained in the classification. The major classifications used in this survey are briefly discussed under the relevant topic descriptions in Content and Methods. Copies of, or references to, the full classifications are provided in Appendixes.
- Collection period: It is important to bear in mind the survey collection period, from late August 2004 to early July 2005, when considering results in perspective, or when comparing them with data from another source.

INTERPRETATION OF RESULTS

As noted above, there is a variety of factors which have impacted on the quality of the data collected. Through various means in the development and conduct of this survey the ABS has sought to minimise the effects of these factors; however, it is only sampling error which can be quantified enabling users of the data to allow for possible errors when using/interpreting the data. For the other issues affecting the data, information is not available from the survey to enable these effects to be quantified. The relative importance of these factors will differ between topics, between items within topics, and by characteristics of respondents.

Comments have been included in individual topic descriptions in this publication to alert users of the data to the more significant issues likely to effect results for that topic or items within it. In part these notes reflect ABS experience of past Indigenous health and other surveys and feedback from users of data from those surveys, ABS and other research on survey methods and response patterns, on testing for this survey, on comparisons between survey data and other data sources and in part on 'common sense'. However, these comments are indicative only, and are not necessarily comprehensive of all factors impacting results, nor necessarily of the relative importance of those factors.

Against this background, the following general comments are provided about interpreting data from the survey:

- The survey aims to provide statistics which represent the Indigenous population or component groups of the Indigenous population; the survey does not aim to provide data for analysis at the individual level. While errors of the types noted above may occur in individual respondent records, if these errors are not repeated commonly throughout the respondent population, they will have little impact on the estimates from the survey, and hence little impact on the story to be gleaned from those estimates.

INTERPRETATION OF RESULTS *continued*

- The survey data are all self reported. For some topics/items their self reported nature is the purpose/value of the item (i.e. self assessed health) while for some others self reported data are the only source of the information, particularly information with a population group perspective (e.g. insurance status, diet, alcohol consumption and smoking behaviour). For other topics/items information is available from other sources (e.g. hospital records), and because of the different sources and methods, including the self reported nature of the survey data, the information will likely differ from those sources. In the case of data from administrative sources it is likely (though not necessarily certain) that those data will be more accurate than the survey data. However, the survey data should not be discounted on that basis; survey data can often show other dimensions to the data (e.g. population group dimension, related and other health characteristics, information about uses of other health services) which are not available from administrative sources.
- Some survey topics, such as alcohol consumption, have some known data quality issues. While this means the data should be interpreted with care, the information is still considered valuable for certain uses. For example, while the overall levels of alcohol consumption described by the survey should be interpreted with caution, the data are still considered useful in describing consumption patterns across days of the week, types of drink consumed, relative levels of consumption across population groups, alcohol consumption in relation to other risk behaviours or characteristics, and is useful for monitoring changes in the levels and patterns of consumption over time. Notes regarding any known data quality issues are contained in the individual topic descriptions in this publication.
- Although various reference periods are used throughout the survey for different topics (e.g. current, usual, last week, last 2 weeks, last 4 weeks) the survey essentially provides a 'point in time' picture of the health of the population and of population sub-groups. The survey provides information about the prevalence of characteristics, not the incidence of those characteristics or of changes in characteristics (except in terms of differences between surveys). Because the survey was conducted over a 10 month period, the results essentially are an average over that period e.g. they represent a typical week, fortnight, etc in that period. In some cases these estimates can reasonably be expanded to represent a different reference period. For example, the number of doctor consultations in a two week period can be multiplied by 26 to provide an estimate of consultations over a year.

COMPARABILITY BETWEEN 2001 NHS(I) AND 2004–05 NATSIHS

Although the 2004–05 NATSIHS is similar to the 2001 NHS(I) in many ways, there are some differences in sample design, survey content, definitions, etc. which affect the degree to which data are directly comparable between the surveys. These are:

- The sample size of the 2004–05 NATSIHS (10,439 person records) was significantly larger than the sample size of the 2001 NHS(I) (3,681 person records). The difference in sample sizes means that the estimates from the 2004–05 survey generally have smaller standard errors and therefore can be considered more reliable than those from the 2001 NHS(I).

COMPARABILITY BETWEEN 2001 NHS(I) AND 2004–05 NATSIHS continued

- In the 2001 NHS(I), selected households were screened to identify only those households where at least one adult (18 years or over) of Aboriginal and/or Torres Strait Islander origin were usually resident. This meant that Indigenous children living in households in non-remote areas where there was no Indigenous adult usually resident (up to one quarter of all Indigenous children in non-remote areas reside in such households) did not have a chance of selection. In the 2004–05 NATSIHS procedures were changed to provide for the selection of Indigenous children in households with no resident Indigenous adult.
- Minor differences in the sample design and estimation for the two surveys also exist. However, most of these differences are reflected in the differing standard errors of estimates. That is, the only way these differences affect comparability is in the difference they make to the standard errors of estimates. Those remaining differences are not expected to have any significant affect on the comparability of the surveys at the national level.

Apart from the sample design and methodological differences discussed above, the main differences between the 2004–05 NATSIHS and 2001 NHS(I) which may affect the comparability of data presented in this publication, are outlined below.

Throughout the topic descriptions and in other parts of this publication, comments have been made about the changes between surveys and their expected impact on the comparability of data. These are general comments based on results of testing, ABS experience in survey development, and a preliminary examination of results from the 2004–05 survey. As a result they should not be regarded as definitive statements on comparability and may omit the types of findings which might result from a detailed analysis of the affects of all changes made.

The following table summarises the key differences between the 2001 and 2004–05 surveys, and hence the degree of comparability between them:

GENERAL SURVEY CHARACTERISTICS

Survey characteristic	*2001 NHS(I)*	*2004-05 NATSIHS*
Collection method	Personal interview with adult respondents; proxy interview for children less than 18 years.	Personal interview with adult respondents; proxy interview for children less than 15 years. Personal interview with children aged 15–17 years with parental consent; otherwise interview by proxy.
Questionnaires	Household form; Adult and child questionnaires; Women's supplementary questionnaire	Non-Remote - CAI instrument, incorporating household, adult and child components - Women's and Substance Use supplementary paper questionnaires Remote - Household, household spokersperson, adult and child questionnaire
Sample coverage	Private dwellings only Separate non-remote and remote area	Private dwellings only All States and Territories Separate non-remote and remote area Remoteness classifications Additional sample of Torres Strait Islander persons.
Sample design/size	Non-remote - one Indigenous adult and up to two Indigenous children aged 0–17 years - fully responding H'holds = 1,110 - final sample = 2,124 persons Remote - one Indigenous adult and up to one Indigenous child aged 0–17 years (community areas. Non-community as per non-remote) - fully responding H'holds = 827 - final sample = 1,557 persons	Non-remote - up to two Indigenous adults per dwelling and up to two Indigenous children aged 0–17 years - fully responding H'holds = 3,018 (final sample: 3,133) - final sample = 6,345 persons Remote - up to one Indigenous adult per dwelling and up to one Indigenous child aged 0–17 years (community areas. Non-community as per non-remote) - fully responding H'holds = 1,996 (final sample: 2,101) - final sample = 4,094 persons
Enumeration period	June 2001 to November 2001	August 2004 to July 2005
Collection methodology	Pen and paper questionnaires Optical Mark Reader (OMR) and key data entry Manual coding, supported by CAC systems.	Non-remote - CAI and supplementary paper questionnaires - automated coding, supported by manual and CAC systems Remote - pen and paper questionnaires, key data entry - automated coding, supported by manual and CAC systems
Main output units	Person	Person

Partial enumeration of households

As the 2004–05 survey sub-sampled Indigenous persons in households (two adults and two children (0–17 years) in non-remote areas and one adult and one child in remote areas) complete enumeration only occurred in some households. Characteristics of the household, family, income unit, etc in which respondents live are available as person

Partial enumeration of households continued

level items and, in some cases, household level (i.e. information collected from the household spokesperson or geographic information). Family and income unit level results are not produced.

In the 2004–05 NATSIHS, although only selected people were fully enumerated, basic demographic characteristics were collected about all household members. As well as assisting in the derivation of household, family, etc. characteristics (as outlined above) this information enables the position of the selected persons (adults and children) in the household, family, etc to be taken into account when analysing their health (for example whether youngest, oldest or only child) and in other analysis (number and ages of children in households containing smokers). In the 2001 NHS(I) information is only available about persons enumerated in the survey, not all people in the household.

Enumeration period

The 2004–05 NATSIHS was enumerated over a longer period than the 2001 NHS(I): 2004–05 from end August 2004 to beginning of July 2005; 2001 from June to November. The 2004–05 survey was not conducted over all of the winter months, while the 2001 survey was over the first half of the year. Research using data from previous national health surveys had shown minimal seasonal effects on the data for the topics covered in these surveys; however, statistically significant seasonal differences were found for some items in the alcohol consumption, visits to other health professionals and exercise topics. This should be considered in comparing data for these topics between surveys.

Survey content

The following tables summarise the main differences in content between the 2004–05 NATSIHS and the 2001 NHS(I).

SURVEY CONTENT, Health status indicators

Topics covered	*2001 NHS(I)*	*2004–05 NATSIHS*	*Main items available from 2004–05*	*Comments on main differences between 2001 NHS(I) and 2004–05 NATSIHS*
General health - Self assessed health status	X	X	Self assessed health status	Same content as in 2001
Health transition	X	X	Health transition	Same content as in 2001
Quality of life	X		N/A	Not collected in 2004–05
Asthma	X	X	Asthma status; whether has asthma action plan (non-remote); type of plan; whether used pharmaceutical medications for asthma;	Number and type of pharmaceutical medications used and Nebuliser use (non-remote) not collected in 2004–05
Asthma symptoms	X		N/A	Not collected in 2004–05
Cancer	X	X	Cancer status; age diagnosed; type of cancer;	Whether takes medication not collected in 2004–05. Number and type of pharmaceutical medication used (non-remote) not collected in 2004–05.
Circulatory conditions	X	X	Circulatory condition status; types of condition; whether used pharmaceutical medications for circulatory conditions;	Number and type of pharmaceutical medications used (non-remote) not collected in 2004–05
Arthritis & Osteoporosis	X	X	Arthritis & osteoporosis status; type of arthritis & osteoporosis (non-remote); whether used pharmaceutical medications for arthritis & osteoarthritis.	New sections in 2004–05. Covered in general illness section in non-remote areas in 2001. Arthritis cover in general illness section and osteoporosis not covered in remote areas in 2001.
Diabetes/ High Sugar Levels (HSL)	X	X	Diabetes/HSL status; age told had diabetes/ HSL; whether having daily insulin injections; whether used pharmaceutical medications for diabetes/ HSL; type of other actions taken to manage condition; whether condition interferes with usual activity (non-remote); whether diabetes/HSL related sight problems; period since last visited optometrist/eye specialist (non-remote).	Number and type of pharmaceutical medications used (non-remote) not collected in 2004–05
Other long term conditions	X	X	Types of condition.	Same content as in 2001
Cause of reported long term conditions	X	X	Whether any long term condition is the result of injury; type of long term condition due to injury;	Whether any long term condition was work related (non-remote) and place where injury occurred not collected in 2004–05
Injuries	X	X	Whether "defined" injury event in last 4 weeks resulted in action; whether resulted in injury; type of occurrence; type of injury; parts of body injured; activity at time of event; location of event; whether attended for treatment.	Event and injury details collected for the last 3 occasions (in the last 4 weeks) in 2001; collected for most recent event only in 2004-05;Whether had time off work/study or had to cut down on usual activites not collected in 2004-05.
Oral Health		X	Type of dental professional last consulted; whether lost any of own teeth; number of teeth lost; whether has dentures/ false teeth; whether needs dentures to eat properly.	Not collected in 2001.
Kidney disease and dialysis		X	Kidney disease status; whether ever told has kidney disease; whether currently has kidney disease; whether ever had dialysis.	Not collected in 2001. Used as prompt in general conditions section in remote areas in 2001.
Social and emotional wellbeing		X	Psychological distress (reduced K10); impact of psychological distress; positive feelings (reduced SF–36); feelings of anger; cultural identification.	Not collected in 2001

SURVEY CONTENT, Health related actions

Topics covered	*2001 NHS(I)*	*2004–05 NATSIHS*	*Main items available from 2004–05*	*Comments on main differences between 2001 NHS(I) and 2004–05 NATSIHS*
Stays in hospital	X	X	Whether admitted in last 12 months; number of admissions; Most recent admission - number of nights, patient type (non-remote), public/private hospital type; reason chose admission as Medicare patient; whether discharged in last 2 weeks, whether made copayment (non-remote).	Hospital type, reasons for admission as Medicare patient and copayments new items in 2004–05 (non-remote).
Visits to casualty, outpatients, day clinics	X	X	Whether visited in last 2 weeks; number of visits; whether outpatients visit related to admission (non-remote).	Same content as in 2001
Doctor consultations	X	X	Time since last visit; number of visits in last 2 weeks, separately for GP and Specialist (non-remote), combined GP and specialist (remote). Whether made copayment (non-remote)	Consultations to GP or Specialist not collected separately in remote 2004–05. Copayments new item in 2004–05 (non-remote)
Dental consultations	X	X	Time since last visit; number of visits in last 2 weeks; place of last consultation; usual reason for consultation.	Place of last consultation and usual reason for consultation not asked in 2001.
Consultations with other health professionals (OHP)	X	X	Whether visited in last 2 weeks; number of visits by type of OHP; whether co-payment required.	Information on copayments not asked in 2001.
Days away from work/study: own illness	X	X	Whether had days away in last 2 weeks due to own illness; number of days	Only collected whether had days away from work or study in remote in 2001. Days were recorded against work and school as appropriate in 2004-05 compared to being recorded against work only in 2001.
Days away from work/school as carer	X	X	Whether had days away in last 2 weeks as carer; number of days.	Not collected in remote areas in 2001. Days were recorded against work and school as appropriate in 2004/5 compared to being recorded against work only in 2001.
Other days of reduced activity	X	X	Whether cut down on usual activities in last 2 weeks due to illness; number of days.	Not collected in remote in 2001. Same content as in 2001.
Use of pharmacetical medications	X	X	See asthma, heart and circulatory conditions, diabetes, arthritis and osteoporosis	Types of medications used not collected in 2004-05.
Unmet need		X	Whether needed to go to hospital, doctor, dentist, OHP but didn't; reason didn't go.	Not collected in 2001.
Discrimination		X	Actions/feeling resulting from discrimination; treatment when seeking health care compared to non Indigenous; whether felt treated badly because Indigenous.	Not collected in 2001.

SURVEY CONTENT, Health risk factors

Topics covered	*2001 NHS(I)*	*2004–05 NATSIHS*	*Main items available from 2004–05*	*Comments on main differences between 2001 NHS(I) and 2004–05 NATSIHS*
Adult immunisation	X	X	Whether had influenza and pneumococcal vaccines; whether influenza vaccination was free of charge (non-remote).	Whether influenza vaccination obtained by prescription (non-remote) collected in 2001.
Alcohol consumption	X	X	Period since last drank; days consumed in last week; quantity of alcohol by type of drink consumed in last week (max 3 days); alcohol risk level; frequency of drinking 7-10/11+ drinks (male) and 5-6/7+ drinks (female).	Graduated frequency questions added in 2004–05
Breastfeeding	X	X	Whether currently/ever breastfed; Whether breastmilk main source.For non-remote areas: whether ever given infant formula; age first given infant formula; whether ever given other milk substitute, age first given other milk substitute; age at introduction of solid food; main reason stopped breastfeeding; type of other sources.	Additional content in 2004-05 of whether breastmilk main source. Additional item in non-remote 2004–05 of type of sources.
Body mass	X	X	Self reported height, weight and body mass; Body mass index. Whether weight/height measured (remote).	In remote 2004–05 identification of whether respondent was weighed/measured.
Children's immunisation	X	X	Collected in non-remote only. Immunisation status against recommended National Immunisation Guidelines.	For 2004–05, immunisation status for each type of vaccination was only collected for those respondents that had immunisation records.New HepB and course completion questions for 10-17 year olds in 2004–05.
Dietary habits	X	X	Type of milk usually consumed; usual daily intake of vegetables & fruit (non-remote); whether eats vegetables & fruit (remote); frequency of adding salt after cooking; food security.	Not collected in remote in 2001. New item for food security of whether went without food when ran out of food and money to buy more. Deliberate consumption of foods, drinks and supplements with added folate collected in 2001.
Exercise	X	X	Frequency and duration of exercise in last 2 weeks; exercise level, whether walked yesterday for transport, number of times walked and total duration.	Not collected in remote in 2001. Same content as in 2001 plus new questions relating to walking for transport
Smoking	X	X	Smoker status; number of smokers in household, age started/stopped smoking regularly.	Expanded data set in 2004–05 compared with 2001. New questions to support more detailed status item and age started and ceased smoking.
Substance Use		X	Collected in non-remote only. type of substances ever used; type of substances used in last 12 months; whether ever used substances; whether ever used substances in last 12 months.	Not collected in 2001.
Sun protection	X		N/A	Not collected in 2004–05

SURVEY CONTENT, Women's supplementary health topics

Topics covered	*2001 NHS(I)*	*2004–05 NATSIHS*	*Main items available from 2004–05*	*Comments on main differences between 2001 NHS(I) and 2004–05 NATSIHS*
Breast examination	X	X	Knowledge of mammogram; whether ever had mammogram; whether has regular mammograms; time between mammograms.	Same content in 2004–05 as in 2001 with addition of frequency question.
Contraception /protection	X	X	Whether ever taken oral contraceptive; whether currently taking oral contraceptive; main reason taking oral contraceptive; age first started taking oral contraceptive; type of contraception currently used, reasons not using contraception.	Main reason taking oral contraceptive not collected in 2001. Different collection method for type of contraceptions taken in 2004–05 as included non-contraception practices and change to question wording.
Hysterectomy	X		N/A	'Not specifically collected as a question in 2004-05. Listed as an item response in the contraception/protection question.
Pap Smear Test	X	X	Knowledge of pap smear; whether ever had pap smear test; time since last test; whether has regular tests; frequency between tests.	Usual time between pap smear tests not asked in remote in 2001; whether has tests every two years not asked in 2001.
Breastfeeding history	X	X	Whether had any babies; whether breastfed any children.	Reduced content in 2004–05.

SURVEY CONTENT, Population characteristics

Topics covered	*2001 NHS(I)*	*2004–05 NATSIHS*	*Main items available from 2004–05*	*Comments on main differences between 2001 NHS(I) and 2004–05 NATSIHS*
General demographics	X	X	Sex; age; marital status (social); Indigenous status; main language spoken at home; Family type; Household size, composition, type; Income unit type; Location.	Proficiency in English (non-remote), and registered marital status not collected in 2004-05
Education	X	X	Whether attending school; highest level of school completed; whether has non-school qualification; level of highest educational attainment; whether currently studying full or part time.	Type educational institution currently attending and level of highest educational attainment not collected in 2001. Changes to question module and data items in accordance with new ABS standards, and coding of qualification to ASCED.
Labour force	X	X	Labour force status; status in employment; occupation, industry and industry sector of main job; hours worked; duration of unemployment.	Duration of unemployment, industry not collected in remote in 2001; Shift work not collected in 2004–05.
Income	X	X	Personal income - Level; sources and main source; type of pension/benefit received. Income unit income - Level, equivalised level. Household - Level, equivalised level.	Household income information not collected in 2001;
Financial Stress		X	Ability to raise funds in an emergency; whether had days without money for basic living in last 2 weeks/12 months.	Not collected in 2001.
Housing	X	X	Dwelling type and location; number of bedrooms; tenure; landlord type.	Tenure and location added in 2004–05.
Private health insurance (PHI)/health cards	X	X	Non-remote.Whether has PHI; type of cover; reasons having/not having PHI; whether Govt concession card: type of health cards.	Type and length of PHI membership and DVA cards not collected in 2004–05.

Comparability of data about long term conditions

There are a number of issues effecting the comparability between surveys of data for long term medical conditions; these include the methodology used in the questionnaire to elicit responses, the ways in which those responses were recorded, and the ways in which those responses were turned into coded information for the survey data file. These issues are discussed in general terms below; further discussion of issues related to particular NHPA conditions is contained in the relevant condition sections of this Guide. See also the general description of the methodologies used in the 2004–05 survey for

Comparability of data about long term conditions continued

collecting data about medical conditions, which is presented at the beginning of Chapter 3.

METHODOLOGICAL ISSUES

The methodologies used to elicit responses regarding medical conditions were similar in both the 2001 and 2004-05 non-remote and remote surveys; a combination of direct questions, general questions supported by prompt cards (either showing examples of conditions, or a list of conditions from which respondents are asked to select) or verbal prompting, and open ended questions. Experience has shown that respondents are more likely to report a condition in response to a specific question about that condition, than in response to a more general condition. Changes between the surveys which may have impacted comparability include:

- Low blood pressure/hypotension is listed on the prompt card used in non-remote areas for the cardiovascular section of the questionnaire and verbally prompted for in remote areas in 2004–05 but was not specifically mentioned in questions or prompt cards used in 2001.
- Macular degeneration is listed on the prompt card used in non-remote ares for the eye and sight section of the questionnaire in 2004–05 but was not specifically mentioned in questions or prompt cards used in 2001.
- Specific questions were asked about osteoporosis in the 2004–05 survey. In the 2001 survey it was listed on a prompt card in non-remote areas for the general question about long term conditions and in remote areas it was not mentioned.
- Specific questions were asked about kidney disease in the 2004–05 survey, whereas in the 2001 survey it was not mentioned in non-remote areas and in remote areas it was prompted for in the question relating to long term conditions.
- In both surveys the questions to identify cases of arthritis, rheumatism or gout were asked in the form of a running prompt in non-remote areas. In 2001 remote areas, arthritis was prompted for in the question relating to long term conditions, whereas in 2004–05 remote areas the running prompt style was used as per non-remote areas. However, in 2004–05 non-remote and remote areas the questions initially asked respondents whether they had ever had the conditions and then asked whether they currently had the condition(s); in the 2001 survey respondents were asked initially in non-remote areas whether they currently had the condition(s). The different approach may have effected the likelihood of these conditions being reported as current conditions. Also, in the 2004–05 survey, current cases of arthritis were assumed to be long term conditions, whereas in the 2001 survey non-remote respondents were asked whether the condition had lasted or was expected to last for 6 months or more.
- In the 2001 survey respondents in non-remote areas were asked whether they had ever been told by a doctor or nurse that they had diabetes or high sugar levels such that both could be reported; in the 2004–05 survey respondents were not asked about high sugar levels if they reported they had been told they had diabetes. While this effects the condition status item for high sugar levels, it is expected to have had minimal impact on the long term condition data. This is because in the 2001 survey where a person reported both diabetes and high sugar levels as current conditions, only diabetes was recorded as a long term condition.

Comparability of data about long term conditions continued

METHODOLOGICAL ISSUES *continued*

- In the 2004–05 survey two categories of back problems were listed on the prompt card used in non-remote areas for the general conditions question: Back — slipped disc or other disc problems, and Back pain/back problems. Persons reporting conditions recorded in the second of these categories were asked to provide more detail about the condition, to enable more accurate and specific coding of the condition type. In remote areas in the long term conditions question, respondents were asked if they had any back problems and to specify the condition. Back problems of any sort were not included on prompt cards used in the 2001 survey.

A further factor which may affect comparability is that the reported prevalence of illness is complex and dynamic, and is a function of respondent knowledge and attitudes, which in turn may be affected by the availability of health services and health information, public education and awareness, accessibility to self-help, etc.

RECORDING OF CONDITION DETAILS

Provision made to record conditions information was similar in the 2001 and 2004–05 surveys; a combination of marking specified categories and write in boxes; interviewers were encouraged in both surveys to add supplementary information if they felt this would aid in understanding the responses or in coding the information. From a coding perspective there was no observable difference in the nature or detail of the descriptions recorded in the 2001 pen/paper form as compared with the computer instrument used in the 2004–05 non-remote areas.

CODING CONDITIONS DATA

The classification of medical conditions (and supporting coding index) introduced in the 2001 NHS(I) was used largely unchanged in the 2004–05 NATSIHS, but coding processes differed between the surveys. For both surveys conditions and alcohol data were coded progressively throughout the enumeration period by a group of coders employed and trained specifically to undertake this coding. For both surveys, coding was subject to rigorous quality assurance procedures.

In the 2001 NHS(I) coding was performed manually, supported by a computer assisted coding (CAC) system, and coded values were included on computer survey records via a separate data entry process. In the 2004–05 NATSIHS coding was initially undertaken using similar arrangements, but with assigned codes added directly to the relevant survey records. From February 2005 an automated coding system was introduced, which automatically assigned a code, and added it to the computer record from the survey. Cases which could not be coded by the auto-coding system were manually coded using the CAC system. The auto-coding system which coded on the basis of an 'exact match' with the coding index was successful in coding 29% of coding instances from NHS and NATSIHS in the period of its operation.

For both the 2001 and 2004-05 surveys the coding processes and systems were designed to ensure the codes assigned were as specific and accurate as possible. Thorough testing of the auto-coding system prior to its introduction ensured it met or surpassed manual coding quality levels. Although auto-coding could be expected to ensure greater consistency in the coding process, across the whole survey the nature of the coding

Comparability of data about long term conditions continued

CODING CONDITIONS DATA *continued*

processes used is considered to have minimal impact on the comparability of data between the surveys.

COMPARISON OF ESTIMATES FROM THE 2001 AND 2004–05 SURVEYS

The table below presents estimates of the prevalence of selected long term conditions from the 2001 NHS(I) and 2004–05 NATSIHS, with comments regarding factors which may have contributed to movements in the estimates between surveys.

SELECTED LONG TERM CONDITIONS: COMPARISON OF ESTIMATES FROM THE 2001 AND 2004–5 SURVEYS

Type of condition	*2001 estimate (000)*	*2004–05 estimate (000)*	*% difference*	*Comments*
Low blood pressure	0.5	4.6	744.0	For the first time, low blood pressure was listed on a prompt card or verbally prompted for in the 2004–05. This was instrumental in lifting the reported prevalence of this condition. As such, the increase is considered to be a direct result of the change in survey methodology rather than an increase in prevalence.
Renal disease	5.2	8.7	65.7	For the first time, renal disease was separated as a question on its own. In remote areas this category was prompted for in 2001 in the general long term question, while in non-remote areas it was not mentioned. This appears to have caused the identified change in prevalence, with a significant increase occurring in non-remote areas between 2001 and 2004–05. The increase is considered to be in part a result of the change in survey methodologies rather than an increase in prevalence.
Back pain/problems, disc disorder	6.7	6.2	–7.6	In the 2001 NHS(I) inadequately specified back disorders (eg back pain, back problems, bad back) were classified together to a single category. In the 2004–05 NATSIHS respondents who reported such conditions were asked to provide further information if possible. This enable some of those cases to be classified to other condition categories. The fall in the reported prevalence of these conditions is considered to be primarily due to this change in survey methodologies.
Osteoporosis	1.2	4.5	287.9	In 2001 NHS(I) osteoporosis was listed as a category on the prompt card used for a general question about long term conditions in non-remote areas, and not mentioned in remote areas. In the 2004–05 osteoporosis was covered in a series of separate and specific questions. The large increase in the reported prevalence of osteoporosis between 2001 and 2004–05 is in part due to this change in methodology between surveys. Also, osteopenia was mentioned and included with osteoporosis in 2004–05.
Long sight/hyperopia	56.7	77.4	36.5	The methodology for sight conditions was similar in the 2001 and 2004–05 surveys, with the only difference being for age related sight problems. As such data for hyperopia is considered comparable.
Disorders of thyroid gland	np	6.2	..	While data from 2001 is not publishable, the change to being publishable is not necessarily due to an increase in prevalence in 2004–05. An error occurred in the 2001 NHS(I) which meant that not all reported instances were carried through to output. As a result, the 2004–05 and 2001 surveys are not comparable for this condition.
Rheumatism	2.3	4.6	95.1	In 2001 non-remote areas, respondents were asked whether they currently had arthritis, gout and/or rheumatism and whether the condition(s) had lasted for 6 months or more; osteoarthritis was assumed to be long term. In remote areas only arthritis was prompted for in the general long term conditions question. In 2004–05 respondents were asked whether they currently had, or ever had these conditions. Arthritis was assumed to be long term (and in remote gout and rheumatism was also assumed to be long term).
Arthritis	35.9	43.2	20.3	See above. It is expected that some of the increase in the prevalence of rheumatism and arthritis between 2001 and 2004–05 results from these changes.

Comparability of data about long term conditions continued

COMPARISON OF ESTIMATES FROM THE 2001 AND 2004–05 SURVEYS *continued*

While the nature and general direction of the various influences on survey results can be gauged with reasonable surety, the level of effects are much more difficult to determine: i.e. how much of observed changes between estimates from the 2004–05 NATSIHS and those from the 2001 NHS(I) are attributable to real changes in the health characteristics or relationships between characteristics and how much to methodological or other differences between surveys, or to changes in respondent awareness of and attitudes to those characteristics. Unfortunately data to support this type of quantitative analysis are not available.

The points noted above, and within individual topic sections of this publication about comparability between Indigenous health surveys, are useful guides to interpreting apparent changes between surveys. However, data users should also consider other information external to the NATSIHS to assist them in interpreting the data. For many topics covered in the NATSIHS, some data are available from other sources; although these other sources will seldom be directly comparable with the NATSIHS they can provide a basis for data comparison and assessment.

During validation of the 2001 NATSIHS, selected results from the survey were compared both with results from previous NHS(I)s and with data from other sources; differences were reconciled and notes relating to differences or changes have been included where appropriate within individual topic descriptions in this publication. However, as only selected data sources were examined, other differences may exist, and users of the NATSIHS data should contact the ABS if they have any queries regarding comparability issues.

CHAPTER 8 DATA OUTPUT AND DISSEMINATION

CONTENTS

DATA AVAILABILITY

Results from the 2004–05 NATSIHS are available in:

- publications and other public releases of sets of tables;
- unidentifiable unit records; and
- tables produced on request to meet specific information requirements from the survey.

This section outlines the products and services currently available and those expected to be available over the coming months.

PUBLICATIONS

Selected results of the 2004–05 NATSIHS are contained in *National Aboriginal and Torres Strait Islander Health Survey, Australia 2004–05* (cat. no. 4715.0) which was released in April 2006.

This publication contains summary level statistics for most topics covered in the 2004–05 NATSIHS about the health of Indigenous Australians. The publication primarily presents national results, but some tables show results for states/territories or remoteness, and some tables contain results from Indigenous components of the 1995 and 2001 National Health Survey and from non-Indigenous persons from the 2001 and 2004–05 National Health Survey.

A smaller 'plain English' summary booklet will be produced, based on the results contained in this publication. This booklet will be provided to Indigenous communities as a source of Indigenous health data and will be available on the ABS web site.

In addition, the tables contained in *National Aboriginal and Torres Strait Islander Health Survey, Australia 2004–05* (cat. no.4715.0), are available in EXCEL spreadsheet format from this web site (cat.no.4715.0.55.005). State and Territory versions of most of the National tables are also available in EXCEL format (cat. nos. 4715.0.55.005 to 4714.8.55.005). State and Territory tables have been customised depending on the size of the sampling error.

Further results from the survey will be released in a variety of other publications including:

- Various compendium style publications such as the *Australian Year Book* (cat. no. 1301.0), *Australian Social Trends* (cat. no. 4102.0) and, the joint publication with the Australian Institute of Health and Welfare (AIHW), *The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples* (ABS cat. no. 4704.0).
- A series of thematic publications focussing on particular topics or topic areas covered by the survey. The content of each publication will be developed in consultation with major stakeholders to ensure that output and analyses are relevant to current and policy issues.
- A series of smaller web-based reports and media releases focussing on particular Indigenous health issues. These are seen as a cost effective way of disseminating results as broadly as possible to the community.

ACCESS TO MICRODATA

The ABS is required by legislation not to release information in a manner that is likely to enable the identification of a particular person or organisation. To meet this requirement in releasing microdata, the ABS aims to protect against two main types of risk; spontaneous recognition and matching against other data sources. In order to ensure the confidentiality of respondents the ABS usually removes some items from the

ACCESS TO MICRODATA *continued*

microdata it makes available, and reduces the level of detail shown for some other items. However in this process the ABS is conscious of the need to find an appropriate balance between ensuring confidentiality while maximising the usefulness of the data set to users of the data.

In the past, the ABS released confidentialised data files on floppy disc or CD ROM. To better meet needs for access to microdata, in 2003 the ABS introduced a new facility whereby approved users of the data were granted remote access to confidentialised data files which were retained in the ABS; this facility is called the Remote Access Data Laboratory (RADL). This enables greater security around access to, and use of the file, and by effectively removing the risk of matching to other data sources, the RADL enables more detailed information to be made available to users than could be released on CD ROM. Such data files are referred to as EXPANDED confidentialised unit record files.

For the NATSIHS, an expanded confidentialised unit record file will be released through the RADL. It is expected the data file will be available from July 2006.

The file will contain all records from the survey, but some data items will be removed, and the level of detail for some others will be reduced to protect the confidentiality of survey respondents. A full list of the data items available on the file will be contained in the *National Aboriginal and Torres Strait Islander Health Survey, 2004–05: Expanded Confidentialised Unit Record File, Information Paper* (cat. no. 4715.0.55.002), which is expected to be available on the ABS web site from July 2006.

Release of all confidentialised unit record information is subject to the approval of the Australian Statistician, and is contingent upon users of the file agreeing in writing to abide by the legislative restrictions on use and such other conditions of sale as may be determined by the Australian Statistician. These include use of the data for statistical purposes only, not attempting to identify particular persons or organisations and not attempting to match the information with any other unit level list of persons or organisations. Full details of the conditions of sale and use, together with application and undertaking forms are available from the ABS web site.

SPECIAL DATA SERVICES

In addition to products outlined above, a range of special data services are available on request, on a fee for service basis. Subject to sampling and confidentiality constraints, tables can be compiled to individual specifications, and other data and analytical services are available. For people wishing to request special tables, a list of all output data items are contained in *National Health Survey and National Aboriginal and Torres Strait Islander Health Survey 2004–05: Data Reference Package* (cat. no. 4363.0.55.002). For further information, contact the National Information and Referral Service 1300 135 070.

OTHER HEALTH RELATED AND INDIGENOUS PUBLICATIONS

Listed below is a selection of other mainly ABS publications which may be of interest. Information about current ABS publications and products can be found in the *Catalogue of Publications* (cat. no. 1101.0), or on-line at www.abs.gov.au.

The Health and Welfare of Australia's Aboriginal and Torres Strait Islander Peoples (cat. no. 4704.0)
National Health Survey, Aboriginal and Torres Strait Islander Results, Australia (cat. no. 4715.0)
National Health Survey, Summary of Results, Australia (cat. no. 4364.0)

OTHER HEALTH RELATED AND INDIGENOUS PUBLICATIONS *continued*

National Health Survey: Users' Guide (cat. no. 4363.0.55.001)
National Health Survey (Indigenous): Expanded Confidentialised Unit Record File, Information Paper (cat. no. 4715.0.55.002)
National Health Survey: Aboriginal and Torres Strait Islander Results, Australia, 1995(cat. no. 4806.0)
Occasional Paper: Hospital Statistics, Aboriginal and Torres Strait Islander Australians, 1999–2000 (cat. no. 4711.0)
Occasional Paper: Cigarette Smoking among Indigenous Australians, 1994 (cat. no. 4701.0)
Occasional Paper: Overweight and Obesity, Indigenous Australians, 1994 (cat. no. 4702.0)
Occasional Paper: Self-Assessed Health Status, Indigenous Australians, 1994 (cat. no. 4707.0)
National Aboriginal and Torres Strait Islander Social Survey (cat. no. 4714.0)
Population Characteristics, Aboriginal and Torres Strait Islander Australians(cat. no. 4713.0)
Experimental Estimates and Projections, Aboriginal and Torres Strait Islander Australians, 1991 to 2009 (cat. no. 3238.0)
Demography Working Paper 2004/3 - Calculating Experimental Life Tables for Use in Population Estimates and Projections of Aboriginal and Torres Strait Islander Australians, 1991 to 2001 (cat. no. 3106.0.55.003)
Housing and Infrastructure in Aboriginal and Torres Strait Islander Communities, Australia (cat. no. 4710.0)
Australian Housing Survey: Aboriginal and Torres Strait Islander Results, 1999(cat. no. 4712.0)

ABBREVIATIONS

ABS	Australian Bureau of Statistics
AIHW	Australian Institute of Health and Welfare
ANZSIC	Australian and New Zealand Standard Industrial Classification
ARA	any responsible adult
ARIA	Accessibility/Remoteness Index of Australia
ASCED	Australian Standard Classification of Education
ASCO	Australian Standard Classification of Occupations
ASGC	Australian Standard Geographical Classification
CAC	computer assisted coding
CAI	computer assisted interviewing
CD	Collection District
CDEP	Community Development Employment Projects
CDT	combined diphtheria-tetanus vaccine
DoHA	Australian Government Department of Health and Ageing
DTP	diphtheria, tetanus and pertussis vaccine
GP	General Medical Practitioner
Hib	Haemophilus influenzae (type B)
HSL	high sugar level in blood and/or urine
ICD-10	International Classification of Diseases 10th Revision
ICF	Indigenous Community Frame
ICPC	International Classification of Primary Care
K10	Kessler Psychological Distress Scale
NATSIHS	National Aboriginal and Torres Strait Islander Health Survey
NDSHS	National Drug Strategy Household Survey
NHDD	National Health Data Dictionary
NHMRC	National Health and Medical Research Council
NHPA	National Health Priority Area
NHS	National Health Survey
NHS(I)	National Health Survey (Indigenous)
NNS	National Nutrition Survey
OHP	Other health professional
PAL	primary approach letter
PAPI	pen-and-paper interview
RADL	Remote Access Data Laboratory
RSE	relative standard error
SEIFA	Socio-Economic Indexes for Areas
SF-36	Medical Outcome Short Form Health Survey
SLA	statistical local area
SMHWB	Survey of Mental Health and Wellbeing
WHO	World Health Organization

APPENDIX 1 SAMPLE COUNTS AND WEIGHTED ESTIMATES

SAMPLE COUNTS AND WEIGHTED ESTIMATES

Provided below are tables showing sample counts and weighted estimates from the 2004–05 NATSIHS.

NATSIHS SAMPLE COUNTS AND WEIGHTED ESTIMATES(a), Age by sex, Australia

Age group (years	Persons in sample			Weighted Estimate		
	Male	Female	Persons	Male	Female	Persons
0–4	741	729	1 470	30 825	29 358	60 183
5–14	1 390	1 254	2 644	61 942	58 544	120 486
15–24	737	849	1 586	45 830	46 237	92 067
25–34	604	847	1 451	32 574	37 198	69 772
35–44	632	850	1 482	27 186	31 871	59 057
45–54	407	529	936	18 812	20 766	39 578
55+	380	490	870	15 193	17 974	33 167
Total	4 891	5 548	10 439	232 362	241 948	474 310

(a) Includes Indigenous sample from NHS selected dwellings.

NATSIHS SAMPLE COUNTS(a), Age, States and Territories

Age group (years)	New South Wales	Victoria	Queensland(b)	South Australia	Western Australia	Tasmania	Northern Territory	Australian Capital Territory	Total
0–17	710	395	911	495	835	408	763	165	4 682
18+	875	455	1 172	611	1 049	468	924	203	5 757
Total	1 585	850	2 083	1 106	1 884	876	1 687	368	10 439

(a) Includes Indigenous sample from NHS selected dwellings.

(b) Includes Torres Strait Islander sample.

APPENDIX 2 CLASSIFICATION OF CONDITIONS ICD–10

CLASSIFICATION OF LONG TERM MEDICAL CONDITIONS: BASED ON ICD–10

LABEL	*ABS INPUT CODES*
Certain infectious & parasitic diseases	
Certain infectious & parasitic diseases	
Tuberculosis	20 992
Viral infections characterised by skin & mucous membrane lesions	21 22 39 49 123 602 623 651 903
Viral hepatitis	271
Other infectious & parasitic	23 24 35 40 48 83 118 151 184 237 265 270 272 282 297 330 492 494 495 496 577 624 625 792 793 794 795 810 811 812 831 832 833 834 835 836 962
Neoplasms	
Malignant neoplasms	
Digestive organs	273 274 275 276 277 589 877 921 927
Respiratory & intrathoracic organs	44 45 350 379 380 588 924
Skin	41 42 43 627 920
Mesothelial & soft tissue	418 993
Breast	798 922
Female genital organs	426 743 797 925
Male genital organs	837 838 923
Other	70 71 72 73 74 85 497 674 676 677 711 712 713 714 926 928 929
Site unknown	26 46 47 930
Benign neoplasms & neoplasms of uncertain nature	
Benign neoplasms & neoplasms of uncertain nature	86 87 278 321 378 456 457 498 499 590 595 628 629 631 632 633 675 678 715 716 744 799 800 801 802 839 876
Diseases of the blood & blood forming organs	
Diseases of the blood & blood forming organs	
Anaemias	76 78 79 80 978
Other diseases of blood & blood forming organs	64 81 82 84 901
Endocrine, nutritional & metabolic disorders	
Disorders of the thyroid gland	
Disorders of thyroid gland	673 681 684 685 686 695 991
Diabetes	
Diabetes	90 688 689 947 948
Other endocrine, nutritional & metabolic diseases	
High sugar levels in blood/urine	91
High cholesterol	693 942
Other endocrine nutritional metabolic diseases	55 92 187 188 189 242 667 682 687 690 691 694 891 950 980
Mental & behavioural problems	
Organic mental problems	
Organic mental problems	538 539
Alcohol and drug problems	
Alcohol and drug problems	526 527 528 529 530
Mood (affective) disorders	
Feeling depressed	515
Other mood (affective) disorders	541 545
Other mental & behavioural problems	
Anxiety related problems	89 514 542 543 544 547 548 551
Problems of psychological development	534
Behavioural & emotional problems with usual onset in childhood/adolescence	520 521 522 523 524 525 532 533 550 882
Other mental & behavioural problems	264 518 540 549 552 553 554 555 556 557 890 892
Symptoms signs involving cognition perceptions emotional state & behaviour	7 175 176 177 341 487 531 893

CLASSIFICATION OF LONG TERM MEDICAL CONDITIONS: BASED ON ICD–10 *continued*

LABEL	*ABS INPUT CODES*
Diseases of the nervous system	
Episodic & paroxysmal disorders	
Epilepsy	505 982
Migraine	506 986
Other episodic & paroxysmal disorders	507 512
Other diseases of nervous system	112 113 461 462 463 468 503 504 508 509 510 511 513 737
Diseases of the eye & adnexa	
Cataract	
Cataract	331 961
Glaucoma	
Glaucoma	332 960
Disorders of the choroid & retina	
Macular degeneration	328
Other disorders of choroid and retina	326, 327, 645
Disorders of the ocular muscles, binocular movement, accommodation & refraction	
Astigmatism	103 952
Presbyopia	36 954
Short sight/myopia	105 879 953
Long sight/ hyperopia	640 955
Other disorders of ocular muscles binocular	107 334 880 963
Visual disturbances & blindness	
Complete blindness (one or both eyes)	93 94 956 957
Partial blindness (one or both eyes)	95 102 958 959
Other visual disturbances or loss of vision	305 306 307 315 333 642
Other diseases of the eye & adnexa	
Colour blind	106, 951
Other diseases of eye & adnexa	119 302 303 304 308 309 310 311 316 317 318 319 320 329 335
Diseases of the ear & mastoid	
Complete deafness	
Complete deafness	108 964
Partial deafness & hearing loss nec	
Partial deafness & hearing loss nec	109 110 337 358 359 360 965 966
Diseases of the middle ear & mastoid processes	
Otitis media	346 347 349 969
Other diseases of middle ear & mastoid	348 352
Diseases of the inner ear	
Menieres disease	111 968
Other diseases of inner ear	357
Other diseases of the ear	
Other diseases of the ear	134 336 338 339 340 344 345 356 361 934 967
Diseases of the circulatory system	
Hypertensive disease	
Hypertensive disease	392 393 394 939
Ischaemic heart diseases	
Angina	117 938
Other Ischaemic heart diseases	382 383 384 391 936
Other heart diseases	
Other heart diseases	136 376 385 386 390 400
Tachycardia	
Tachycardia	365 387 388 943
Cerebrovascular diseases	
Cerebrovascular diseases	396 397 398 937
Oedema	
Oedema	135 941

CLASSIFICATION OF LONG TERM MEDICAL CONDITIONS: BASED ON ICD–10 *continued*

LABEL	*ABS INPUT CODES*
Diseases of the circulatory system	
Diseases of the arteries, arterioles & capillaries	
Diseases of arteries arterioles & capillaries	114 115 290 367 399 404 940
Diseases of the veins, lymphatic vessels, etc	
Haemorrhoids	403 945
Varicose veins	402 405 946
Other diseases of veins lymphatic vessels	67 69 127 401
Other diseases of the circulatory system	
Low blood pressure	116 395
Other diseases of circulatory system	377 935
Symptoms & signs involving the circulatory system	
Abnormalities of heartbeat	366
Cardiac murmurs and cardiac sounds	389 944
Other signs symptoms involving circulatory system	362 363 364 375
Diseases of the respiratory system	
Chronic lower respiratory diseases	
Bronchitis	583 979
Emphysema	596 981
Asthma	597
Other diseases of the respiratory system	
Hayfever & allergic rhinitis	215 975
Chronic sinusitis	580 976
All other diseases of respiratory system	120 178 180 568 569 578 579 581 582 584 585 586 587 594 599 897
Symptoms & signs involving the respiratory system	
Symptoms & signs involving respiratory system	9 37 179 214 558 559 560 561 562 563 564 565 566 567 570 572 576 598
Diseases of the digestive system	
Diseases of the oesophagus, stomach & duodenum	
Diseases of the oesophagus	285
Stomach/duodenal/gastrointestinal ulcer	287 286 990
Other diseases of the oesophagus, stomach & duodenum	129 288
Hernia	
Hernia	291 292 293 984
Other diseases of the intestines	
Irritable bowel syndrome	295
Other diseases of the intestines	98 146 147 152 294 296
Gallstones	
Gallstones	486
Other diseases of the digestive system	
Other diseases of the digestive system	131 132 133 138 148 149 150 155 157 192 193 194 283 284 289 298 299 300 301
Symptoms & signs involving the digestive system	
Symptoms & signs involving digestive system	96 97 100 101 128 130 145 153 154 195 196 197 198 202 269
Diseases of the skin & subcutaneous tissue	
Diseases of the skin & subcutaneous tissue	
Dermatitis & eczema	99 601 636 637 638 639
Psoriasis	647 989
Other diseases of skin & subcutaneous tissue	25 68 121 181 183 186 605 606 607 614 615 617 618 626 630 634 635 646 648 649 650 652 653 654 655 656 657 658
Symptoms signs involving skin & subcutaneous tissue	174 464 600 603 604 616 622

CLASSIFICATION OF LONG TERM MEDICAL CONDITIONS: BASED ON ICD–10 *continued*

LABEL	*ABS INPUT CODES*
Diseases of the musculoskeletal system & connective tissue	
Arthropathies	
Gout	692 972
Arthritis - Rheumatoid	445 480 481 971
Arthritis - Osteoarthritis	421 423 446 447 448 482 483 970
Arthritis - Other & type unknown	422 449 476 479 974 484 478
Other arthropathies	139 141 142 143 144 158 159 160 161 412 458 485
Soft tissue disorders	
Rheumatism	216 973
Other soft tissue disorders	140 410 411 442 443 444 450 451 452 453 477
Dorsopathies	
Sciatica	425
Disc disorders	171 440
Back pain/problems nec	406 407 408 441 878
Curvature of the spine	424
Osteoporosis	
Osteoporosis	455 987
Other diseases of the musculoskeletal system & connective tissue	
Other diseases musculoskeletal system & connective tissue	173 417 454 459 905
Symptoms & signs involving the musculoskeletal system & connective tissue	
Symptoms & signs involving nervous & musculoskeletal system	137 409 416 466 491 899
Diseases of the genito-urinary system	
Diseases of the genito-urinary system	
Urinary calculus	721 985
Incontinence: urine	696
Diseases of male genital organs	814 816 817 818 819 820 821 822 830 843 848 849 850
Diseases of female pelvic organs & genital tract	732 762 763 764 765 766 767 768 769 770 772 773 774 775 776 777 778 779 791 796 805 807 809 813
Other diseases of genito-urinary system	203 204 207 208 209 211 643 644 697 698 701 702 705 706 707 708 709 710 720 723 780 808
Congenital malformations, deformations & chromosomal abnormalities	
Congenital malformations, deformations & chromosomal abnormalities	
Of musculoskeletal system	420
Other congenital malformations, deformations & chromosomal abnormalities	54 77 88 185 281 324 325 355 381 593 679 680 719 746 804 844 845 846 847 904
Symptoms, signs & conditions nec	
General symptoms, signs & conditions	
Dizzyness	467
Disability nec	17 201 267 343 372 373 415 490 537 575 621 790 829 856
Speech difficulties	469 571
Fluid retention (non circulatory)	983
Allergy (undefined)	56 977
Amputation	217 218
Fatigue and exhaustion	124

CLASSIFICATION OF LONG TERM MEDICAL CONDITIONS: BASED ON ICD–10 *continued*

LABEL	*ABS INPUT CODES*
Symptoms, signs & conditions nec	
Injuries	
Fractures	162 163 164 165 166 906
Sprains & Strains	167 168 169
Tear ligament, muscle or tendon	493
Injury internal organs	31 75 280 717
Injury skin	38 122 612 613
Injury knee nec	172
Injury eye	323
Injury joint	419
Injury neck nec	894
Injury nerve	502
Burns & scalds	609
Adverse effects of treatment	33 34 50 51 52 53 932
Other injuries	29 30 32 279 353 841 170 182 219 268 322 351 354 460 500 501 591 592 608 610 611 718 745 803 806 840 842
All other symptoms, signs & conditions	
All other symptoms, signs & conditions	1 2 3 4 5 6 8 11 63 125 126 190 191 465 516 659 660 661 662 663 664 665 666 670 671 672 699 722 729 730 739 740 747 750 753 771 815 860 866 873 874 875 888 998 999

APPENDIX 3 CLASSIFICATION OF CONDITIONS ICPC

CLASSIFICATION OF LONG TERM MEDICAL CONDITIONS: ICPC–BASED

ABS INPUT CODES	*ICPC CODES*	*LABELS*
A. GENERAL AND UNSPECIFIED		
Symptoms and complaints		
1 2	A01	Pain general/multiple sites
3	A02	Chills
4	A03	Fever
124	A04	Weakness/tiredness general
5	A05	Feeling ill
6	A06	Fainting/syncope
7	A07	Coma
8	A08	Swelling
125	A09	Sweating problem
126	A10	Bleeding/haemorrhage nos
9	A11	Chest pain nos
11	A16	Irritable infant
17	A28	Limited function/disability nos
875 888	A29	General symptom/complaint other
Diagnoses/diseases		
20 992	A70	Tuberculosis
21	A71	Measles
22	A72	Chickenpox
23	A73	Malaria
49	A74	Rubella
237	A75	Infectious mononucleosis
35	A76	Viral exanthem other
39 265	A77	Viral disease other/nos
24 25 48	A78	Infectious disease other/nos
29 30	A80	Trauma/injury nos
26 930 46 47	A79	Malignancy nos
31	A81	Multiple trauma/injuries
32 217	A82	Secondary effect of trauma
33	A84	Poisoning by medical agent
34 932	A85	Adverse effect medical agent
50	A86	Toxic effect non–medicinal substance
51	A87	Complication of medical treatment
52	A88	Adverse effect physical factor
53	A89	Effects prosthetic device
54	A90	Congenital anomaly nos/multiple
55 91	A91	Abnormal results investigation nos
56 977	A92	Allergy/allergic reaction nos
58	A94	Perinatal morbidity other
63	A99	General disease nos
B. BLOOD, BLOOD FORMING ORGANS AND IMMUNE MECHANISM		
Symptoms and complaints		
127	B02	Lymph gland(s) enlarged/painful
64	B04	Blood symptom/complaint
267	B28	Limited function/disability (B)
67	B29	Symptom/complaint blood and immune mechanism

CLASSIFICATION OF LONG TERM MEDICAL CONDITIONS: ICPC–BASED *continued*

ABS INPUT CODES	*ICPC CODES*	*LABELS*
B. BLOOD, BLOOD FORMING ORGANS AND IMMUNE MECHANISM *cont.*		
Diagnoses/diseases		
68	B70	Lymphadenitis acute
69	B71	Lymphadenitis non–specific
70 71 929	B72	Hodgkin's disease/lymphoma
72 928	B73	Leukaemia
73 74 85 876	B74	Malignant neoplasm blood other
86 87	B75	Benign/uncertain neoplasms blood
75	B76	Ruptured spleen traumatic
268	B77	Injury blood/lymph/spleen other
76	B78	Hereditary haemolytic anaemia
77	B79	Congenital anomaly blood/lymph other
78	B80	Iron deficiency anaemia
79	B81	Anaemia vitamin B12/folate deficiency
80 978	B82	Anaemia other/unspecified
81	B83	Purpura/coagulation defect
82	B84	Abnormal white cells
269	B87	Splenomegaly
83	B90	HIV–infection/AIDS
84 901	B99	Blood/lymph/spleen disease other
D. DIGESTIVE		
Symptoms and complaints		
96	D01	Abdominal pain/cramps general
128	D02	Abdominal pain epigastric
97	D03	Heartburn
98	D04	Rectal/anal pain
99	D05	perianal itching
100	D06	Abdominal pain localised other
129	D07	Dyspepsia/indigestion
130	D08	Flatulence/gas/belching
101	D09	Nausea
145	D10	Vomiting
146	D11	Diarrhoea
147	D12	Constipation
148	D13	Jaundice
149	D14	Haematemesis/vomiting blood
150	D15	Melaena
152	D16	Rectal bleeding
153	D17	Incontinence of bowel
154	D18	Change in faeces/bowel movements
155 157	D19	Teeth/gum symptom/complaint
192 193 194	D20	Mouth/tongue/lip symptom/complaint
195	D21	Swallowing problem
196	D23	Hepatomegaly
197	D24	Abdominal mass nos
198	D25	Abdominal distension
201	D28	Limited function/disability (digestive)
202	D29	Digestive symptom/complaint other

CLASSIFICATION OF LONG TERM MEDICAL CONDITIONS: ICPC–BASED *continued*

ABS INPUT CODES	*ICPC CODES*	*LABELS*
D. DIGESTIVE *cont.*		
Diagnoses/diseases		
118	D70	Gastrointestinal infection
270	D71	Mumps
271	D72	Viral hepatitis
272	D73	Gastroenteritis presumed infection
273 927	D74	Malignant neoplasm stomach
274 921 275 877	D75	Malignant neoplasm colon/rectum
276	D76	Malignant neoplasm pancreas
277	D77	Malignant digestive neoplasm other/nos
278	D78	Neoplasm digestive system benign/uncertain
279	D79	Foreign body in digestive system
280	D80	Injury other
281	D81	Congenital anomaly digestive
131	D82	Teeth/gum disease
282 283 284	D83	Mouth/tongue/lip disease
285	D84	Oesophagus disease
286	D85	Duedenal ulcer
287 990	D86	Peptic ulcer, other
291	D89	Inguinal hernia
292	D90	Hiatus hernia
293 984	D91	Abdominal hernia, other
298 486	D98	Cholecystitis/cholelithiasis
295	D93	Irritable bowel syndrome
288	D87	Stomach function disorder
289	D88	Appendicitis
294	D92	Diverticular disease
132	D94	Chronic enteritis/ulcerative colitis
296	D95	Anal fissure/perianal abscess
297	D96	Worms/other parasites
133	D97	Liver disease nos
299 300 301	D99	Disease digestive system other
F. EYE		
Symptoms and complaints		
302	F01	Eye pain
303	F02	Red eye
304	F03	Eye discharge
305	F04	Visual floaters/spots
306 307	F05	Visual disturbance other
308	F13	Eye sensation abnormal
309 641	F14	Eye movements abnormal
310	F15	Eye appearance abnormal
311	F16	Eyelid symptom/complaint
94 102 315	F28	Limited function/disability eye
316	F29	Eye symptom/complaint, other

CLASSIFICATION OF LONG TERM MEDICAL CONDITIONS: ICPC–BASED *continued*

ABS INPUT CODES	*ICPC CODES*	*LABELS*
F. EYE *cont.*		
Diagnoses/diseases		
317	F70	Conjunctivitis infectious
318	F71	Conjunctivitis allergic
319	F72	Blepharitis/stye/chalazion
320 903	F73	Eye infection/inflammation other
321	F74	Neoplasm of eye/adnexa
119	F75	Contusion/haemorrhage eye
322	F76	Foreign body in eye
323	F79	Injury eye other
324	F80	Blocked lacrimal duct: Infant
325	F81	Congenital anomaly eye other
326	F82	Detached retina
327	F83	Retinopathy
328	F84	Macular degeneration
329	F85	Corneal ulcer
330 962	F86	Trachoma
36 954 103 952 953 104 105 640 955 105 107 879	F91	Refractive error
331 961	F92	Cataract
332 960	F93	Glaucoma
93 95 333 956 957 958 959	F94	Blindness
334 880 963	F95	Strabismus
106 335 951 642 645	F99	Eye/adnexa disease, other
H. EAR		
Symptoms and complaints		
336	H01	ear pain/earache
337	H02	Hearing complaint
338 967	H03	Tinnitus, ringing/buzzing ear
339	H05	ear discharge
340	H13	Plugged feeling ear
341	H15	Concern with appearance of ears
108 109 343	H28	Limited function/disability (ear)
344	H29	ear symptom/complaint other

CLASSIFICATION OF LONG TERM MEDICAL CONDITIONS: ICPC–BASED *continued*

ABS INPUT CODES	*ICPC CODES*	*LABELS*
H. EAR *cont.*		
Diagnoses/diseases		
345 934	H70	Otitis externa
346 969	H71	Acute otitis media/myringitis
347	H72	Serious otitis media
348	H73	Eustachian salpingitis
349	H74	Chronic otitis media
350	H75	Neoplasm of ear
351	H76	Foreign body in ear
352	H77	Perforation ear drum
353	H78	Superficial injury of ear
354	H79	Ear injury other
355	H80	Congenital anomaly of ear
356	H81	Excessive ear wax
111 134 968	H82	Vertiginous syndrome
357	H83	Otosclerosis
358	H84	Presbyacusis
359 964	H85	Acoustic trauma
110 360 965 966	H86	Deafness
361	H99	Ear/mastoid disease other
K. CIRCULATORY		
Symptoms and complaints		
362	K01	Heart pain
363	K02	Pressure/tightness of heart
364	K03	Cardiovascular pain nos
365 943	K04	Palpitations/awareness of heart
366	K05	Irregular heartbeat other
367	K06	Prominent veins
135 941	K07	Swollen ankles/oedema
372 373	K28	Limited function/disability (cardiovascular)
116 375	K29	Cardiovascular symptom/complaint other

CLASSIFICATION OF LONG TERM MEDICAL CONDITIONS: ICPC–BASED *continued*

ABS INPUT CODES	*ICPC CODES*	*LABELS*
K. CIRCULATORY *cont.*		
Diagnoses/diseases		
376	K70	Infection of circulatory system
377 935	K71	Rheumatic fever/heart disease
378 379 380	K72	Neoplasm cardiovascular
381	K73	Congenital anomaly cardiovascular
117 382 938	K74	Ischaemic heart disease with angina
383	K75	Acute myocardial infarction
384	K76	Ischaemic heart disease without angina
385	K77	Heart failure
386	K78	Atrial fibrillation/flutter
387	K79	Paroxysmal tachycardia
388	K80	Cardiac arrhythmia nos
389 944	K81	Heart/arterial murmur nos
390	K82	Pulmonary heart disease
136	K83	Heart valve disease nos
391 936	K84	Heart disease other
392 939	K85	Elevated blood pressure
393	K86	Hypertension uncomplicated
394	K87	Hypertension complicated
395	K88	Postural hypotension
396	K89	Transient cerebral ischaemia
397 937	K90	Stroke/cerebrovascular accident
398	K91	Cerebrovascular disease
114 115 940 290 399	K92	Atherosclerosis/peripheral vascular disease
400	K93	Pulmonary embolism
401	K94	Phlebitis/thrombophlebitis
402	K95	Varicose veins of leg
403 945	K96	Haemorrhoids
404 405 946	K99	Cardiovascular disease other

CLASSIFICATION OF LONG TERM MEDICAL CONDITIONS: ICPC–BASED *continued*

ABS INPUT CODES	*ICPC CODES*	*LABELS*
L. MUSCULOSKELETAL		
Symptoms and complaints		
406	L01	Neck symptom/complaint
407	L02	Back symptom/complaint
408	L03	Low back symptom/complaint
409	L04	Chest symptom/complaint
137	L05	Flank/axilla symptom/complaint
138	L07	Jaw symptom/complaint
139	L08	Shoulder symptom/complaint
140	L09	Arm symptom/complaint
141	L10	Elbow symptom/complaint
142	L11	Wrist symptom/complaint
143	L12	Hand/finger symptom/complaint
144	L13	Hip symptom/complaint
158	L14	Leg/thigh symptom/complaint
159	L15	Knee symptom/complaint
160	L16	Ankle symptom/complaint
161	L17	Foot/toe symptom/complaint
216 410 973	L18	Muscle pain
411	L19	Muscle symptom/complaint nos
412	L20	Joint symptom/complaint nos
415	L28	Limited function/disability (L)
416	L29	Symptom/complaint

CLASSIFICATION OF LONG TERM MEDICAL CONDITIONS: ICPC–BASED *continued*

ABS INPUT CODES	*ICPC CODES*	*LABELS*
L. MUSCULOSKELETAL *cont.*		
Diagnoses/diseases		
417 476 477	L70	Infections of
418	L71	Malignant neoplasm musculoskeletal
162	L72	Fracture: radius/ulna
163	L73	Fracture: tibia/fibula
164	L74	Fracture: hand/foot bone
165	L75	Fracture: femur
166	L76	Fracture: other
167	L77	Sprain/strain of ankle
168	L78	Sprain/strain of knee
169	L79	Sprain/strain of joint nos
170	L80	Dislocation/subluxation
218 419 478 493 806	L81	Injury musculoskeletal nos
420	L82	Congenital anomaly musculoskeletal
171 421 479 894	L83	Neck syndrome
422 423 878	L84	Back syndrome without radiating pain
424	L85	Acquired deformity of spine
425 440 441	L86	Back syndrome with radiating pain
442 443 444	L87	Bursitis/tendinitis/synovitis nos
445 480 481 971	L88	Rheumatoid arthritis
446 482	L89	Osteoarthritis of hip
447 483	L90	Osteoarthritis of knee
448 449 974	L91	Osteoarthritis of other
450 451 452	L92	Shoulder syndrome
453	L93	Tennis elbow
454	L94	Osteochondrosis
455 987	L95	Osteoporosis
172	L96	Acute internal knee damage
456 457	L97	Neoplasm benign/unspecified musculoskeletal
458	L98	Acquired deformity of limb
173 459 460 905 970	L99	Musculoskeletal disease, other
N. NEUROLOGICAL		
Symptoms and complaints		
461	N01	Headache
462	N03	Pain face
463	N04	Restless legs
174	N05	Tingling fingers/feet/toes
464	N06	Sensation disturbance other
465	N07	Convulsion/seizure
466	N08	Abnormal involuntary movements
175	N16	Disturbance of smell/taste
467	N17	Vertigo/dizziness
468	N18	Paralysis/weakness
469	N19	Speech disorder
490	N28	Limited function/disability (neurological)
491 899	N29	Neurological symptom/complaint other

CLASSIFICATION OF LONG TERM MEDICAL CONDITIONS: ICPC–BASED *continued*

ABS INPUT CODES	*ICPC CODES*	*LABELS*
N. NEUROLOGICAL *cont.*		
Diagnoses/diseases		
492	N70	Poliomyelitis
494	N71	Meningitis/encephalitis
495	N72	Tetanus
496	N73	Neurological infection other
497	N74	Malignant neoplasm nervous system
498	N75	Benign neoplasm nervous system
499	N76	Neoplasm nervous system uncertain nature
500	N79	Concussion
501 906	N80	Head injury other
502	N81	Injury nervous system other
88	N85	Congenital anomaly neurological
503	N86	Multiple sclerosis
504	N87	Parkinsonism
505 982	N88	Epilepsy
506 986	N89	Migraine
507	N90	Cluster headache
508	N91	Facial paralysis/Bells' Palsy
509	N92	Trigeminal neuralgia
510	N93	Carpal tunnel syndrome
511	N94	Peripheral neuritis/neuropathy
512	N95	Tension headache
112 113 513 737	N99	Neurological disease other
P. PSYCHOLOGICAL		
Symptoms and complaints		
89 487	P01	Feeling anxious/nervous/tense
514	P02	Acute stress reaction
515	P03	Feeling depressed
176	P04	Feeling/behaving irritable/angry
516	P05	Senility, feeling/behaving old
264	P06	Sleep disturbance
518	P08	Sexual fulfilment reduced
520 521	P10	Stammering/stuttering/tic
522	P11	Eating problem in child
523 524	P12	Bedwetting/enuresis
525	P13	Encopresis/bowel training problem
526	P15	Chronic alcohol abuse
527	P16	Acute alcohol abuse
528	P17	Tobacco abuse
529	P18	Medication abuse
530	P19	Drug abuse
531	P20	Memory disturbance
532 882	P22	Child behaviour symptom/complaint
533	P23	Adolescent behaviour symptom/complaint
534	P24	Specific learning problem
537	P28	Limited function/disability
177 892 893	P29	Psychological symptom/complaint other

CLASSIFICATION OF LONG TERM MEDICAL CONDITIONS: ICPC–BASED *continued*

ABS INPUT CODES	*ICPC CODES*	*LABELS*
P. PSYCHOLOGICAL *cont.*		
Diagnoses/diseases		
538	P70	Dementia
539	P71	Organic psychosis other
540	P72	Schizophrenia
541	P73	Affective psychosis
542 543	P74	Anxiety disorder/anxiety state
544	P75	Somatization disorder
545	P76	Depressive disorder
547	P78	Neuraesthenia/surmenage
548	P79	Phobia/compulsive disorder
549	P80	Personality disorder
550	P81	Hyperkinetic disorder
551	P82	Post–traumatic stress disorder
552	P85	Mental retardation
553 554 555	P86	Anorexia nervosa/bulimia
556 860 890	P98	Psychosis nos/other
557	P99	Psychological disorders, other
R. RESPIRATORY		
Symptoms and complaints		
558 559 560 561 562 563	R01	Pain respiratory system
564	R02	Shortness of breath/dyspnoea
565	R03	Wheezing
37	R04	Breathing problem other
566	R05	Cough
567	R06	Nose bleed/epistaxis
178	R07	Sneezing/nasal congestion
568	R08	Nose symptom/complaint other
569 897	R09	Sinus symptom/complaint
214 570	R21	Throat symptom/complaint
571	R23	Voice symptom/complaint
572	R24	Haemoptysis
179	R25	Sputum/phlegm abnormal
575	R28	Limited function/disability (respiratory)
576	R29	Respiratory symptom/complaint other

CLASSIFICATION OF LONG TERM MEDICAL CONDITIONS: ICPC–BASED *continued*

ABS INPUT CODES	*ICPC CODES*	*LABELS*
R. RESPIRATORY *cont.*		
Diagnoses/diseases		
577	R71	Whooping cough
578	R72	Strep throat
120	R73	Boil/abscess nos
579	R74	Upper respiratoy infection acute
580 976	R75	Sinusitis acute/chronic
581	R76	Tonsillitis acute
180	R77	Laryngitis/tracheitis acute
583 979	R79	Chronic bronchitis
582	R78	Acute bronchitis/bronchiolitis
584	R80	Influenza
585	R81	Pneumonia
586	R82	Pleurisy/pleural effusion
587	R83	Respiratory infection other
44 45 924 588	R84	Malignant neoplasm bronchus, lung
589 993	R85	Malignant neoplasm respiratory other
590	R86	Benign neoplasm respiratory
591	R87	Foreign body nose/larynx/bronchus
592	R88	Injury respiratory other
593	R89	Congenital anomaly respiratory
594	R90	Hypertrophy tonsils/adenoids
595	R92	Neoplasm respiratory uncertain nature
596 981	R95	Chronic obstructive pulmonary disease
597	R96	Asthma
215 975	R97	Allergic rhinitis
598	R98	Hyperventilation syndrome
599	R99	Respiratory disease other

CLASSIFICATION OF LONG TERM MEDICAL CONDITIONS: ICPC–BASED *continued*

ABS INPUT CODES	*ICPC CODES*	*LABELS*
S. SKIN		
Symptoms and complaints		
601	S02	Pruritus
603 983	S04	Lump/swelling localised
604	S05	Lumps/swelling multiple
605	S06	Rash localised
606	S07	Rash generalised
607	S08	Skin colour change
121	S09	Infected finger/toe
181	S10	Boil/carbuncle
38	S11	Skin infection post–traumatic
122	S12	Insect bite/sting
608	S13	Animal/human bite
609	S14	Burn/scald
610	S15	Foreign body in skin
611	S16	Bruise/contusion
182	S17	Abrasion/scratch/blister
612	S18	Laceration/cut
613	S19	Skin injury other
614 615	S20	Corn/callosity
616	S21	Skin texture symptom/complaint
617	S22	Nail symptom/complaint
183	S23	Hair loss/baldness
618	S24	Hair/scalp symptom/complaint
621	S28	Limited function/disability (skin)
622	S29	Skin symptom/complaint other

CLASSIFICATION OF LONG TERM MEDICAL CONDITIONS: ICPC–BASED *continued*

ABS INPUT CODES	*ICPC CODES*	*LABELS*
S. SKIN *cont.*		
Diagnoses/diseases		
623	S70	Herpes zoster
123	S71	Herpes simplex
624	S72	Scabies/other acariasis
184	S73	Pediculosis/skin infestation other
40 625	S74	Dermatophytosis
151	S75	Moniliasis/candidiasis skin
626	S76	Skin infection other
41 42 43 627 920	S77	Malignant neoplasm of skin
628	S78	Lipoma
629	S79	Neoplasm skin benign/uncertain
630	S80	Solar keratosis/sunburn
631 904	S81	Haemangioma/lymphangioma
632 633	S82	Naevus/mole
185	S83	Congenital skin anomaly other
634	S84	Impetigo
635	S85	Pilonidal cyst/fistula
636	S86	Dermatitis seborrhoeic
637	S87	Dermatitis/atopic eczema
638	S88	Dermatitis contact/allergic
639	S89	Diaper rash
646	S90	Pityriasis rosea
484 647 989	S91	Psoriasis
648 649	S92	Sweat gland disease
650	S93	Sebaceous cyst
186	S94	Ingrowing nail
651	S95	Molluscum contagiosum
652	S96	Acne
653	S97	Chronic ulcer skin
654	S98	Urticaria
655 656 657 658	S99	Skin disease other
T. ENDOCRINE, METABOLIC AND NUTRITIONAL		
Symptoms and complaints		
659	T01	Excessive thirst
660	T02	Excessive appetite
661	T03	Loss of appetite
662	T04	Feeding problem of infant/child
663	T05	Feeding problem of adult
664	T07	Weight gain
665	T08	Weight loss
666	T10	Growth delay
667	T11	Dehydration
670	T28	Limited function/disability (endocrine/metabolic)
187 671 672	T29	Endocrine/metabolic/nutritional symptom/complaint other

CLASSIFICATION OF LONG TERM MEDICAL CONDITIONS: ICPC–BASED *continued*

ABS INPUT CODES	*ICPC CODES*	*LABELS*
T. ENDOCRINE, METABOLIC AND NUTRITIONAL *cont.*		
Diagnoses/diseases		
673	T70	Endocrine infection
674	T71	Malignant neoplasm thyroid
675	T72	Benign neoplasm thyroid
676 677 678	T73	Neoplasm endocrine other/uncertain
679	T78	Thyroglossal duct/cyst
680	T80	Congenital anomaly endocrine/metabolic
681	T81	Goitre
682	T82	Obesity
683	T83	Overweight
684	T85	Hyperthyroidism/thyrotoxicosis
685 686	T86	Hypothyroidism/myxoedema
687	T87	Hypoglycaemia
688 947	T89	Diabetes insulin dependent
90 689 948	T90	Diabetes non–insulin dependent
188 690 691	T91	Vitamin/nutritional deficiency
692 972	T92	Gout
189 693 942	T93	Lipid disorder
242 485 694 695 991 92 950 891 980	T99	Endocrine/metabolic/nutritional disease, other
U. URINARY SYSTEM		
Symptoms and complaints		
190	U01	Dysuria/painful urination
191	U02	Urinary frequency/urgency
696	U04	Incontinence urine
697	U05	Urination problems other
698	U06	Haematuria
699	U07	Urine complaints other
701	U13	Bladder symptom/complaint other
702	U14	Kidney symptom/complaint
705	U28	Limited function/disability (urinary)
706	U29	Urinary symptom/complaint other
Diagnoses/diseases		
203	U70	Pyelonephritis/pyelitis
707 708 709	U71	Cystitis/urinary infection other
710	U72	Urethritis
711 712 926	U75	Malignant neoplasm kidney
713	U76	Malignant neoplasm of bladder
714	U77	Malignant neoplasm urinary other
715	U78	Benign neoplasm urinary tract
716	U79	Neoplasm urinary tract nos
717 718	U80	Injury urinary tract
719	U85	Congenital anomaly urinary tract
204	U88	Glomerulonephritis/nephrosis
720	U90	Orthostatic albuminuria/proteinuria
721 985	U95	Urinary calculus
722	U98	Abnormal urine test nos
643 644 723	U99	Urinary disease other

CLASSIFICATION OF LONG TERM MEDICAL CONDITIONS: ICPC–BASED *continued*

ABS INPUT CODES	*ICPC CODES*	*LABELS*
W. PREGNANCY, CHILDBEARING, FAMILY PLANNING		
Symptoms and complaints		
726	W03	Antepartum bleeding
205	W05	Pregnancy vomiting/nausea
729	W12	Contraception uterine
730	W13	Sterilization
732	W15	Infertility/subfertility
733	W17	Post–partum bleeding
734	W18	Post–partum symptom/complaint other
735	W19	Breast/lactation symptom/complaint
739	W28	Limited function/disablility (pregnancy)
740	W29	Pregnancy symptom/complaint other
Diagnoses/diseases		
741	W70	Puerperal infection/sepsis
742	W71	Infection complicating pregnancy
743	W72	Malignant neoplasm related to pregnancy
744	W73	Benign/uncertain neoplasm related to pregnancy
745	W75	Injury complicating pregnancy
746	W76	Congenital anomaly complicating pregnancy
747	W78	Pregnancy
750	W81	Toxaemia of pregnancy
754 949	W85	Gestational diabetes
759	W94	Puerperal mastitis
206	W95	Breast disorder in pregnancy/puerperium other
760	W96	Complications of peurperium other
761	W99	Disorder of pregnancy/delivery other

CLASSIFICATION OF LONG TERM MEDICAL CONDITIONS: ICPC–BASED *continued*

ABS INPUT CODES	*ICPC CODES*	*LABELS*
X. FEMALE GENITAL SYSTEM (INCLUDING BREAST)		
Symptoms and complaints		
762	X01	Genital pain female
763	X02	Menstrual pain
764	X03	Intermenstrual pain
765	X04	Painful intercourse female
766	X05	Menstruation absent/scanty
767	X06	Menstruation excessive
768	X07	Menstruation irregular/frequent
769	X08	Intermenstrual bleeding
770	X09	Premenstrual symptom/complaint
771	X10	Postponement of menstruation
772 773	X11	Menopausal symptom/complaint
774	X12	Postmenopausal bleeding
775	X13	Postcoital bleeding
776	X14	Vaginal discharge
777	X15	Vaginal symptom/complaint other
778	X16	Vulval symptom/complaint
779	X17	Pelvis symptom/complaint female
780	X18	Breast pain female
781	X19	Breast lump/mass female
782	X20	Nipple symptom/complaint female
783	X21	Breast symptom/complaint female other
790	X28	Limited function/disability (genital)
791	X29	Genital symptom/complaint female other

CLASSIFICATION OF LONG TERM MEDICAL CONDITIONS: ICPC–BASED *continued*

ABS INPUT CODES	*ICPC CODES*	*LABELS*
X. FEMALE GENITAL SYSTEM (INCLUDING BREAST) *cont.*		
Diagnoses/diseases		
792	X70	Syphilis female
793	X71	Gonorrhoea female
794	X72	Genital candidiasis female
795	X73	Genital trichomoniasis female
796	X74	Pelvis inflammatory disease
797	X75	Malignant neoplasm cervix
798 922	X76	Malignant neoplasm breast female
426 925	X77	Malignant neoplasm genital female other
799	X78	Fibromyoma uterus
800	X79	Benign neoplasm breast
801	X80	Benign neoplasm female genital
802	X81	Genital neoplasm female other/unspecified
219 803	X82	Injury genital female
804	X83	Congenital anomaly genital female
207	X84	Vaginitis/vulvitis nos
208	X85	Cervical disease nos
805	X86	Abnormal pap smear
807	X87	Uterovaginal prolapse
808	X88	Fibrocystic disease breast
809	X89	Premenstrual tension syndrome
810	X90	Genital herpes female
811	X91	Condylomata acuminata female
812	X92	Chlamydia infection genital female
813	X99	Genital disease, other
Y. MALE GENITAL SYSTEM		
Symptoms and complaints		
814	Y01	Pain in penis
209	Y02	Pain in testis/scrotum
815	Y03	Urethral discharge
816	Y04	Penis symptom/complaint other
817 818	Y05	Scrotum/testis symptom/complaint other
819	Y06	Prostate symptom/complaint
820	Y07	Impotence nos
821	Y08	Sexual function symptom/complaint male
822	Y10	Infertility/subfertility male
824	Y16	Breast symptom/complaint male
829	Y28	Limited function/disability genital male
830	Y29	Genital symptom/complaint male other

CLASSIFICATION OF LONG TERM MEDICAL CONDITIONS: ICPC–BASED *continued*

ABS INPUT CODES	*ICPC CODES*	*LABELS*
Y. MALE GENITAL SYSTEM *cont.*		
Diagnoses/diseases		
831	Y70	Syphilis male
832	Y71	Gonorrhoea male
833	Y72	Genital herpes male
834	Y73	Prostatitis/seminal vesiculitis
211	Y74	Orchitis/epididymitis
835	Y75	Balanitis
836	Y76	Condylomata acuminata male
837 923	Y77	Malignant neoplasm prostate
838	Y78	Malignant neoplasm male genital other
839	Y79	Benign/unspecified neoplasm male genital
840 841 842	Y80	Injury male genital
843	Y81	Phimosis/redundant prepuce
844 845	Y82	Hyposadias
846	Y83	Undescended testicle
847	Y84	Congenital genital anomaly male other
848	Y85	Benign prostatic hypertrophy
849	Y86	Hydrocoele
850	Y99	Genital disease male other
Z. SOCIAL PROBLEMS		
Symptoms and complaints		
856	Z07	Education problem
866	Z18	Illness problems with child
873	Z28	Social handicap
874	Z29	Social problem nos
SYMPTOM OR CONDITION NOT KNOWN/NOT STATED		
998 999	Z99	Not known/not stated

CLASSIFICATION OF OCCUPATION

Occupation (of main job held at the time of the survey) is classified to the full 4 digit level of the *Australian Standard Classification of Occupation* (cat. no. 1222.0). While survey results can technically be compiled at this level, the survey sample is not sufficient to support reliable output at that level. For most output purposes, occupation classified to the broader Major and Sub-Major group level classifications, as shown below, would be more suitable.

AUSTRALIAN STANDARD CLASSIFICATION OF OCCUPATION, Major and sub–major unit groups

1 Managers and administrators	
11	Generalist managers
12	Specialist managers
13	Farmers and farm managers
2 Professionals	
21	Science, building and engineering
22	Business and information
23	Health professionals
24	Education professionals
25	Social, arts and miscellaneous professionals
3 Associate professionals	
31	Science, engineering and related
32	Business and administrative
33	Managing supervisors (sales and service)
34	Health and welfare
39	Other associate professionals
4 Tradespersons and related workers	
41	Mechanical engineering
42	Automotive
43	Electrical and electronics
44	Construction
45	Food
46	Skilled agricultural and horticultural
49	Other tradespersons and related workers
5 Advanced clerical and service workers	
51	Secretaries and personal assistants
59	Other advanced clerical and service workers
6 Intermediate clerical, sales and service workers	
61	Intermediate clerical
62	Intermediate sales and related
63	Intermediate service
7 Intermediate production and transport workers	
71	Intermediate plant operators
72	Intermediate machine operators
73	Road and rail transport drivers
79	Other intermediate production and transport workers
8 Elementary clerical, sales and service workers	
81	Elementary clerks
82	Elementary sales workers
83	Elementary service workers
9 Labourers and related workers	
91	Cleaners
92	Factory labourers
99	Other labourers and related workers

APPENDIX 5 CLASSIFICATION OF INDUSTRY OF EMPLOYMENT

CLASSIFICATION OF INDUSTRY OF EMPLOYMENT

Industry (of main job held at the time of the survey) is classified to the full 4 digit level of the *Australian and New Zealand Standard Industrial Classification* (First Edition) (cat. no. 1292.0). While survey results can technically be compiled at this level, the survey sample is not sufficient to support reliable output at that level. For most output purposes, industry classified to the broader Division level classification would be more suitable.

AUSTRALIAN AND NEW ZEALAND STANDARD INDUSTRIAL CLASSIFICATION, Divisions and sub–divisions

Agriculture, forestry and fishing	
1	Agriculture
2	Services to agriculture, hunting and trapping
3	Forestry and logging
4	Commercial fishing
Mining	
11	Coal mining
12	Oil and gas extraction
13	Metal ore mining
14	Other mining
15	Services to mining
Manufacturing	
21	Food, beverage and tobacco
22	Textile, clothing, footwear and leather
23	Wood and paper products
24	Printing, publishing and recorded media
25	Petroleum, coal, chemical and associated products
26	Non-metallic mineral products
27	Metal products
28	Machinery and equipment
29	Other manufacturing
Electricity, gas and water supply	
36	Electricity and gas supply
37	Water, sewerage and drainage services
Construction	
41	General construction
42	Construction trade services
Wholesale trade	
45	Basic material wholesaling
46	Machinery and motor vehicles
47	Personal and household goods
Retail trade	
51	Food retailing
52	Personal and household goods
53	Motor vehicle retailing and services
Accommodation, cafes and restaurants	
57	Accommodation, cafes and restaurants
Transport and storage	
61	Road transport
62	Rail transport
63	Water transport
64	Air and space transport
65	Other transport
66	Services to transport
67	Storage
Communication services	
71	Communication services
Finance and insurance	
73	Finance
74	Insurance
75	Services to finance and insurance
Property and business services	
77	Property services
78	Business services
Government administration and defence	
81	Government administration
82	Defence
Education	
84	Education

AUSTRALIAN AND NEW ZEALAND STANDARD INDUSTRIAL CLASSIFICATION, Divisions and sub–divisions *continued*

Health and community services	
86	Health services
87	Community services
Cultural and recreational services	
91	Motion picture, radio and television
92	Libraries, museums and the arts
93	Sport and recreation
Personal and other services	
95	Personal services
96	Other services
97	Private households employing staff

APPENDIX 6 STANDARD ERRORS AND REPLICATE WEIGHTS

STANDARD ERRORS

Reliability of estimates

Since the estimates from this survey are based on information obtained from a sub-sample of usual residents of a sample of dwellings, they are subject to sampling variability; that is, they may differ from those that would have been produced if all persons had been included in the survey. One measure of the likely difference is given by the standard error (SE), which indicates the extent to which an estimate might have varied by chance because only a sample of persons was included. There are about two chances in three that a sample estimate will differ by less than one SE from the number that would have been obtained if all dwellings had been included, and about 19 chances in 20 that the difference will be less than two SEs. Another measure of the likely difference is the relative standard error (RSE), which is obtained by expressing the SE as a percentage of the estimate.

The size of the SE increases with the level of the estimate, so that the larger the estimate the larger is the SE. However, the larger the sample estimate the smaller the SE will be in percentage terms (that is the RSE). This means larger estimates will be relatively more reliable than smaller estimates. In general, estimates with an RSE of 25% or less are considered sufficiently reliable for most purposes. Estimates with RSEs of 25% to 50% should be used with caution, while estimates with RSEs above 50% are considered too unreliable for general use.

Exact standard errors (SEs) and relative standard errors (RSEs) on every estimate can be produced using the replicate weight methodology: this methodology is outlined at the end of this Appendix.

Generally it is found that the smaller the estimate the higher the RSE. Very small estimates are thus subject to such high SEs (relative to the size of the estimate) as to detract seriously from their value for most reasonable uses. Only estimates with RSEs of less than 25% and percentages based on such estimates are considered sufficiently reliable for most purposes. However, estimates with a higher RSE are contained in published tables from the survey and can be provided on request. In published output estimates with an RSE of 25% to 50% are preceded by an asterisk (e.g. *3.4) to indicate that they are subject to high SEs and should be used with caution. Estimates with RSEs greater than 50% are preceded by a double asterisk (e.g. **2.1) to indicate that they are considered too unreliable for general use.

SEs of proportions and percentages

Proportions and percentages formed from the ratio of two estimates are also subject to sampling errors. The size of the error depends on the accuracy of both the numerator and denominator. For proportions where the denominator is an estimate of the number of persons in a group and the numerator is the number of persons in a subgroup of the denominator population, the formula to approximate the RSE is:

$$RSE\left(\frac{x}{y}\right) = \sqrt{[RSE(x)]^2 - [RSE(y)]^2}$$

Using this formula, the RSE of the estimated proportion or percentage will be lower than the RSE estimate of the numerator. Therefore an approximation for SEs of proportions or percentages may be derived by neglecting the RSE of the denominator i.e. obtaining the RSE of the number of persons corresponding to the numerator of the proportion or percentage and then applying this figure to the estimated proportion or percentage.

Standard error of a difference

The difference between two survey estimates is itself an estimate and is therefore subject to sampling variability. The sampling error of the difference between the two estimates depends on their individual SEs and the relationship (correlation) between them. An approximate SE of the difference between two estimates (x–y) may be calculated by the following formula:

$$SE(x-y) = \sqrt{[SE(x)]^2 + [SE(y)]^2}$$

Standard error of a difference continued

While this formula will only be exact for differences between separate and uncorrelated characteristics of subpopulations, it is expected to provide a reasonable approximation for most differences likely to be of interest in relation to this survey.

REPLICATE WEIGHTS TECHNIQUE

A class of techniques called replication methods provide a general method of estimating variances for the types of complex sample designs and weighting procedures employed in ABS household surveys.

A basic idea behind the replication approach is to select subsamples repeatedly from the who sample. For each of these subsamples the statistic of interest is calculated. The variance of the full sample statistic is then estimated using the variability among the replicate statistics calculated from these subsamples. The subsamples are called replicate groups and the statistics calculated from these replicates are called replicate estimates.

There are various ways of creating replicate subsamples from the full sample. The replicate weights produced for the 2004–05 NATSIHS have been created under the Jackknife method of replication which is described below.

There are numerous advantages to using the replicate weighting approach. These include:

- The same procedure is applicable to most statistics such as means, percentages, ratios, correlations, derived statistics and regression coefficients
- It is not necessary for the analyst to have available detailed survey design information if the replicate weights are included with the data file.

Derivation of replicate weights

Under the Jackknife method of replicate weighting, weights were derived as follows:

- 250 replicate groups were formed with each group formed to mirror the overall sample. Units from a CD all belong to the same replicate group and a unit can belong to only one replicate group.
- One replicate group was dropped from the file and then the remaining records were weighted in the same manner as for the full sample.
- The records in that group that was dropped received a weight of zero.
- This process was repeated for each replicate group (i.e. a total of 250 times).
- Ultimately each record has 250 replicate weights attached to it with one of these being the zero weight.

Application of replicate weights

As noted above, replicate weights enable variances of estimates to be calculated relatively simply. They also enable unit records analyses such as chi-square and logistic regression to be conducted which may take into account the sample design.

Replicate weights for any variable of interest can be calculated from the 250 replicate groups, giving 250 replicate estimates. The distribution of this set of replicate estimates, in conjunction with the full sample estimate (based on the general weight) is then used to approximate the variance of the full sample.

The formula for calculating the standard error (SE) and relative standard error (RSE) of an estimate using this method is shown below.

$$SE(y) = \sqrt{\left((249/250)\,\Sigma_g (y_{(g)} - y)^2\right)}$$

where

Σ_g = (1, ..., 60(the number of replicate weights)

$y_{(g)}$ = estimate from using replicate weighting; and

y = estimate from using full person weight.

The $RSE(y) = SE(y)/y \times 100$

Application of replicate weights continued

This method can also be used when modelling relationships from unit record data, regardless of the modelling technique used. In modelling, the full sample would be used to estimate the parameter being studies, such as a regression coefficient, the 250 replicate groups used to provide 250 replicate estimates of the survey parameter. The variance of the estimate of the parameter from the full sample is then approximated, as above, by the variability of the replicate estimates.

Use of replicate weights with statistical packages

Not all statistical computer packages may allow direct calculation of SEs using the Jackknife replicate weights. However, those packages that allow the direct use of Balanced Repeated Replication (BRR) methodology generally include the option of an adjustment factor. This factor can be incorporated to overcome the difference between the variance formulae.

Availability of RSEs calculated using replicate weights

Actual RSEs (i.e. those calculated using the replicate weights methodology) were used in the summary publication released from the NATSIHS to identify high RSEs and highlight them using the * and ** symbols. The publication tables along with selected tables for each State and Territory are available as spreadsheets on the ABS web site (cat. nos. 4715.0.55.005 to 4715.8.55.005) with the actual RSEs presented next to each cell proportion.

APPENDIX 7 DECILES FOR INCOME ITEMS

DECILES IN INCOME ITEMS

A range of income items from the 2004–05 NATSIHS are available expressed in deciles. These deciles are those determined from the 2004–05 NHS and as such are representative of Australian income deciles rather than Indigenous income deciles. For details on how the deciles were derived, refer to the National Health Survey: Users' Guide (cat. no. 4363.0.55.001).

To assist in the use and interpretation of these items, the $ amounts contained in each decile are shown in the following table. Cases where the income was not available are shown as not stated.

Information about all income items available from the survey are contained in Chapter 6 of this Guide.

DECILE GROUPINGS OF INCOME VALUES

Decile	*$ value*
Gross weekly cash income	
1	Less than 150
2	150–199
3	200–249
4	250–354
5	355–499
6	500–632
7	633–766
8	767–958
9	959–1297
10	1298 or more
98	Not stated
Gross weekly equivalised cash income of income unit	
1	Less than 225
2	225–267
3	268–345
4	346–448
5	448–549
6	550–655
7	656–779
8	780–958
9	959–1250
10	1251 or more
98	Not stated
Gross weekly cash income of household	
1	Less than 336
2	336–500
3	501–724
4	725–924
5	925–1147
6	1148–1346
7	1347–1604
8	1605–1917
9	1918–2493
10	2494 or more
98	Not stated
Gross weekly equivalised cash income of household	
1	Less than 238
2	238–294
3	295–379
4	380–479
5	480–584
6	585–688
7	689–822
8	823–996
9	997–1278
10	1279 or more
98	Not stated

GLOSSARY

Aboriginal people People who identify or are identified as being of Aboriginal origin. may also include people identified as being of both Aboriginal and Torres Strait Islander origin. See also indigenous and Torres Strait Islander people.

Age standardisation A method of removing the influence of age when comparing populations with different age structures. Data from this survey use age standardised weights based on the age composition of the total estimated resident population of Australia as at 30 June 2001. The age standardised rate is that which would have prevailed if the studies population had the standard age composition.

Alcohol consumption risk level Alcohol risk levels were derived from the average daily consumption of alcohol in the seven days prior to interview and are grouped into relative risk levels as defined by the National Health and Medical Research Council (NHMRC) as follows:

ALCOHOL RISK LEVEL(a)

Relative risk level	CONSUMPTION PER DAY	
	Males	*Females*
Low risk	50mls or less	25mls or less
Risky	More than 50mls, up to 75 mls	More than 25mls, up to 50ml
High risk	More than 75mls	More than 50mls

(a) One standard drink contains 12.5mls of alcohol

It should be noted that risk level as defined by the NHMRC is based on regular consumption levels of alcohol whereas indicators derived in the NATSIHS do not take into account whether consumption in the reference week was more, less or the same as usual.

Drinking status information was also collected for those who did not consume any alcohol in the seven days prior to interview. Categorised as:

- Last consumed more than one week to less than 12 months ago;
- Last consumed 12 months or more ago; and
- Never consumed.

Arthritis Arthritis is characterised by an inflammation of the joints often resulting in pain, stiffness, disability and deformity.

Asthma A chronic disease marked by episodes of wheezing, chest tightness and shortness of breath associated with widespread narrowing of the airways within the lungs and obstruction of airflow.

Body Mass Index (BMI) Calculated from reported height and weight information, using the formula weight (kg) divided by the square of height (m). To produce a measure of the prevalence of overweight or obesity in adults, BMI values are grouped according to the table below which allows categories to be reported against both the World Health Organization (WHO) and National Health and Medical Research Council (NHMRC) guidelines.

Body Mass Index (BMI) *continued*

BODY MASS INDEX

	2004–05
Underweight	Less than 18.5
Normal range	18.5 to less than 20.0(a)
	20.0 to less than 25.0
Overweight	25.0 to less than 30.0
Obese	30.0 and greater

(a) Classified as underweight by NHMRC and Normal weight by WHO.

Breastfeeding status Refers to past or current breastfeeding status of children aged less than four years, including duration of breastfeeding. This includes children up to 47 months of age. In remote areas, only past or current breastfeeding status was collected.

Cause of condition Asked in respect of all the current long term conditions which the respondent had previously reported. This refers to the respondent's perception of whether the conditions was the result of an injury.

Circulatory problems/diseases Covers all diseases and related problems of the circulatory system. Includes specific conditions such as hypertension, angina, tachycardia, oedema, haemorrhoids, varicose veins and cardiac murmurs. For the purposes of condition status items in this survey, also includes high cholesterol.

Community Refers to remote Indigenous communities located in Western Australia, South Australia, Northern Territory and Queensland which are not considered to be remote Indigenous communities. These areas were collected using pen and paper interviewing (PAPI) methodology. For most of this Guide, community is referred to as the geographical area of remote although communities do not account for the whole remote component of the survey sample; see non-community, remote, non-remote and Chapter 2 for further details.

Community Development Employment Projects (CDEP) scheme The CDEP scheme enables participants (usually members of Aboriginal or Torres Strait Islander communities) to exchange unemployment benefits for opportunities to undertake work as training in activities which are managed by a local Aboriginal or Torres Strait Islander community organisation. Participants in the program are therefore classified as employed.

Conditions See long term medical condition.

Condition status Derived for asthma, diabetes and high sugar levels in blood or urine, cancers, circulatory conditions, arthritis, osteoporosis, and renal/kidney disease. Condition status brings together information about whether or not a person has ever been told by a doctor or nurse they have the condition, whether the condition was current at the time of the survey, and if current whether the condition was long term (i.e. had lasted or was expected to last for 6 months or more). The derivations used and assumptions made differ slightly between conditions: see Chapter 3 for further details.

Contraception The prevention of pregnancy by deliberate measures; birth control.

Current daily smoker A current daily smoker is an adult who reported that they regularly smoked one or more cigarettes, cigars or pipes per day. See also Smoker status.

Days away from work or study Refers to days on which the respondent was away from work, school or other educational institution for at least half the day. Absences included days away due to a respondent's own illness or injury, or to care for another person with illness or injury.

Days out of role Days away from work or school/study, and other days of reduced activity due to own illness or injury.

Dentist Includes dentist, orthodontist, dental nurse, dental technician and dental mechanic.

Diabetes A chronic condition in which blood glucose levels become too high sue to the body producing little or no insulin, or not using insulin properly.

Dietary habits In the 2004–05 NATSIHS this term refers to usual consumption of fruit or vegetables, the main type of milk usually consumed, and the addition of salt to food after it is cooked. Usual daily serves of fruit and vegetables are listed separately in this Glossary.

Employed Persons aged 15 years and over who had a job or business, or who undertook work without pay in a family business. Includes persons who were absent from a job or business and Community Development Employment Projects (CDEP) participants. See also Unemployed, Not in the labour forces, and CDEP.

Equivalised income Equivalisation is a process whereby reported household income and income unit income is adjusted to take account of the size and composition of the household or income units: for further details see Chapter 6.

Exercise level Based on frequency, intensity (i.e. walking, moderate exercise and vigorous exercise) and duration of exercise (for recreation, sport or fitness) in the two weeks prior to the interview. From these components, an exercise score was derived using factors to represent the intensity of the exercise. Scores were grouped into the following four categories:

Exercise level	*Criteria*
Sedentary	Scores less than 100 mins(a)
Low exercise level	Scores of 100 mins to less than 1600 mins
Moderate exercise level	Scores of 1600 to 3200 mins or more than 3200 mins but less than 2 hours of vigorous exercise
High exercise level	Scores of more than 3200 mins and 2 hours or more of vigorous exercise

(a) Includes no exercise.

Sedentary refers to sitting in the one place for extended periods of time. The components required to derive the exercise score were not collected in remote areas.

Government health card Refers to coverage by the following government issued cards which entitle the card holder, and in some cases their dependents, to a variety of health benefits or concessions (e.g. medical care, hospital treatment/accommodation, supply of pharmaceuticals, free of charge or at reduced rates).

- Health Care Card (including the low income health care card);
- Pensioner Concession Card; and
- Commonwealth Seniors Health Card.

Health related actions Refers to specific health related action(s) respondents reported they had taken in the two weeks prior to interview:

- Discharged from a stay in hospital (as an admitted patient);
- Visit to casualty/emergency units at hospitals;
- Visit to outpatients department at hospital;
- Visit to day clinics (non-remote only);
- Consultation with general practitioner (GP) and/or specialist;
- Dental consultation;
- Consultation with other health professionals (OH); see separate entry in this Glossary;
- Days away from work or school (due to own illness or injury); and
- Other days of reduced activity (days other than days away from work or school/study) due to own illness or injury.

Generally, 'discharged from a stay in hospital' is replaced in output by 'admitted to hospital (in last 12 months)'.

Homelands/traditional country An area of land with which Aboriginal or Torres Strait Islander people have ancestral and/or cultural links.

Hospital cover Health insurance provided by a private insurance organisation to cover all or part of the costs of private accommodation in a public hospital, charges for private hospital treatment and care in a public hospital by a doctor of the patients choice.

Household Consists of one or more persons usually resident in the same dwelling. In this survey, each household contained at least one identified Indigenous resident and at least one adult (aged 18 years and over).

Household income Derived as the some of the reported personal cash incomes of all household members aged 15 years and over. household income is available in $ amounts and deciles/quintiles, in reported and equivalised form.

Household structure Refers to the composition of the household to which the respondent belonged: for further details see Chapter 6.

HSL High sugar levels in blood or urine.

ICD–10 ICD–10 refers to the tenth revision of the International Classification of Diseases and Health Related Problems and is the most widely used international standard to classify diseases and injuries. The ICD–10 is endorsed by the World Health Organization. The classification of long term conditions most commonly used in output from the 2004–05 NATSIHS and 2004–05 NHS has been developed for use in these surveys, but is based on the ICD–10: see Appendix 2.

ICPC International Classification of Primary Care (ICPC). Results of the survey about long term conditions are available classified to a classification developed for the NHS and NATSIHS based on the ICPC: see Appendix 3.

Immunisation status The degree to which the recommended course of vaccinations for a particular disease has been received (as appropriate to the age of the child). The National Health and Medical Research Council Standard Childhood Vaccination Schedules were used to derive immunisation status of children. immunisation is categorised as:

- Fully immunised
- Partially immunised;
- Not immunised;
- not known if fully or partially immunised;
- not known if immunised.

Immunisation status for children was not collected in remote areas.

Incidence Incidence refers to the number of new cases of a particular characteristic, such as cancer, which occur within a certain period. This differs from prevalence, which refers to the number of cases of a particular characteristic that are present in a population at one point in time.

Income of income unit An income unit may comprise one person or group of related persons (de facto or registered marriage or parent/dependent child relationship) within a household whose command over income is assumed to be shared. An income unit may therefore include the partner (for couples), all children aged less than 15 years, and children aged 15–24 years provided they are unmarried, full-time students and do not have dependents of their own. in this survey, income unit income is the sum of the respondent's cash income, the cash income of their spouse/partner (where applicable) and the cash income of children aged 15 years or more who are part of that unit.

Index of disadvantage This is one of four Socio Economic Indexes for Areas (SEIFAs) compiled by ABS following each Census of Population and Housing. The indexes are compiled from various characteristics of persons resident in particular areas; the index of disadvantage summarises attributes such as low income, low educational attainment, high

Index of disadvantage *continued*

unemployment and jobs in relatively unskilled occupations. For further information see Chapter 6.

Indigenous people

People who identified themselves, or were identified by another household member, as being of Aboriginal and/or Torres Strait Islander origin. See also Aboriginal person and Torres Strait Islander person.

Injury event

An accident, harmful incident, exposure to harmful factors or other incident which resulted in an injury. The injury must have occurred in the four weeks prior to the survey and have resulted in one or more of the following actions being taken:

- consulting a health professional;
- seeking medical advice;
- receiving medical treatment;
- reduced usual activities; and
- other treatment of injury (i.e. taking medications, using a bandage/bandaid, or heat or ice pack).

In the labour force

People who, during the reference week, were employed or unemployed, as defined (see also labour force status).

Kessler Psychological Distress Scale

The Kessler psychological Distress Scale – 10 (K10) is a scale of non-specific psychological distress. It was developed by professors Ron Kessler and Dan Mroczek, as a short dimensional measure of non-specific psychological distress in the anxiety–depression spectrum, for use in the US National health Interview Survey.

The K10 was first used by the ABS in the Survey of Mental Health and Well-being of Adults (SMHWB) in 1997 and has also been used in the 2001 and 2004–05 National Health Survey. The 2004–05 NATSIHS includes five questions from the K10 to provide a measure of the social and emotional wellbeing of the Indigenous population. The questions asked in the NATSIHS were:

- In the last 4 weeks, about how often did you feel nervous?
- In the last 4 weeks, about how often did you feel without hope?
- In the last 4 weeks, about how often did you feel restless or jumpy?
- In the last 4 weeks, about how often did you feel everything was an effort?
- In the last 4 weeks, about how often did you feel so sad that nothing could cheer you up?

Labour force status

Refers to the employment situation of respondents at the time of the survey. Categories are:

- Employed (aged 15 years and over and had a job in the week prior to the survey)
- Unemployed (aged 15 years and over, were not employed and actively looked for work in the four weeks prior to the survey)
- Not in the labour force (all children less than 15 years, and persons 15 years and over who were neither employed or unemployed).

Level of highest non-school educational qualification

The level of the highest educational qualification obtained other than school qualification; may include non-school qualification obtained while still at school.

Long term medication condition

A medication condition (illness, injury or disability) which has lasted at least six months, or which the respondent expects to last for six months or more. Some reported conditions are assumed to be long term, including:

- asthma;
- arthritis;
- cancer;
- osteoporosis;
- diabetes;
- rheumatic heart disease;
- heart attack;
- stroke;
- renal disease.

Main language spoken at home — Obtained for adults only and refers to the language reported by the respondent as the main language they speak at home.

Mammogram — An X–ray examination of the female breast to help in the early diagnosis of breast cancer.

METS — METS or intensity values are a measure of the energy expenditure required to carry out exercise, expressed as a multiple of the resting metabolic rate and operate as a factor when determining exercise level. The 2004–05 NATSIHS (non-remote) used the following 'intensity' factors — 3.5 for walking, 5.0 for moderate exercise and 7.5 for vigorous exercise.

Moderate exercise — Exercise for recreation, sport or fitness which caused a moderate increase in heart rate or breathing.

National Health Priority Areas (NHPA) — Comprises asthma, cancer, diabetes/high sugar levels, heart and circulatory conditions, musculoskeletal conditions (arthritis and osteoporosis), and injuries.

Natural teeth — Refers to the 14 teeth on the top and bottom jaws – 28 in total (excluding wisdom teeth, dentures and false teeth). The definition of losing teeth is a respondents tooth or teeth have either been removed by a dentist or dental professional, or the teeth/tooth has fallen adult.

Neoplasm — A neoplasm is a new growth of abnormal tissue (a tumour). Tumours can be either benign (non-cancerous) or malignant (cancerous). Cancer refers to several diseases and can affect most types of cells in various parts of the body.

Non-community — Refers to all parts of Victoria, Tasmania, Australian Capital Territory, and areas of Western Australia, South Australia, Northern Territory and Queensland which are not considered to be remote Indigenous communities. These areas were collected using CAI. For most of this Guide, non-community is referred to as non-remote although geographically non-community areas also cover remote areas; see community, remote, non-remote and Chapter 2 for further details.

Non-remote — Geographical areas within the 'Major cities of Australia', 'Inner regional Australia' and 'Outer regional Australia' categories of the Australian Standard Geographical Classification (AGC) Remoteness structure. See Remoteness Area. Reference made to non-remote in this publication regarding methodological collection issues and limiting of data items refer to the concept of non-community, although for output purposes, data items are restricted according to non-remote geography; see community, non-community, remote and Chapter 2 for further details.

Not in the labour force — Persons who are not employed or unemployed as defined, including persons who:
- are retired;
- no longer work;
- do not intend to work in the future;
- are permanently unable to work; and
- have never worked and never intend to work.

Osteoporosis — A condition that thins and weakens bone mineral density, generally caused by loss of calcium, which leads to increased risk of fracture.

Other days of reduced activity — Days other than days away form work or from school/study on which a person had cut down on their usual activities for at least half the day, as a result of personal injury or illness.

Other health professionals — Includes consultation, for own health reasons, in the two weeks prior to interview with one or more of the following:
- Aboriginal health worker;
- Accredited counsellor;
- Acupuncturist;
- Alcohol and drug worker;
- Audiologist/audiometrist;

Other health professionals *continued*

- Chemist (advice only);
- Chiropodist/podiatrist;
- Chiropractor;
- Dietition/nutritionist;
- Herbalist;
- Hypnotherapist;
- Naturopath;
- Nurse;
- Occupational therapist;
- Optician/optometrist;
- Osteopath;
- Physiotherapist/hydrotherapist;
- Psychologist;
- Social worker/welfare officer;
- Speech therapist/pathologist; and
- Traditional healer.

Pharmaceutical medications

Any medication used in the two weeks prior to interview for the treatment of asthma, arthritis, osteoporosis, heart and circulatory conditions, or diabetes/HSL. Does not include medications identified by respondents as vitamins or minerals, or natural or herbal medications.

Prevalence

The number of cases of a particular characteristics (e.g. a specific long term condition such as cancer) that are present in a population at one point in time. This differs from incidence, which refers to the number of new cases of a particular characteristic, such as cancer, occurring within a certain period.

Private health insurance

Refers to the private health insurance status at the time of the survey of persons aged 15 years and over in non-remote areas. Information about type of cover is also available.

Remote

Geographical areas within the 'Remote Australia' and 'Very remote Australia' categories of the Australian Standard Geographical Classification (ASGC) Remoteness structure. See Remoteness Area. Reference made to remote in this publication regarding methodological collection issues and limiting of data items refer to the concept of community although for output purposes, data items are restricted according to remote geography; see community, non-community, non-remote and Chapter 2 for further details.

Remoteness Area

Within a state or territory, each Remoteness Area represents an aggregation of non-contiguous geographical areas which share common characteristics of remoteness, determined in the context of Australia as a whole.

The delimitation criteria for Remoteness Areas are based on the Accessibility/Remoteness Index of Australia (ARIA) developed by the then Commonwealth Department of Health and Aged Care and the National Key Centre for Social Applications of Geographic Information Systems (GIS). ARIA measures the remoteness of a point based on the physical road distances to the nearest Urban Centre in each of the five size classes. Therefore, not all Remoteness Areas are represented in each state or territory.

There are six Remoteness Areas in this structure:

- Major Cities of Australia (Collection Districts (CDs) with an average ARIA index value of 0 to 0.2)
- Inner Regional Australia (CDs with an average ARIA index value greater than 0.2 and less than or equal to 2.4)
- Outer Regional Australia (CDs with an average ARIA index value greater than 2.4 and less than or equal to 5.92)
- Remote Australia (CDs with an average ARIA index value greater than 5.92 and less than or equal to 10.53)
- Very Remote Australia (CDs with an average ARIA index value greater than 10.53)
- Migratory (composed on off-shore, shipping and migratory CDs).

Remoteness Area *continued*

For more information, see *Statistical Geography Volume 1, Australian Standard Geographical Classification (ASGC), 2001* (cat. no. 1216.0).

SEIFAs

Four Indexes compiled by the ABS following each population Census. Each index summarises different aspects of the socioeconomic condition of areas. The Index of Disadvantage is the SEIFA index most frequently used in health analysis; it focuses on low income earners, relatively lower educational attainment and high unemployment.

The Indexes available for use with the 2004005 NATSIHS data are those compiled from the 2001 Census of Population and Housing. The Index scores have been mapped to the NATSIHS sample at both the CD and SLA levels. For further information about the indexes, see *Information Paper: Census of Population and Housing — Socio-Economic Indexes for Areas, Australia* (cat. no. 2039.0).

Self assessed body mass

Respondents reported assessment of himself/herself as being of acceptable weight, underweight or overweight.

Self assessed health status

A person's general assessment of their own health against a five point scale from excellent through to poor.

SF–36 — Medical Outcome Short Form health Survey

The SF–36 is a survey questionnaire designed to provide information on general health and wellbeing. The questionnaire is a subset of a larger set of questions used in the Medical Outcomes Study in the United States of America in the 1980s.

The SF–36 provides an indicator across eight dimensions of health and wellbeing: physical functioning, role limitations due to physical problems, bodily pain, general health perceptions, vitality, social functioning, role limitations due to emotional problems and mental health. The 2004–05 NATSIHS includes four SF–36 questions that relate to the positive aspects of social and emotional wellbeing. The questions asked were:

- In the last 4 weeks, about how often did you feel calm and peaceful?
- In the last 4 weeks, about how often have you been a happy person?
- In the last 4 weeks, about how often did you feel full of life?
- In the last 4 weeks, about how often did you have a lot of energy?

Significance testing

To determine whether a difference between two survey estimates is a real difference in the populations to which the estimates relate, or merely the product of different sampling variability, the statistical significance of the difference can be tested. This is particularly useful for interpreting apparent changes in estimates over time. The test is done by calculating the standard error of the difference between two estimates and then dividing the actual difference by the standard error of the difference. If the result is greater than 1.96 then there are 19 chances in 20 that there is a real difference in the populations to which the estimates relate. For further information see Chapter 7 of this Guide.

Smoker status

The extent to which an adult was smoking at the time of interview, and refers to regular smoking of tobacco, including manufactured (packet) cigarettes, roll-your-own cigarettes, cigars and pipes, but excludes chewing tobacco and smoking of non-tobacco products. Categorised as:

- Current daily smoker (a person who was smoking one or more cigarettes (or cigars or pipes) per day, on average, at the time of interview)
- Current smoker — other (a person who was smoking at least once a week, but not daily at the time of interview).
- Ex-smoker (has previously smoked daily or has smoked 100+ cigarettes in lifetime or has smoked pipes/cigars etc. at least 20 times)
- Never smoked (has not previously smoked daily or smoked 100+ cigarettes in lifetime or smoked pipes/cigars etc. at least 20 times)

Stressors

one or more events or circumstances which a persons considers to have been a problem for themselves or someone close to them in the last 12 months. Includes:

- Serious illness;

Stressors *continued*

- Accident or disability;
- Death of a family member or close friend;
- Divorce or separation;
- Inability to obtain work;
- Mental illness (non-remote only);
- Involuntary loss of a job;
- Alcohol or drug-related problems;
- Witnessing violence;
- Being the victim of abuse or violent crime;
- Trouble with the police;
- Gambling problems;
- Incarceration of self or a family member;
- Overcrowding;
- Pressure to fulfill cultural responsibilities (non-remote only);
- Discrimination or racism.

Substance use

The use of substances for non-medical purposes. Includes: analgesics; tranquillisers; amphetamines; marijuana; heroin; cocaine; hallucinogens (both synthetic and naturally occurring); ecstasy and other designer drugs; methadone; petrol and other inhalants; and kava. The 2004–05 NATSIHS collected information in non-remote areas on a person's substance use in the 12 months prior to interview and their substance use to date. Information on substance use was not collected in remote areas.

Torres Strait Islander people

People identified as being of Torres Strait Islander origin. May also include people identified as being of both Torres Strait Islander and Aboriginal origin. See also Indigenous and Aboriginal people.

Type of condition

The type of medical condition as reported by respondents and/or office coded by ABS from the description provided by respondents. All reported long term medical conditions were coded to a classification developed by the ABS for use in the NHS and NATSIHS. For survey output, conditions are classified either to a classification based on the tenth revision of the International Classification of Diseases and Health Related Problems (ICD–10) or a classification based on the International Classification of Primary Care (ICPC). See Chapter 7 for further information.

Type of injury

The type of injury as reported by respondents against the following categories:

- Fractures and broken bones;
- Internal injury;
- Dislocations, sprains, strains, torn muscles/ligaments;
- Open wound;
- Bruising;
- Burns and scalds;
- Concussion;
- Choking;
- Poisoning (other than food poisoning);
- Other.

Type of injury event

The type of event resulting in injury as reported by respondents against the following categories:

- Vehicle accident;
- Low fall (one metre or less);
- High fall;
- Hitting something or being hit by something;
- Attack by another person;
- Near drowning;
- Exposure to fire/heat;
- Exposure to chemicals;
- Bite or sting;

Type of injury event *continued*

- Cut with knife/tool; and
- Other event.

Unemployed

Persons aged 15 years and over who were not employed and actively looking for work in the four weeks prior to the survey, and were available to start work in the week prior to the survey.

Usual daily intake of fruit

Refers to the number of serves of fruit (excluding drinks and beverages) usually consumed each day, as reported by the respondent. A serve is approximately 150 grams of fresh fruit or 50 grams of dried fruit. The National Health and Medical Research Council (NHMRC) has recommended a minimum of two serves of fruit per day for adults. The number of serves of fruit consumed was not collected in remote areas. in remote areas a general question was asked regarding whether they usually eat fruit each day.

Usual intake of vegetables

Refers to the number of vegetables (excluding drinks and beverages) usually consumed each day, as reported by the respondent. A serve is approximately half a cup of cooked vegetables or one cup of salad vegetables — equivalent to approximately 75 grams. The National Health and Medical Research Council (NHMRC) has recommended a minimum of five serves of vegetables per day for adults. The number of serves of vegetables consumed was not collected in remote areas. In remote areas a general questions was asked regarding whether they usually eat vegetables each day.

Vigorous exercise

Exercise for recreation, sport or fitness which caused a large increase in heart rate or breathing.

FOR MORE INFORMATION . . .

INTERNET	**www.abs.gov.au** the ABS web site is the best place for data from our publications and information about the ABS.
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