



Australian Health Survey



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The Australian Health Survey

The Australian Health Survey is the largest most comprehensive health survey ever conducted in Australia. The survey includes a nationally representative sample of 35,000 people from the general population as well as a specific survey of 13,250 Aboriginal and Torres Strait Islander people. The Aboriginal and Torres Strait Islander survey commenced across the country in May 2012 involving people living in non-remote and remote areas. The survey will expand on the information collected about Aboriginal and Torres Strait Islander peoples in previous health surveys conducted by the Australian Bureau of Statistics (ABS), and will:

- provide estimates of the prevalence of certain chronic diseases and conditions and selected behavioural risk factors—including physical activity participation and sedentary behaviour;
- provide objective measures of selected chronic diseases, nutrition status and other risk factors which can be combined with self-reported data about health status and conditions (e.g. diabetes); and
- examine health risk factors and outcomes for different population groups of interest, such as different age groups and people living in remote and non-remote areas.

In addition to these objectives, information from this survey (based on a nationally representative sample) will provide a platform for a range of new research into health determinants and patterns. This will be achieved by combining the results of objective biomedical tests with self-reported survey-based results for a range of health conditions such as circulatory disease, diabetes and kidney disease. It is well recognised that such diseases are responsible for shortening the lives of many Aboriginal and Torres Strait Islander people. By enabling comparisons with data for the general population this survey will therefore support critical assessment of progress in Closing the Gap in health outcomes.

The survey is being funded through a combination of ABS health survey program funding and additional funds from the Department of Health and Ageing (DoHA) and the National Heart Foundation of Australia.

Consultation and Ethical Clearance

Recognising the need for extensive consultation with Aboriginal and Torres Strait Islander stakeholder groups and the development of data collection instruments that are appropriate for the Aboriginal and Torres Strait Islander population, the survey has been developed over a longer period than the equivalent collection of the general population. The ABS expects to release the first survey results relating to Aboriginal and Torres Strait Islander peoples in September 2013, with more detailed results available from June 2014.

The ABS is authorised to conduct the household interview components of the survey under the *Census and Statistics Act 1905* and will draw on previous experience in conducting a number of health and social surveys of Aboriginal and Torres Strait Islander peoples. Ethical approval has been granted for the voluntary biomedical component and was provided by the DoHA's Departmental Ethics Committee in October 2011. The ABS is currently conducting a similar survey for the general population which commenced in March 2011, and also includes the collection of biomedical samples on a voluntary basis from consenting respondents (i.e. participants). Ethical approval for the biomedical survey of the general population was provided by DoHA's Departmental Ethics Committee in February 2011.

Key advice on how to appropriately collect this information from Aboriginal and Torres Strait Islander peoples has been sought through NATSIHEC, NACCHO, NAGATSIHID, OATSIH (see box below) and the Survey's own appointed Indigenous Technical Panel. The ABS is continuing to engage with Aboriginal and Torres Strait Islander organisations and health services. ABS has also sought and gained ethical approval from jurisdictional Aboriginal Health Ethics Committees, as guided by health research policies and stakeholder feedback.

NATSIHEC: National Aboriginal and Torres Strait Islander Health Equality Council
NACCHO: National Aboriginal Community Controlled Health Organisation
NAGATSIHID: National Advisory Group on Aboriginal and Torres Strait Islander Health Information and Data
OATSIH: Office for Aboriginal and Torres Strait Islander Health (within DoHA)

Survey operations

The survey will be conducted across Australia over 14 months from May 2012, and will include households in non-remote areas and remote Indigenous communities. See Attachment 1 for an overview of the proposed survey content.

The household survey will begin with an ABS interviewer conducting a personal interview with up to two adults and two children (if any) in each selected household. In remote communities, a local member of the community will be employed to act as a local facilitator to assist trained ABS interviewers with language translation (if required), in their movement around the community, and their interactions with community members. In both remote and non-remote areas, respondent(s) aged 18 years or over will be invited to also take part in the voluntary biomedical component of the survey.

The survey will ask questions about the selected person, including their health status, health service use and health risk factors including diet and physical activity. For the first time, the ABS will collect objective health measures of obesity and blood pressure, as well as nutritional status and chronic disease markers from biomedical samples. Together with the self-reported information, the biomedical samples will provide a more complete picture of the health of Aboriginal and Torres Strait Islander peoples.

ABS has selected Sonic Healthcare, through a national tender process, as the national pathology provider to process the blood and urine samples from the voluntary biomedical part of the survey. In some parts of Australia other health care providers, including Aboriginal Medical Services, may be asked to provide assistance.

Physical measurements

During the household interview, respondents will be asked for permission to measure their height, weight, waist, hips and blood pressure, which will provide a more accurate picture of Aboriginal and Torres Strait Islander people's risk factor levels across the country. The ABS interviewer will give each person measured a card with their results, for them to keep.

Food and nutrition information

Automated Multiple-Pass Method instrument

Respondents will be asked some questions about their dietary habits and food security (having enough to eat). They will also be asked about all the food and drink they have consumed in the last 24 hours, including the amount and types of foods, drinks and dietary supplements consumed. This data will be collected using a multi-pass method to ensure that the information about food consumption is as complete and detailed as possible.

In non-remote areas only, within a couple of weeks of interview, respondents will complete a second 24 hour dietary recall over the phone. The information from the interview and phone recall will be examined to understand the types and amounts of foods Aboriginal and Torres Strait Islander peoples eat, and the extent to which they are meeting dietary guidelines.

Food Composition Database

As part of the Australian Health Survey, Food Standards Australia New Zealand (FSANZ) is developing a survey-specific food composition database based on the National Food Composition Database. The ABS will use the database to translate data about food, beverage and dietary supplement consumption into nutrient consumption information in order to compare respondents' intake of 43 nutrients against relevant nutrient reference values (including energy, protein, fat, cholesterol, carbohydrate, dietary fibre, and a number of vitamins and minerals).

Prompt Card

In addition to a food model booklet used to assist with the recall of portion sizes, the ABS has developed a prompt card to assist respondents to recall any bush foods that they have consumed in the previous 24 hours.

Physical activity information

In this survey, respondents will also be asked about their physical activity including walking, exercise of moderate or vigorous intensity, sport, sedentary behaviour and sleep patterns. For interviews conducted in non-remote areas, pedometers are also being provided to respondents, along with instructions for their use. Respondents will be asked to record their daily pedometer readings over an 8-day period. Information from pedometers will provide an objective measure of some types of physical activity and will be used in conjunction with self-reported data.

Biomedical information

After completing an interview, respondents aged 18 years and over will be invited, on a voluntary basis, to take part in the biomedical component of the survey. Respondents who have given their informed consent, will be asked to attend a collection centre or temporary clinic where a qualified health professional will collect small samples of blood and urine to be tested for chronic disease and nutrition biomarkers.

Specimen collection outside of remote areas, wherever possible, will be undertaken using the same Sonic Healthcare pathology collection centres currently being employed for the general population survey. Alternatively, in areas where a Sonic Healthcare pathology collection centre is not readily accessible, consideration will be given to the provision of a mobile pathology collection service or temporary clinic, staffed by a qualified health professional.

Recognising that it may be more difficult to collect, store and transport blood and urine specimens obtained from participants in remote communities, the approved protocols for these areas are somewhat different to those which will apply in non-remote areas. However, the ABS will be ensuring that we have:

- suitable facilities for supporting specimen collection (e.g. including adequate refrigeration space);
- transport services that can deliver specimens to Sydney within 72 hours of collection; and
- willing support from clinical personnel that can provide a duty-of-care to participants including being able to be contacted and deal immediately with any urgent results.

In remote communities, the most appropriate facilities and personnel for the biomedical component are assumed to be the local Aboriginal Medical Service (AMS), or other local primary health care clinic. Each relevant AMS will be consulted prior to the start of the survey in their area to seek their support and to ascertain the most appropriate way to collect the biomedical samples, whether it be by use of AMS resources or an agreement that Sonic Healthcare pathology collectors will accompany ABS interviewers to assist with the biomedical collection. Initial consultations around any involvement of AMSs will first be conducted broadly with the organising bodies in each jurisdiction.

Reimbursement for participants

There will be no cost to participants for the testing. In addition, each participant can claim a flat \$50 reimbursement toward their costs in attending a collection centre, such as for travel or child care (no receipts for expenses required).

Tests to be conducted

Specimens will be collected according to standard operating procedures and forwarded to a central Sonic Healthcare laboratory for analysis. The list of tests conducted on all the samples collected for the AHS has been developed through consultation with population health experts and is shown below:

Biomarker	Rationale
Total cholesterol	To estimate prevalence of cardiovascular disease risk factors
Fasting triglycerides	
Fasting LDL and HDL cholesterol	
Apolipoprotein B	
Fasting plasma glucose	To estimate prevalence of diabetes
Glycated Haemoglobin (HbA1c)	To monitor diabetes control
Estimated Glomerular Filtration Rate(eGFR)	To estimate prevalence and severity of kidney damage
Urinary albumin creatinine ratio (ACR)	To estimate prevalence of albuminuria, an early indicator of kidney damage
Erythrocyte folate	To monitor the effectiveness of folate food fortification programs and estimate prevalence of folate deficiency
Serum folate	
Serum B12	To estimate prevalence of vitamin B12 deficiency
Urinary sodium concentration	To measure sodium and potassium levels in the population
Urinary potassium concentration	
Serum 25(OH)D	To estimate prevalence of vitamin D deficiency
Urinary iodine	To monitor the effectiveness of iodine food fortification programs and estimate prevalence of iodine deficiency
Serum ferritin	To estimate prevalence and severity of iron deficiency
Serum transferrin receptor	
Haemoglobin	
Inflammation marker (CRP)	To assist with iron interpretations
Liver function tests (GGT, ALT)	To assist in assessing burden of liver disease
Serum cotinine	To estimate prevalence of smoking

Specimens collected from participants will not be used for genetic testing or testing for illegal drugs, pregnancy, sexually transmitted infections, or diseases like cancer.

Participants can have their pathology results sent to them either directly (by post) or via the local medical service in remote communities. Participants may also have the results sent to their preferred doctor or medical clinic if they wish. If any of the participant's results are serious and require urgent follow-up, the pathologist will contact the nominated health care provider, or, where no health care provider has been nominated, contact the participant directly to advise them of the results and the recommended course of action.

Who will be able to access the survey data?

The ABS will release major findings from the survey in publications that are freely available on its website. All of the data collected in the survey are protected by the secrecy provisions of the *Census and Statistics Act 1905* which means the ABS will **confidentialise all survey data so it will not be possible to identify any individual respondent from published findings**. Researchers can request access to microdata products under standard ABS protocols.

In addition, the ABS is developing an Australian Health Survey Output Strategy in consultation with data users to identify policy and research themes. Possible partnership arrangements and data release mechanisms will be discussed such as summary publications, data cubes, Confidentialised Unit Record Files (Basic and Expanded), and the ABS' Remote Access Data Laboratory, in order to maximise the benefits of this significant investment in population health. ABS is also committed to returning the aggregated survey results to remote communities in a user friendly manner that allows for its best use.

Proposed Structure
Sample size = 7,700 households

ATTACHMENT 1

