4431.0.55.001

Australian Bureau of Statistics

Information Paper

Disability, Ageing and Carers, Australia: User Guide

2009

www.abs.gov.au

Information Paper

Disability, Ageing and Carers, Australia: User Guide

2009

Brian Pink
Australian Statistician

AUSTRALIAN BUREAU OF STATISTICS

EMBARGO: 11.30AM (CANBERRA TIME) FRI 17 JUN 2011

ABS Catalogue No. 4431.0.55.001

Produced by the Australian Bureau of Statistics

INQUIRIES

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

CONTENTS

ABBREVIATIONS

ABS	Australian Bureau of Statistics
ABSCQ	Australian Bureau of Statistics Classification of Qualifications
ABSDL	Australian Bureau of Statistics Site Data Laboratory
ANZSCO	Australian and New Zealand Standard Classification of Occupations
ANZSIC	Australian and New Zealand Standard Industrial Classification
ARA	any responsible adult
ASCED	Australian Standard Classification of Education
ASGC	Australian Standard Geographical Classification
CAC	computer assisted coding
CAI	computer assisted interviewing
CD	collection district
CD-ROM	compact disc read-only memory
CURF	confidentialised unit record file
ERP	estimated resident population
ICD-10	International Classification of Diseases 10th Revision
ICF	International Classification of Functioning, Disability and Health
OECD	Organisation for Economic Co-operation and Development
RADL	Remote Access Data Laboratory
RSE	relative standard error
SDAC	Survey of Disability, Ageing and Carers
SE	standard error
SEIFA	Socio-Economic Indexes for Areas
SLA	statistical local area
TTY	telephone typewriter

CHAPTER 1 INTRODUCTION

INTRODUCTION

This User Guide is intended to assist with the use and interpretation of data from the 2009 Survey of Disability, Ageing and Carers (2009 SDAC) which was conducted from April 2009 to December 2009. It contains information on:

- the objectives and content of the survey
- the concepts, methods and procedures underlying the collection of the data
- the derivation of estimates.

The 2009 SDAC was the sixth comprehensive national survey conducted by the Australian Bureau of Statistics (ABS) to measure disability, following similar surveys in 1981, 1988, 1993, 1998 and 2003. It collected detailed information on:

- people with disabilities
- older people
- those who provided care for older people and people with disabilities.

Information was also collected on people who were not in these populations, allowing for comparison of their relative demographic and socio-economic situations. A selection of data from the survey was published in *Disability, Ageing and Carers, Australia: Summary of Findings, 2009* (cat. no. 4430.0) and *Disability, Australia* (cat. no. 4446.0). Microdata in the form of a Basic Confidentialised Unit Record File (CURF) is also available: *Microdata: Disability, Ageing and Carers, Basic CURF, Australia, 2009* (cat. no. 4430.0.30.002).

Most people with a disability live in their own homes. In instances where care requirements are not able to be met at home people may move into cared-accommodation. To gain a comprehensive picture of disability in Australia, the 2009 survey collected information about people living in households as well as those in cared-accommodation, such as nursing homes. This was achieved by conducting the survey in two separate parts: the household component and the cared-accommodation component, using different methods for data collection and processing.

The survey was conducted under the authority of the *Census and Statistics Act 1905* and details were tabled in Parliament. The ABS sought the cooperation of selected households and cared-accommodation establishments, and the confidentiality of all information provided by respondents was guaranteed. Under its legislation the ABS cannot release identifiable information about households or individuals.

The success of the 2009 SDAC was dependent on the high level of cooperation received from the community. Their continued cooperation is very much appreciated; without it, the range of disability, ageing, carer and other statistics published by the ABS would not be possible.

INTRODUCTION *continued*

OVERVIEW

The first comprehensive survey on disability was conducted by the ABS in 1981, the International Year of Disabled Persons. The survey, titled 'Survey of Handicapped Persons', identified people with a disability and addressed the nature and extent of related specific limitations or restrictions ('handicaps'), through their need for assistance in, difficulty with, or the use of aids to perform, a range of everyday activities. The survey also provided information on other characteristics of people with specific limitations or restrictions, such as their living arrangements, work, education, recreation and whether their need for assistance was met.

As information needs altered over time, in line with government policy and changed social attitudes, questions have been introduced over time to better identify disability. From 1988, the scope of the survey was also expanded to collect information about carers of people with a disability.

Prior to each disability survey the ABS conducts wide-spread consultation with its users of statistics. The SDAC Advisory Group, comprising representatives of Department of Health and Ageing (DoHA), Department of Families, Housing, Community Services and Indigenous Affairs (FaHCSIA), Department of Education, Employment and Workplace Relations (DEEWR), Department of the Prime Minister and Cabinet (PM & C), Carers Australia, the Australian Institute of Health and Welfare (AIHW), State and Territory disability authorities, and academic and research centres, was established to assist the ABS in the ongoing consultation process, and advise on prioritised data requirements. Reports on the development and testing process were prepared for the group for their consideration, and distributed to other interested organisations and individuals on request.

New topics proposed for inclusion in the 2009 SDAC underwent testing to ensure the concepts were understood by respondents, and to enable questions and associated procedures to be refined. A dress rehearsal of the survey was conducted in south east Queensland in November and December 2008.

CHANGES FOR THE 2009 SURVEY

The household component of the 2009 SDAC was expanded to include data items about:

Main language spoken at home/proficiency in English

Disability services and services for older persons/Unmet demand

- Age at which assistance was first needed with core activities
- Whether any organised services have been contacted for assistance with core/non-core activities in the last 12 months
- Type of organised service contacted (Government/Private non-profit organisation/Private commercial organisation)
- Whether respondent expects to receive assistance with core/non-core activities for 6 months or more from organised services/partner or spouse, family, friends or neighbours
- How often respondent receives assistance with core/non-core activities from organised services/partner or spouse, family, friends or neighbours
- Reasons respondent is not receiving (more) help from organised services
- Whether respondent needs (more) help with core/non-core activities

CHANGES FOR THE 2009 SURVEY *continued*

- Whether respondent needs (more) help with core/non-core activities from organised services
- How often respondent needs (more) help with core/non-core activities from organised services
- Whether respondent needs (more) help with core/non-core activities from partner or spouse, family, friends or neighbours
- How often respondent needs (more) help with core/non-core activities from partner or spouse, family, friends or neighbours
- Whether there are any (other) aids that the respondent needs
- Task/s for which an aid is needed

Travelled to activities without any assistance

- Social inclusion (for people with a disability and persons aged 60 years and over)
- Frequency of face-to-face contact with family and friends not living with respondent
- Frequency of other forms of contact with family and friends not living with respondent
- Ability to get support in a time of crisis
- Source of support in a time of crisis

Labour force participation (all persons 15 years and over – dependent on labour force status)

- Working arrangements used to help look after someone in the last 6 months
- Period since last worked
- Difficulties in finding work
- Whether available to start work/work more hours in the next 4 weeks
- Reasons not available to start work/work more hours in the next 4 weeks
- Reasons for not wanting work/more hours
- Whether looked for work in the last 12 months
- Time since last looked for work
- Main activity when not in the labour force
- Whether wanted to work
- Preferred hours of work
- Arrangements required to assist primary carer to achieve a successful balance between work and caring arrangements
- Reasons primary carer could not use arrangements to achieve a successful balance between work and caring arrangements.

Carers

- An improved carer selection process which incorporates carers who are identified by the recipient as well as those identified by the 'initial household contact person'
- Whether carer provides continuous or episodic care to usual resident (UR)/non-UR recipient
- Whether non-UR recipient lives in cared-accommodation
- Total number of hours spent each week providing care to all UR and non-UR recipients
- Social and community participation of primary carer
- Unmet sources of support for primary carer to help in their caring role

COMPARISON OF ABS DISABILITY SURVEYS

	1981	*1988*	*1993*	*1998/2003*	*2009*
Name of survey	Survey of Handicapped Persons	Survey of Disabled and Aged Persons	Survey of Disability, Ageing and Carers	Survey of Disability, Ageing and Carers	Survey of Disability, Ageing and Carers
Populations of interest	Persons with a handicap (specific restriction in self-care, mobility and/or communication activity, or in schooling or employment) by severity level	Persons with a disablity	Persons with a disablity	Persons with a disability	As in 1998
		Persons with a specific restriction, by severity level	Persons with a specific restriction, by severity level	Persons with a specific restriction, by severity level	
		Older persons	Older persons	Older persons	
		Co-resident principal carers	Principal carers	Providers of care - Primary carers; All informal carers	

COMPARISON OF ABS DISABILITY SURVEYS *continued*

	1981	*1988*	*1993*	*1998/2003*	*2009*
Disability criteria	Disability criteria:	Modified wording:	Three new criteria:	Two new criteria:	As in 1998
	Loss of sight, not corrected by glasses	'Any loss of hearing' replaced 'anything wrong with hearing'	Difficulty gripping or holding small objects	Restricted in everyday activities by chronic or recurrent pain	
	Anything wrong with: hearing; speech		Head injury, stroke or other brain damage	Restricted in everyday activities by shortness of breath or breathing difficulties	
	Any condition that makes them slow at learning or understanding		Any other restricting condition		
	Has blackouts, fits or loses consciousness				
	Needs to be helped or supervised in doing things because of a mental disability		Modified wording:	Changes:	
	Incomplete use of arms or fingers		Restriction in physical activity or physical work	Hearing loss a disability criterion if there was difficulty communicating or use of aids	
	Incomplete use of legs or feet		Disfigurement or deformity (without qualification)	Nervous condition: restriction in everyday activities rather than treatment for condition	
	Treatment for nerves or an emotional condition		Slow at learning or understanding (without 'condition')	Treatment of long-term condition other than already mentioned	
	Any condition that restricts them in physical activities or doing physical work		Needs to be helped or supervised in doing things because of any mental illness	Modified wording:	
	Any disfigurement or deformity caused by an ailment or injury that they have had from birth			'Restricted in everyday activities' replaced 'restricted in any way'	
	Having long-term treatment or taking any medicine or tablets for a condition or ailment that still restricts them			Difficulty learning or understanding things	
				'Difficulty gripping or holding things' replaced 'Difficulty gripping or holding small objects'	
				Restricted in 'doing everday' physical activity or physical work	
				'A' not 'any' disfigurement or deformity	

COMPARISON OF ABS DISABILITY SURVEYS *continued*

	1981	*1988*	*1993*	*1998/2003*	*2009*
Areas of specific restriction	Self-care:	Self-care - as in 1981 plus:	Self-care - as in 1988	Self-care - as in 1988	Self-care - as in 1988
	showering or bathing	toileting			
	dressing	bladder/bowel control			
	eating				
	Mobility:	Mobility - as in 1981 plus:	Mobility - as in 1988 plus:	Mobility - as in 1993	Mobility - as in 1993
	moving about the house	transferring from bed or chair	bending and picking up something from the floor		
	going to or getting around a place away from home				
	walking 200 metres				
	climbing stairs without a handrail				
	using public transport				
	Communication:	Communication - as in 1981	Communication - as in 1988	Communication - as in 1988	Communication - as in 1998
	(relates to people who have proxy interviews, unable to answer the survey for themselves)	For people restricted in communication, use of sign language as a severity criterion		For people restricted in communication, other non-spoken communication as a severity criterion	
	understanding family, friends or strangers				
	being understood by family, friends or strangers				
Carer identification		People who received help with self-care, mobility or communication activities identified their principal care provider; if in the same household, confirmed by carer	Co-resident principal carers identified as in 1988; principal carers for someone in another household were identified ARA, and confirmed by carer	ARA identification of principal carers for recipients either in the same or another household; confirmed by carer; name changed to 'primary' carer to indicate non-comparable population	ARA and/or recipient identification of possible primary carers; confirmed by carer
		Some information collected from care recipients on informal providers of any level of care	As in 1988	Informal providers of any level of care, to a co-resident recipient, identified by recipient; informal providers of any level of care, to a person in another household, identified by ARA	Informal providers of any level of care, to a co-resident recipient, identified by recipient
					Informal providers of any level of care, to a person in another household, identified by ARA

COMPARISON OF ABS DISABILITY SURVEYS *continued*

	1981	*1988*	*1993*	*1998/2003*	*2009*
Scope	Persons in private dwellings	As for 1981	As for 1981	As for 1981 -	As for 1998
	Persons in cared-accommodation			However, persons living in independent dwellings in retirement villages which had a cared facility onsite moved from the cared-accommodation component to 'other non-private dwellings' in the household component	
	Persons in other non-private dwellings				
Collection method	Household component - Personal interview	As for 1981	As for 1981	As for 1981 but using computer assisted interviewing (CAI)	As for 1998
	Cared-accommodation - Personal interview	As for 1981	Mail-back form completed by establishment	As for 1993	As for 1998

CHAPTER 2 SURVEY CONTENT

MAJOR TOPICS COLLECTED

Household component

The household component of the survey was designed to collect basic information from a responsible adult about all persons in the selected household — age, sex, marital status, country of birth, as well as information to identify people with a disability or long-term health condition, and potential primary carers.

Personal interviews were then conducted with older people, people with a disability, and people with long-term health conditions, on the following topics:

- impairments, long-term health conditions and cause of main disabling condition
- difficulties experienced by people with a disability, and help required in the activities of:
  - self-care
  - mobility
  - communication
  - cognitive or emotional tasks
  - health care.
- difficulties experienced and help required both for people aged 60 years and over and people with disabilities in the further activities of:
  - reading or writing
  - transport
  - household chores
  - property maintenance
  - meal preparation.
- the type of assistance received for each of these activities other than cognitive or emotional tasks, the providers of assistance, the extent to which need was met, and reasons for unmet need
- use of aids and equipment
- access to and use of computers and the Internet.

Personal interviews were also conducted with people identified as primary carers of people with a disability on:

- the type of care provided
- the availability or use of support
- the effect of the caring role on their daily life.

Information was collected for the total population on education, employment, income, housing and access to computers and Internet at home. Confirmed primary carers were also asked to complete a self-enumeration form which collected information about their attitudes to, and experience of, their caring role. This form was completed by the carer during the interview.

Household component continued

Standard ABS definitions and classifications were used where possible, to allow comparison with other collections which use these standards.

Cared-accommodation component

A subset of the data collected from the household component of the survey was obtained about people in cared-accommodation using a mail-back form completed by a staff member of the establishment. This collection identified disability status and assistance needs. The questions asked were similar to those included in the household component of the survey. In some cases minor modifications were made to make them relevant to cared-accommodation facilities.

CONCEPTS AND DEFINITIONS

The main concepts relating to disability are:

- disability
- long-term health conditions
- specific limitation or restriction
- core activity limitation and levels of restriction
- need for assistance.

Disability

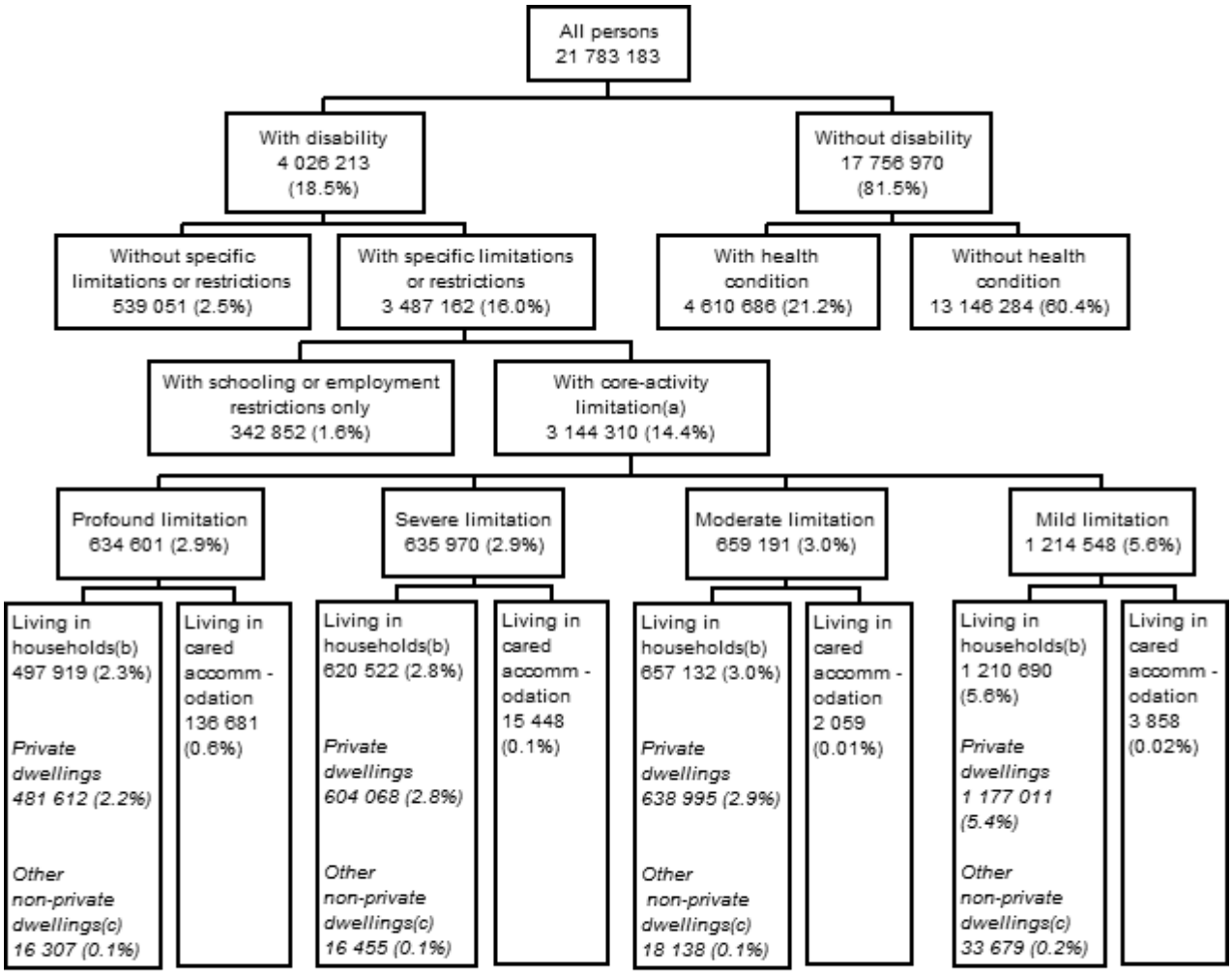
In the context of each individual's health experience, the International Classification of Functioning, Disability and Health (ICF) defines disability as an umbrella term for impairments, activity limitations and participation restrictions. It denotes the negative aspects of the interaction between an individual (with a health condition) and that individual's contextual factors (environment and personal factors).

In this survey a person has a disability if they have a limitation, restriction or impairment, which has lasted, or is likely to last, for at least six months and restricts everyday activities.

This includes:

- loss of sight (not corrected by glasses or contact lenses)
- loss of hearing where communication is restricted, or an aid to assist with, or substitute for, hearing is used
- speech difficulties
- shortness of breath or breathing difficulties causing restriction
- chronic or recurrent pain or discomfort causing restriction
- blackouts, fits, or loss of consciousness
- difficulty learning or understanding
- incomplete use of arms or fingers
- difficulty gripping or holding things
- incomplete use of feet or legs
- nervous or emotional condition causing restriction
- restriction in physical activities or in doing physical work
- disfigurement or deformity
- mental illness or condition requiring help or supervision
- long-term effects of a head injury, stroke or other brain damage causing restriction
- receiving treatment or medication for any other long-term conditions or ailments and still being restricted
- any other long-term conditions resulting in a restriction.

Disability populations



(a) Includes 1 345 542 persons with core activity limitations and schooling or employment restrictions.
(b) 'Living in households' comprises all private dwellings and non-private dwellings apart from cared-accommodation.
(c) Other non-private dwellings comprise non-private dwellings apart from cared-accommodation.

Long-term health conditions

Some people are classified as having a long-term health condition with a resulting disability. Others, not restricted in everyday activities by an impairment or condition, have a long-term health condition without a disability. A long-term health condition is a disease or disorder which has lasted, or is likely to last, for six months or more. This includes conditions resulting from accidents or injuries, lasting for at least six months. The International Statistical Classification of Diseases and Related Health Problems, 10th Revision (ICD-10), was used in the 1998, 2003 and 2009 surveys as the basis for the coding of long-term conditions. For further detail on the coding of long-term health conditions, please refer the Data Processing section in the Survey Design and Operation chapter.

Specific limitation or restriction

The survey identified subsets of the disability population, based on reported limitations (see diagram under the Disability populations heading). People were identified as having a specific limitation or restriction if they needed assistance, had difficulty, or used aids or equipment to do selected tasks relating to the core activities - self-care, mobility and communication; or if their participation in schooling or employment was restricted because of their condition. Prior to the 1998 survey this population was referred to as having a 'handicap'.

Level of core activity limitation

Four levels of limitation (profound, severe, moderate and mild) were determined based on whether a person needed help, had difficulty with, or used an aid or equipment, for any of the tasks related to the core activities of self-care, mobility and communication. A person's overall level of core activity limitation was determined by their highest level of limitation in these activities. The four levels of limitation are:

- profound: the person is unable to do, or always needs help or supervision with, a core activity task.
- severe: the person
  - sometimes needs help or supervision with a core activity task
  - has difficulty understanding or being understood by family and friends
  - can communicate more easily using sign language or other non-spoken form of communication.
- moderate: the person needs no help or supervision but has difficulty with a core activity task.
- mild: the person needs no help and has no difficulty with any of the core activity tasks, but
  - uses aids and equipment
  - cannot easily walk 200 metres
  - cannot walk up and down stairs without a handrail
  - cannot easily bend and pick up an object from the floor
  - cannot use public transport
  - can use public transport, but needs help or supervision
  - needs no help or supervision but has difficulty using public transport.

Schooling or employment restriction

Under the standard disability status classification, categories of restriction are mutually exclusive i.e. persons can only fall within the 'Restricted in schooling or employment' category if they do not have a core activity limitation. However, in *Disability, Ageing and Carers, Australia: Summary of Findings, 2009* (cat. no. 4430.0), the category 'Schooling or employment restriction' has been expanded so that it is not mutually exclusive from the core activity limitation categories. That is, persons may have both a core activity limitation and a schooling or employment restriction.

Need for assistance

Assistance is help or supervision in common activities of daily life, such as showering or dressing, moving around, housework and gardening, or using transport. The need for help must be because of the person's disability, health condition or old age. Where people cannot cook meals or drive, for instance, because they have never learned these skills, they are not included as having a need for assistance. Need includes, but is not limited to, unmet need.

Limitation or restriction, activities and tasks

The activities associated with a specific limitation or restriction, and the tasks associated with core activities and with the other activities where need for assistance is measured, are shown in the table below.

TABLE OF LIMITATIONS, RESTRICTIONS, ACTIVITIES AND TASKS

LIMITATION OR RESTRICTION	*ACTIVITY*	*TASKS*
Specific limitation or restriction		
Core activity limitations	Communication	Understanding family or friends
		Being understood by family or friends
		Understanding strangers
		Being understood by strangers
	Mobility	Getting into or out of a bed or chair
		Moving about usual place of residence
		Moving about a place away from usual residence
		Walking 200 metres
		Walking up and down stairs without a handrail
		Bending and picking up an object from the floor
		Using public transport
	Self-care	Showering or bathing
		Dressing
		Eating
		Toileting
		Bladder or bowel control
Schooling or employment restrictions	Schooling	Unable to attend school
		Attends a special school
		Attends special classes at an ordinary school
		Needs at least one day a week off school on average
		Has difficulty at school
	Employment	Permanently unable to work
		Restricted in the type of work they can or could do
		Need, or would need, at least one day a week off work on average
		Restricted in the number of hours they can, or could, work
		Requires special equipment or modified work environment
		Needs ongoing assistance or supervision
		Would find it difficult to change jobs or get a preferred job
		Needs assistance from a disability job placement program or agency

TABLE OF LIMITATIONS, RESTRICTIONS, ACTIVITIES AND TASKS

LIMITATION OR RESTRICTION	*ACTIVITY*	*TASKS*
Without specific limitation or restriction		
Other activities	Health care	Foot care
		Taking medications or administering injections
		Dressing wounds
		Using medical machinery
		Manipulating muscles or limbs
	Reading or writing	Checking bills or bank statements
		Writing letters
		Filling in forms
	Transport	Going to places away from the usual place of residence
	Household chores	Washing
		Vacuuming
		Dusting
	Property maintenance	Changing light bulbs, taps, washers or car registration stickers
		Making minor home repairs
		Mowing lawns, watering, pruning shrubs, light weeding or planting
		Removing rubbish
	Meal preparation	Preparing ingredients
		Cooking food
	Cognition or emotion	Making friendships, interacting with others or maintaining relationships
		Coping with feelings or emotions
		Decision making or thinking through problems

Social and community participation of primary carers

As was the case in 2003, data on social and community participation in the last 3 months both at home and away from home was collected from 'persons aged 5 years and over with a disability and those aged 60 years and over'. In 2009, questions were added to the primary carer module to capture the same type of social and community participation data for primary carers in an attempt to capture whether these persons were involved in social and community activities without having the person they care for with them.

However, due to respondent burden issues and the fact that primary carer identification only occurs after disability identification, only those primary carers that were not aged and did not have a disability (i.e. aged between 5 and 59 years and did not have a disability) were asked the questions with the additional words 'without the person they care for'.

As a result, it is not possible to obtain data across the whole primary carer population for social and community activity participation. This is because:

- primary carers that either had a disability and/or were aged and responded that they had participated in community activities, may have only done so with the person they cared for
- primary carers aged 5-59 who were not disabled and responded that they did not participate in community activities, may have participated, but only with the person they cared for.

The only way the data can be used is separately. That is:

- Persons aged 5 years and over with a disability or aged 60 years and over: Social and community activities participated in

Social and community participation of primary carers continued

- Primary carers aged 5-59 without a disability: Social and community activities participated in without the person they care for.

Sources of income

In regards to all the sources of income that a person may receive, respondents in the household component were asked whether they receive income from wages & salary, pensions, child support, superannuation, workers' compensation, own unincorporated business, rental property and dividends. However, due to an error in the instrument, respondents were not asked whether there were any 'other' sources of income that they receive income from. Hence, it is not possible to obtain estimates from the 2009 SDAC of the number of people who receive income from 'other' sources. Additionally, for those persons that do receive income from a source not mentioned in the list above, it is possible that their estimate of the amount of income they receive is an under estimate. However, the list of income is pretty comprehensive and so it is expected this will have minimal impact on the estimates.

OTHER KEY POPULATIONS

Older persons

The survey collected a range of information about the assistance needs and participation of older people in everyday activities and use of computers and the Internet. To maintain consistency with the 1988, 1993, 1998, and 2003 surveys, the 2009 SDAC used a minimum age of 60 years for the older persons population.

Carers

For caring, the main concepts are 'carer' and 'primary carer'.

Any person who provides informal assistance, in terms of help or supervision, to an older person or a person with a disability because of their age or condition is defined as a carer. The assistance has to be ongoing, or likely to be ongoing, for at least six months, and on a regular unpaid basis. The assistance may be to a person in the same or another household. Assistance to a person in a different household relates to 'everyday types of activities', without further information about what these activities are. Where the care recipient lives in the same household, the assistance is for one or more of the following activities:

- self-care
- mobility
- communication
- cognitive or emotional tasks
- health care
- reading or writing
- transport
- household chores
- property maintenance
- meal preparation.

Two approaches were used to identify carers:

- through an initial screening process at the beginning of the survey (answered by a responsible adult in the household)
- through information provided by recipients of care (personal interview).

Carers continued

Where the carer and the recipient both live in the same selected household, information provided by the recipient about the type of care received, and some of their own personal details, are copied to the record of the carer on the applicable output data set. This was not possible for carers of persons in different households.

A primary carer provides the most help or supervision with the core activities of self-care, mobility and/or communication:

- to a person who needs this assistance because of their disability
- on a regular unpaid basis
- in a way that is ongoing, or likely to be ongoing, for at least six months.

When an older person needs assistance with core activities because of their age, by definition, they have a core activity limitation and therefore have a disability. Primary carers for recipients in both the same household and in a different household were identified either by an initial screening process (answered by a responsible adult in the household) or by the recipient (personal interview). The carers were then personally interviewed to confirm that they satisfied the criteria, and to provide a range of further information about their caring role.

CHAPTER 3 SURVEY DESIGN AND OPERATION

INTRODUCTION

The 2009 SDAC had two components - the household component and the cared-accommodation (establishment) component. The household component covered people who lived in:

- private dwellings such as houses, flats, home units, townhouses, tents, and other structures used as private places of residence at the time of the survey, including dwellings in retirement villages which had no nursing home or hospital care on site
- non-private dwellings such as hotels, motels, boarding houses, educational and religious institutions, guest houses, construction camps, short-term caravan parks, youth camps and camping grounds, staff quarters, and self-care components of retirement villages which had a cared-accommodation component.

The cared-accommodation component covered residents of hospitals, nursing homes, aged care and disability hostels and other homes such as children's homes, who had been, or were expected to be, living there for at least three months.

SCOPE AND COVERAGE

Scope of the survey

The scope of SDAC was persons in both urban and rural areas in all states and territories, living in both private and non-private dwellings (including persons in cared-accommodation), but excluding:

- diplomatic personnel of overseas governments
- persons whose usual residence was outside Australia
- members of non-Australian defence forces (and their dependents) stationed in Australia
- persons living in very remote areas.

Coverage

The coverage of SDAC was the same as the scope except that the following (small) populations were not enumerated for operational reasons:

- persons living in Indigenous communities in non-very remote areas
- persons living in boarding schools
- persons living in gaols or correctional institutions.

Rules were applied to maximise the likelihood that each person in coverage was associated with only one dwelling and thus had one chance of selection.

Usual residents of selected private dwellings and non-private dwellings (excluding persons in cared-accommodation) were included in the survey unless they were away on the night of enumeration and had been away or were likely to be away for seven months or more. This was designed to avoid multiple selection of a person who might be spending time, for instance, in a nursing home, to be eligible for selection there.

Visitors to private dwellings were excluded from coverage as the expectation was that most would have their chance of selection at their usual residence.

Coverage continued

Occupants of cared-accommodation establishments in the scope of the survey were enumerated if they had been, or were expected to be, a usual resident of an establishment for three months or more.

SAMPLE DESIGN AND SELECTION PROCEDURES

Multistage sampling techniques were used to select the sample for the survey. The actual sample included approximately:

- 27,600 private dwellings
- 200 non-private dwelling units
- 1,100 cared-accommodation establishments.

The final number of fully responding persons was 64,213 for the household component and 9,470 for the cared-accommodation component.

Private dwelling selection

The area based selection of the private dwelling sample ensured that all sections of the population living within the geographic scope of the survey were represented. Each State and Territory was divided into geographically contiguous areas called strata. Strata are formed by initially dividing Australia into regions, within State or Territory boundaries, which basically correspond to the Statistical Division or Subdivision levels of the Australian Standard Geographical Classification. These regions are then divided into Statistical Local Areas (SLAs) in State Capital City Statistical Divisions (metropolitan regions), and into major urban centres as well as minor urban and rural parts in non-metropolitan regions. These smaller regions are then placed into different groups (within the division or subdivision) based on dwelling density to form strata. Each stratum contains a number of Population Census Collection Districts (CDs) containing on average about 250 dwellings. The sample was selected to ensure that each dwelling within the same stratum had the same probability of selection.

In capital cities and other major urban or high population density areas the sample was selected in three stages:

- a sample of CDs was selected from each stratum with probability proportional to the number of dwellings in each CD
- each selected CD was divided into groups of dwellings or blocks of similar size, and one block was selected from each CD, with the probability proportional to the number of dwellings in the block
- within each selected block a list of all private dwellings was prepared and a systematic random sample of dwellings was selected.

In strata with low population density each stratum was initially divided into units, usually corresponding to towns or SLAs or combinations of both. One or two units were then selected from each stratum with probability of selection proportional to the number of dwellings in each unit. Within selected units, the sample of dwellings was arrived at in the same manner as outlined for high population density areas. The effect of this approach is that the sample was not necessarily selected from each SLA. Rather, those selected represented neighbouring SLAs of similar geographical characteristics.

Cared-accommodation and other non-private dwelling selection

The sample of non-private dwellings was selected separately from the sample of private dwellings to ensure they were adequately represented. Non-private dwellings (including cared-accommodation establishments) in each State and Territory were listed and sampled directly from these lists. Each non-private dwelling was given a chance of

Cared-accommodation and other non-private dwelling selection continued

selection proportional to the average number of persons it accommodated. In order to identify the occupants to be included in the survey, all the occupants in each non-private dwelling were listed and then a random selection technique was applied.

DATA COLLECTION

Different approaches were used to collect data from the household and cared-accommodation components.

Data collection for the household component

Data for the household component of the survey were collected by trained interviewers mainly using personal computer assisted interviewing (CAI). There were a number of stages. First, an interviewer conducted a computer assisted interview with any responsible adult (ARA) in the household, to:

- collect details of the composition of the household
- collect demographic information (age, sex, birthplace, social marital status, relationship) about household members
- identify people in the household who were of particular interest for this survey, so that they could be personally interviewed. These were people who:
- had long-term health conditions
- had a disability
- were aged 60 years and over
- regularly provided informal care in core activities to an older person or someone who had a disability, and were considered to provide a greater level of care than others to that care recipient (possible primary carers).

For those people in the household who were not in these particular groups, a computer-assisted interview was then conducted using ARA methodology to collect information on all persons in the household on education, labour force participation, income and housing.

Personal computer-assisted interviews were conducted with people aged 15 and over in the identified groups. Proxy interviews were conducted with parents of children with disabilities or people aged 15-17 where parental consent for a personal interview was not given. People who were prevented by their disability from responding personally were also interviewed by proxy (i.e. another person in the household who answered for them).

Where there were language differences (including the need to use sign language), another member of the household was asked to interpret on behalf of, and with the permission of, the respondent. In some cases, arrangements were made to supply an interviewer conversant in the respondent's preferred language.

People who were confirmed as primary carers in their personal interview were also asked to complete a short self-enumerated paper questionnaire during the interview. This method allowed them to provide information on the effect of caring which may be sensitive, particularly as the care recipient would often be present at the interview.

In order to obtain a personal interview with 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.

Data collection for the household component continued

INTERVIEWERS

Interviewers for the 2009 SDAC were recruited from a pool of trained interviewers with previous experience on ABS household surveys. Those selected to work on this survey underwent further classroom training and were required to satisfactorily complete home study exercises. All phases of the training emphasised 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.

Interviewers were allocated a number of dwellings (a workload) at which to conduct interviews. The size of the workload was dependent upon the geographical area involved and whether or not the interviewer was required to live away from home to collect the data. Interviewers living close to their workload area in urban areas usually had larger workloads. Overall, workloads averaged 20-25 dwellings, to be enumerated over a two week period.

QUESTIONNAIRE

The Computer Assisted Interview (CAI) instrument that was used for the 2009 SDAC was based on the 2003 SDAC, modified as appropriate to incorporate new and changed survey content. Information collected included:

- Household information - 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. Details were also collected allowing the identification of people with long-term health conditions, disabilities or those who provided informal care with core activities to someone who was over 60 years or had a disability. This information was obtained from the ARA.
- Personal Adult Interview - information was collected about the types of limitations they experience, conditions causing those limitations and about their needs and receipt of assistance in everyday activities or, where relevant, about the types of assistance they provide and the impact their caring role has on certain aspects of their lives.
- Personal (or proxy) Child Interview – similar information was obtained relating to limitations in everyday activities, conditions causing the limitations and their needs and receipt of assistance. No questions about care provided to people because of disability or age were asked in relation to children providing that care.
- The questionnaire was designed to be administered using standard ABS procedures for conducting population interview surveys, with regard to the particular aims of the survey and the individual topics within it, and 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, and the sensitivity of topics. Where appropriate, previous ABS questions on the topics covered were adopted.

Data collection for the household component continued

The CAI instrument allows the following:

- data to be 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 ability to use complex sequencing to define specific populations for questions, and ensure word substitutions used in the questions were appropriate to each respondent's characteristics and prior responses
- the ability, through data validation (edits), to check the responses entered against previous responses, reduce data entry errors by interviewers, and 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.
- some derivations to occur in the instrument itself, assisting in later processing
- auto-coding systems to be incorporated, reducing interview and processing time
- data to be delivered in an electronic format compatible with ABS data processing facilities.

The questionnaire was fully field tested to ensure:

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

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

- questions where 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 where 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 health condition, 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.

Data collection for the household component continued

- 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. Listing a set of possible responses (either in the form of a prompt card or a running prompt question) 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 exactly as written. 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.

The 2009 SDAC questionnaire for both the household and cared-accommodation components and related prompt cards are available from the ABS website under the 'Downloads' tabs of the *Information Paper: Disability, Ageing and Carers, Basic CURF, Australia, 2009* (cat. no. 4430.0.00.001).

Prior to enumeration, a letter and brochure were sent out to each household selected for the survey. These documents provided information about the purpose of the survey and how it would be conducted. Both contained the ABS guarantee of confidentiality, and the brochure also provided answers to some of the more commonly asked questions.

Data collection for the cared-accommodation component

OVERVIEW

The cared-accommodation component completes the picture of the prevalence of health conditions, disability and levels of specific limitation or restriction in Australia. It also provides an indication of the balance between cared-accommodation and community care for people with a disability, by age.

In the 1981 and 1988 surveys, interviews were held with residents of cared-accommodation. Many of these were not able to respond for themselves, and it was necessary to try and arrange for family members, who may not have been living nearby, to come and provide proxy interviews. Often it was not possible to find anyone who knew enough to provide the required information.

For the 1993 survey the approach changed. A mail-back paper form was used, with a staff contact person as the respondent. The data collected were limited to the information a staff member could be expected to know from records. This method was also used for the 1998, 2003 and 2009 surveys.

QUESTIONNAIRES

The administrators of selected cared-accommodation establishments were sent a letter informing them of the selection of their establishment in the survey. This letter also provided information on:

- the purpose of the survey
- how the data would be used
- the ABS guarantee of confidentiality

Data collection for the cared-accommodation component continued

- the two-stage approach to data collection.

Three mail-back paper forms were developed for the cared-accommodation (establishment) component of the survey:

- the Contact Information Form
- the Selection Form
- the Establishment Component Questionnaire, referred to below as the personal questionnaire.

CONTACT INFORMATION FORM

The Contact Information Form (CIF) was sent, with the initial letter, to the administrators of selected cared-accommodation establishments. The purpose of the CIF was to confirm:

- a suitable contact officer
- the type of health establishment
- the number of occupants in the establishment.

SELECTION FORM

After receipt of the CIF, the ABS dispatched the Selection Form and personal questionnaires to the nominated contact officers. The Selection Form provided instructions on how to list and select a random sample of residents from the establishment.

PERSONAL QUESTIONNAIRE

Personal questionnaires were completed by staff of the health establishments. Information provided was based on staff members' knowledge of the selected residents and on medical, nursing and administrative records.

Details of data collected and the relevant populations are in the Data item list which can be found in the Downloads tab of this release.

The personal questionnaire underwent minimal changes to the form used in 2003, so no field testing was conducted.

The range of data collected in this component was much smaller than in the household component. Topics such as income, or responses based on self-perception, were not suitable for collection. Others, such as home help, were not relevant to those living in cared-accommodation.

MEASURES TO MAXIMISE RESPONSE

In any sample survey, responses should ideally be obtained from all selected units; 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. Measures taken to encourage respondent cooperation and maximise response included:

MEASURES TO MAXIMISE RESPONSE *continued*

- advance notice of a household's selection in the 2009 SDAC by letter, explaining the purposes of the survey, its official nature and the confidentiality of the information collected. The letter stated that an ABS interviewer would call, and provided an ABS contact number for more information if required. An information brochure on the survey was also provided (this procedure could not be followed for a small number of households for which the ABS did not have an adequate postal address).
- stressing the importance of participation in the survey by selected households and residents, explaining that they represented a number of other households, both geographically and demographically i.e. that their household represented other households that were similar in size, composition and location, and that they themselves represented other people with similar occupations, lifestyles and health characteristics. The cooperation of those selected was important to ensure all households/persons were properly represented in the survey and properly reflected in survey results.
- stressing the importance of the survey to the planning and provision of disability, aged care and carer support services and facilities to meet the care needs of Australia's population.
- stressing the confidentiality of all information collected. The confidentiality of data is guaranteed by the Census and Statistics Act 1905. Under the 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 callbacks 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. Interviewers made five callbacks before a dwelling was classified as a 'non-contact' (three call-backs in non-metropolitan areas). Call-backs occurred at different times during the day to increase the chance of contact. Once contact 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, a selected respondent within a dwelling could not be contacted or interviewed, and these were classified as non-contacts.

DATA PROCESSING

Computer-based systems were used to process the data from the survey. It was necessary to employ a range of processing systems which reflected the different methods used to collect data from the household and cared-accommodation components of the survey. These processing systems are outlined below.

Processing of household component

Most data were collected by trained interviewers using a specially-programmed notebook computer (CAI instrument). Internal system edits were applied in the CAI instrument to ensure the completeness and consistency of the questionnaire. The interviewer could not proceed from one section of the interview to the next until responses had been appropriately completed.

Processing of household component continued

A number of range and consistency edits were programmed into the CAI collection instrument. Edit messages appeared on screen automatically if the information entered was either outside the permitted range for a particular question, or contradicted information already recorded. These edit queries were resolved on the spot with respondents.

Completed questionnaires were transmitted to the ABS from the interviewers' homes via telephone lines. Checks were made to ensure interviewer workloads were fully accounted for and that returns for each household and respondent were obtained. Problems were resolved by office staff, where possible, based on other information contained in the schedule, or on the comments provided by interviewers.

Confirmed primary carers completed a paper questionnaire at the time of interview. Interviewers later entered these responses into the CAI instrument.

A high proportion of coding was automated within the CAI instrument through the use of pick lists and coders. Post-interview however, further coding was needed for responses to questions on occupation, industry and sector of employment, country of birth, educational qualifications, family relationships and health conditions.

CODING OF HEALTH CONDITIONS

Initially all records requiring coding of medical conditions were run through an automatic coder for each of these items. The 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 Computer Assisted Coding (CAC) systems. Rigorous quality control processes were applied throughout to ensure that the coding process met agreed standards.

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.

All reported long-term medical conditions were coded to a list of approximately 1000 conditions, which was built into both the auto-coder and the CAC system. Conceptually the coding process involved locating the reported condition in the coder, and recording the corresponding 4 digit ABS input code. 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 used for the 2009 SDAC was that used in previous SDACs, updated to reflect changes in ICD coding. Conditions classified at the full level of detail are not generally available for output from the survey; however, they can be regrouped in various ways for output. The standard output classification, developed for the SDAC, is based on the International Classification of Diseases: 10th Revision (ICD-10).

Processing of cared-accommodation component

Various components of the questionnaires were able to be captured electronically using scanning technology, while other components were entered using a purpose-built computer-assisted data entry (CADE) system. Prior to data entry, all questionnaires underwent a thorough clerical check. Staff checked that questionnaires were complete, internally consistent and otherwise ready for entry. Instructions were provided on how

Processing of cared-accommodation component continued

to edit questionnaires when this was not the case. Occasionally it was necessary to telephone the health establishment to collect missing information or to clarify responses. Considerable effort was made to capture and retain as many different reported health conditions as possible. For example, the main underlying health condition was requested for each screen question. On forms where the same health condition was reported twice (as the cause of two different impairments) and another health condition was also listed as the cause of one of these impairments, a decision was made to retain the two different health conditions.

Editing

An extensive range of computer edits was applied to each questionnaire during data entry and to the aggregated data file after data entry was complete. These checked that logical sequences had been followed in the questionnaires, that all applicable questions had been answered, that specific values lay within valid ranges, that there were no contradictory responses and that relationships between items were within acceptable limits. The edits were also designed to identify cases which, although not necessarily errors, were sufficiently unusual or close to specified limits as to warrant examination. A detailed set of instructions was developed to help data entry staff solve problems as they arose during clerical checking or data entry itself.

Coding

Coding for the cared-accommodation component of the survey was similar to that of the household component in that the CADE system made use of pick lists and coders. However, fewer items required special coding (country of birth and health conditions only). Employment, education and relationship details were not collected in the cared-accommodation component.

Output 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 'disability status' is derived from responses to approximately 80 questions).

In designing the output data file, the aim was to create a file which was similar to the 2003 data file, but simplified where possible. The result is a 10 level hierarchical output file. The structure of the file is as follows:

- Household level, containing information about the household size and structure and household income details
- Family level, containing information about the family size and structure, including whether there is a carer and/or a person with a disability in the family
- Income unit level, containing information about the Income Unit size and whether there is a primary carer in the Income Unit
- 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
- All conditions level, containing detailed information about the conditions reported in the survey
- Restrictions level, containing detailed information about the restrictions reported in the survey

Output file continued

- Specific activities level, containing detailed information about how much support people need to perform specific activities, such as moving about place of residence
- Recipient level, containing detailed information on respondents who need help or supervision with everyday activities because of their age or disability, including the types of assistance they need
- Broad activities level, containing detailed information about how much support people need to perform activities at the broader level (e.g. mobility, communication)
- Assistance providers level, containing detailed information on people providing assistance to others because of age or disability, including the types of assistance they provide.

A hierarchical data file is an efficient means of storing and retrieving information which describes one to many, or many to many, relationships e.g. a person may report multiple conditions, and may report use of multiple medications for all/some of these.

Data about households and families are contained as individual characteristics on person records. A full listing of output data items available from the survey can be accessed on the ABS web site, under the Downloads tab of this release.

Once processing and validation of the data were complete, person and household weights were derived and 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 error values for the estimates to be produced, 60 replicate weights were included (refer the Data quality (Technical Note) link in the Explanatory Notes tab of *Disability, Ageing and Carers, Australia: Summary of Findings, 2009* (cat. no. 4430.0)).

CHAPTER 4 DATA QUALITY

DATA QUALITY

All reasonable attempts have been taken to ensure the accuracy of the results of the survey. Nevertheless, two potential sources of error - sampling and non-sampling error, should be kept in mind when interpreting results of the survey.

SAMPLING ERROR

Since the estimates are based on information obtained from a sample of the population, they are subject to sampling error (or sampling variability). Sampling error refers to the difference between the results obtained from the sample population and the results that would be obtained if the entire population were enumerated. Factors which affect the magnitude of sampling error include:

- sample design: the design chosen to make the survey results as accurate as possible while remaining within operational and cost constraints
- sample size: the larger the sample on which the estimate is based, the smaller the sampling error will be
- population variability: the extent to which people differ on the characteristics being measured. 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.

Standard error

One measure of sampling variability is the standard error (SE). The SE is based on the 'normal' distribution and allows predictions about the accuracy of data. For example, there are about two chances in three that a sample estimate will differ by less than one SE from the figure that would have been obtained if the population were fully enumerated. The relative standard error (RSE) is the SE expressed as a percentage of the estimate to which it relates.

Very small estimates may be subject to such high RSEs as to detract seriously from their value for most reasonable purposes. Only estimates with RSEs less than 25% are considered sufficiently reliable for most purposes. Estimates with RSEs between 25% and 50% are included in Australian Bureau of Statistics (ABS) publications, but are preceded by the symbol * as a caution to indicate that they are subject to high RSEs. Estimates with RSEs greater than 50% are considered highly unreliable and are preceded by a ** symbol.

NON-SAMPLING ERROR

Additional sources of error which are not related to sampling variability are referred to as non-sampling errors. This type of error is not specific to sample surveys and can occur in a census. The main sources of non-sampling error are:

- errors related to scope and coverage
- response errors such as incorrect interpretations or wording of questions, interviewer bias, etc.
- processing errors such as mistakes in the recording or coding of the data obtained
- non-response bias.

NON-SAMPLING ERROR *continued*

Each of these sources of error is discussed in the following paragraphs.

Errors related to scope and coverage

Some dwellings may have been incorrectly included or excluded from this survey. An example of this form of error might be an unclear distinction concerning the private and non-private status of dwellings. All efforts were made to overcome such situations by constant updating of lists both before and during the survey.

There are also difficulties in applying the coverage or scope rules. Particular attention was paid to questionnaire design and interviewer training to ensure such cases were kept to a minimum.

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 respondents.

For example, errors may be caused by misleading or ambiguous questions, inadequate or inconsistent definitions of terminology used, or by poor questionnaire sequence guides causing some questions to be missed. In order to overcome problems of this kind, individual questions and the overall questionnaire were thoroughly tested before being finalised for use in the survey.

Lack of uniformity in interviewing standards will also result in non-sampling errors. Thorough training programs, and regular supervision and checking of interviewers' work were used to achieve and maintain uniform interviewing practices and a high level of accuracy in recording answers on the electronic survey collection instrument.

Processing errors

Processing errors may occur at any stage between initial collection of the data and final compilation of statistics. Specifically, in this survey, processing errors may have occurred at the following stages in the processing system:

- clerical checking and coding – errors may have occurred during the checking of questionnaires and during coding of various items by office processors
- data transfer – errors may have occurred during the transfer of data from the original questionnaire to the data file
- editing – computer editing programs may have failed to detect errors which reasonably could have been corrected
- manipulation of data – inappropriate edit checks, inaccurate weights in the estimation procedure and incorrect derivation of data items from raw survey data can also introduce errors into the results.

A number of steps were taken to minimise processing errors at various stages of the cycle. For example, detailed coding instructions were developed and staff engaged in coding were trained in the various classifications and procedures used.

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. In addition, at various stages during the processing cycle, 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

Processing errors continued

have significantly affected estimates, and illogical relationships not previously picked up by edits.

Non-response bias

Non-response occurs when people cannot or will not provide information, or cannot be contacted. It can be total (none of the questions answered) or partial (some of the questions may be unanswered due to inability to answer or recall information etc.). This can introduce a bias to the results obtained in that non-respondents may have different characteristics from those persons who responded to the survey. The size of the bias depends upon these differences and the level of non-response.

It is not possible to accurately quantify the nature and extent of the differences between respondents and non-respondents in the survey; however, every effort was made to reduce the level of non-response bias through careful survey design and estimation procedures.

RESPONSE RATES

Response rates for both the household component and cared-accomodation components were high. Of the 28,474 private dwellings and special dwelling units in the effective household component sample, 25,606 (89.9%) were either fully responding or adequate complete. Of the 1,154 health establishments in the cared-accommodation component, 1,049 (90.9%) were responding.

TABLE 4.1 HOUSEHOLD COMPONENT, Response rates

	Number	*%*
Fully responding or adequately responding		
Fully responding	20 673	72.6
Adequately responding	4 933	17.3
Total	*25 606*	*89.9*
Non response		
Full refusal	376	1.3
Full non-contact	1 637	5.7
Other	855	3.0
Total	*2 868*	*10.1*
Total	**28 474**	**100.0**

TABLE 4.2 CARED-ACCOMMODATION COMPONENT, Response rates

	Number	*%*
Responding establishment(a)	1 049	90.9
Non-responding establishment	105	9.1
Total	**1 154**	**100.0**

(a) Due to a change in systems, responding establishments were not able to be split into fully responding and partly responding.

ESTIMATION PROCEDURES–PERSONS

The estimation procedures developed for this survey ensure that survey estimates of the Australian population conform to independent benchmarks of the Australian population as at June 2009 at state by part of state or territory by age group by sex level.

For the calculation of person estimates, one benchmark was used to weight both the household and cared-accommodation components of the survey. For the common questions, the two components were combined to represent the whole population, whereas for the differing questions each survey represented only its population.

Benchmarks

The weights were calibrated to align with independent estimates of the population, referred to as benchmarks, in designated categories of sex by age by area of usual residence. Weights calibrated against population benchmarks ensure that the survey estimates conform to the independently estimated distribution of the population rather than to the distribution within the sample itself. Calibration to population benchmarks helps to compensate for over or under-enumeration of particular categories of persons which may occur due to either the random nature of sampling or non-response.

The survey was benchmarked to the estimated resident population (ERP) in each state and territory, excluding those living in very remote areas of Australia, at 30 June 2009. The SDAC estimates do not (and are not intended to) match estimates for the total Australian population obtained from other sources (which may include persons living in very remote parts of Australia).

Weighting methodology

Expansion factors or 'weights' were added to each respondent's record to enable the data provided by each person to be expanded to provide estimates relating to the whole population within the scope of the survey.

The first step of the weighting procedure was to assign an initial person weight to each fully responding person. The initial person weight was calculated as the inverse probability of the person's selection in the sample, and takes into account which component of the survey the respondent was selected in, i.e. the household component or the cared-accommodation component.

The next step in the weighting procedure was calibrating the initial person weights to a set of person level population benchmarks. The calibration to benchmarks ensures that the sample survey estimates agree 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 also reduces sampling error.

ESTIMATION PROCEDURES – HOUSEHOLDS

This survey was also designed to produce estimates of numbers of households. Only respondents living in private dwellings were given household weights. The estimation procedures developed for the household estimates ensure that survey estimates of the Australian population of households conform to independent benchmarks of the Australian population of households as at June 2009 at state by part of state or territory by household composition level (where household composition is determined by the number of adults and children in a household).

Benchmarks

The benchmark used was all private dwelling households in Australia, excluding those households in very remote areas.

Weighting methodology

Expansion factors or 'weights' were added to each respondent's record to enable the data provided by each household to be expanded to provide estimates relating to the whole household population within the scope of the survey.

The first step of the weighting procedure was to assign an initial household weight to each fully responding household. The initial household weight was calculated as the inverse probability of the household's selection in the sample. Then the initial household weights were calibrated to the set of household level benchmarks.

CHAPTER 5 SURVEY OUTPUT AND DISSEMINATION

DATA AVAILABILITY

Results from the 2009 SDAC are or will be available in the form of:

- an initial publication
- a spreadsheet containing a broad selection of estimates
- a Confidentialised Unit Record File (CURF)
- tables produced on request to meet specific information requirements from the survey.

This chapter outlines the products and services that are available and those that are proposed to be made available. All products apart from the confidentialised unit record file may be obtained by visiting the ABS web site <www.abs.gov.au>.

Publications/spreadsheet

Disability, Ageing and Carers, Australia: Summary of Findings, 2009 (cat. no. 4430.0)

This release is available on the ABS web site and contains a broad selection of national estimates relating to disability, older persons and caring in Australia. It is comprised of an initial publication plus a spreadsheet containing estimates of the number and demographic characteristics of persons with disabilities, limitations or restrictions, persons aged 60 years or more and carers. Information is also included on socio-economic characteristics; levels of limitation or restriction and need for, or receipt of, help by activity and social participation of people with disabilities or people aged 60 and over, carer support, caring relationships, time spent caring and reasons for being a carer and computer and Internet use.

SDAC data is also available in *Disability, Australia* (cat. no. 4446.0). This publication presents summary results relating to people with disabilities.

Microdata

Disability, Ageing and Carers, Australia, Basic Confidentialised Unit Record File (cat. no. 4430.0.30.002).

Provides confidentialised unit record data on disability status, need for assistance and provision of care. Details are provided on difficulty with, or need for, assistance in 10 common activities of daily living, education and employment restrictions, receipt of assistance, specific impairments and underlying health conditions, the ability of older people to carry out activities such as house chores, meal preparation and transport, and the experience and impact of caring for people with severe or profound restrictions. All records have relevant standard demographic, labour force and other socio-economic details.

This CURF is available via CD-ROM or accessed through the Remote Access Data Laboratory (RADL) or the ABS Data Laboratory (ABSDL). Access is for authorised users approved via the ABS web site. Users should refer to the CURF Microdata entry page for further details (*www.abs.gov.au*, Statistics, CURF Microdata).

Microdata continued

The publication, *Information Paper: Disability, Ageing and Carers, Basic CURF, Australia* (cat. no. 4430.0.00.001), explains the data content, technical details and conditions of use and should be used in conjunction with this CURF. An Excel spreadsheet listing all the data items available on the Basic CURF, a copy of both the Household and Establishment questionnaires, and a set of Prompt Cards (related only to the Household component) accompanies the Information Paper.

Results for states

A set of Excel spreadsheets will be available on the ABS web site in July 2011 for each State and Territory containing versions of statistical tables featured in *Disability, Ageing and Carers, Australia: Summary of Findings, 2009* (cat. no. 4430.0).

Summary of finding publication tables will be available subject to confidentiality constraints for:

New South Wales

Victoria

Queensland

South Australia

Western Australia

Tasmania

Northern Territory

Australian Capital Territory.

Secondary table sets

There will be some secondary table sets released from the 2009 SDAC in the following releases:

- *Disability, Ageing and Carers, Australia 2009: Disability and Long Term Health Conditions* (cat. no. 4433.0.55.001)
- *Caring in the Community, Australia* (cat. no. 4436.0).

It is expected that these releases will contain tables similar to those released from the 2003 SDAC - *Disability, Ageing and Carers: Disability and Long Term Health Conditions* (cat. no. 4430.0.55.001 and 4430.0.55.002) and *Disability, Ageing and Carers, Australia: Caring in the Community* (cat. no. 4430.0.55.003 and 4430.0.55.004).

It is also expected that some analytical articles on caring in Australia will be released in *A Profile of Carers in Australia* (cat. no. 4448.0).

These releases will be available on the ABS web site: www.abs.gov.au.

Releases from previous surveys

The following publications relate to the previous surveys conducted in 1981, 1988, 1993, 1998 and 2003.

SURVEY OF HANDICAPPED PERSONS, 1981

Handicapped Persons, Australia 1981 (cat. no. 4343.0)

Releases from previous surveys continued

SURVEY OF DISABLED AND AGED PERSONS, 1988

Disability and Handicap, Australia, 1988 (cat. no. 4120.0)

Domestic Care of the Aged, Australia, 1988 (cat. no. 4121.0)

Carers of the Handicapped at Home, Australia, 1988 (cat. no. 4122.0)

SURVEY OF DISABILITY, AGEING AND CARERS, 1993

Disability, Ageing and Carers, Australia: Summary of Findings, 1993 (cat. no. 4430.0)

Disability, Ageing and Carers: User Guide, Australia, 1993 (cat. no. 4431.0.55.001)

Disability, Ageing and Carers, Australia: Disability and Disabling Conditions, 1993 (cat. no. 4433.0)

Disability, Ageing and Carers, Australia: Visual Impairment, 1993 (cat. no. 4434.0)

Disability, Ageing and Carers, Australia: Hearing Impairment, 1993 (cat. no. 4435.0)

Disability, Ageing and Carers, Australia: Brain Injury and Stroke, 1993 (cat. no. 4437.0)

Focus on Families: Caring in Families: Support for Persons who are Older or have Disabilities (cat. no. 4423.0)

SURVEY OF DISABILITY, AGEING AND CARERS, 1998

Disability, Ageing and Carers, Australia: Summary of Findings, 1998 (cat. no. 4430.0)

Disability, Ageing and Carers: User Guide, Australia, 1998 (cat. no. 4431.0.55.001)

Caring in the Community, 1998 (cat. no. 4436.0)

Disability and Disabling Conditions, 1998 (cat. no. 4433.0)

SURVEY OF DISABILITY, AGEING AND CARERS, 2003

Disability, Ageing and Carers, Australia: Summary of Findings, 2003 (cat. no. 4430.0)

Disability, Ageing and Carers: User Guide, Australia, 2003 (cat. no. 4431.0.55.001)

Disability, Australia, 2003 (cat. no. 4446.0)

Please note, publications from 1998 onwards are available on the ABS web site, while disability, ageing and carer publications before 1998 can be obtained by emailing health@abs.gov.au.

Other related publications

Other ABS publications relating to disability, ageing and carers:

Disability, Australia, 2009 (cat. no. 4446.0)

A Profile of Carers in Australia, 2008 (cat. no. 4448.0)

People with a Need for Assistance - A Snapshot, 2006 (cat. no. 4445.0)

Census of Population and Housing: Ageing in Australia, 2001 (cat. no. 2048.0)

Focus on Families - A Statistical Series: Family Life, 1995 (cat. no. 4425.0)

Other related publications continued

Other ABS publications which may be of interest include:

Australian Social Trends (cat. no. 4102.0)

Labour Force, Australia (cat. no. 6202.0)

Education and Training Experience, Australia, 2009 (cat. no. 6278.0)

Private Hospitals, Australia, 2008-2009 (cat. no. 4390.0)

National Aboriginal and Torres Strait Islander Social Survey, 2008 (cat. no. 4714.0)

Household Income and Income Distribution, Australia, 2007-08 (cat. no. 6523.0)

National Health Survey: Summary of Results, 2007- 08 (cat. no. 4364.0)

General Social Survey: Summary Results, Australia, 2006 (cat. no. 4159.0)

How Australians Use Their Time, 2006 (cat. no. 4153.0)

Older People, Australia: A Social Report, 1999 (cat. no. 4109.0)

Children, Australia: A Social Report, 1999 (cat. no. 4119.0)

SPECIAL DATA SERVICES

As well as releasing publications and standard products, the ABS can make available special tabulations. Subject to confidentiality and standard error constraints, tabulations can be produced from the survey incorporating data items, populations and geographic areas selected to meet individual requirements. All special tabulations attract a service charge. For further information and requests for unpublished data, contact the National Information and Referral Service on 1300 135 070.

STATISTICAL CONSULTANCY SERVICES

The ABS offers a specialist consultancy service to assist users with more complex statistical information needs. Users may wish to have the unit record data analysed according to their own needs, or may require information not included in regular publications. Services include assistance with the analysis of survey data and application of statistical techniques (such as regression analysis, factor analysis and hypothesis testing). This consultancy attracts a service charge. For further information, contact the National Information and Referral Service on 1300 135 070.

GLOSSARY

Ability to get support in a time of crisis
Refers to whether there is someone outside the person's household that could be asked for support in a time of crisis. Support could be in the form of emotional, physical or financial help. Potential sources of support could be family members, friends, neighbours, work colleagues and various community, government and professional organisations.

Activity
An activity comprises one or more tasks. See the table in the Survey Content chapter a summary table of restrictions, activities and tasks. In this survey, tasks have been grouped into the following ten activities:
- cognition or emotion
- communication
- health care
- household chores
- meal preparation
- mobility
- property maintenance
- reading or writing
- self-care
- transport.

Age standardised disability rate
An age standardised rate is calculated to remove the effects of different age structures when comparing populations over time. A standard age composition is used, in this case the age composition of the estimated resident population of Australia at 30 June 2001. An age standardised rate is that which would have prevailed if the actual population had the standard age composition. Age-specific disability rates are multiplied by the standard population for each age group. The results are added and the sum calculated as a percentage of the standard population total to give the age standardised percentage rate.

Aids and equipment
Any device used by persons with one or more disabilities to assist them with performing tasks, but does not include help provided by another person or an organisation.

Australian Standard Classification of Education (ASCED)
The ASCED is a national standard classification which includes all sectors of the Australian education system, that is, schools, vocational education and training, and higher education. From 2001, ASCED replaced a number of classifications used in administrative and statistical systems, including the ABS Classification of Qualifications (ABSCQ). The ASCED comprises two classifications: Level of education and Field of education. See *Australian Standard Classification of Education (ASCED), 2001* (cat. no. 1272.0).

Braces
Braces are applied to legs for extra support. This extra support may allow people to walk who otherwise are not able to. Braces can also be applied to other joints to provide extra support after injury.

Calipers
A specific type of brace that is applied to legs. It is constructed of side bars, with spurs fitting into a tube in the heel of an adapted shoe and straps around the leg to hold the splint in position.

Capital city/Balance of state
Capital city refers to the capital city Statistical Division for each state or territory. All other regions within each state are classified as Balance of state.

Cared-accommodation
Hospitals, homes for the aged such as nursing homes and aged care hostels, cared components of retirement villages, and other 'homes', such as children's homes.

Carer A person of any age who provides any informal assistance, in terms of help or supervision, to persons with disabilities or long-term conditions or persons who are elderly (i.e. aged 60 years and over). This assistance has to be ongoing, or likely to be ongoing, for at least six months. Assistance to a person in a different household relates to 'everyday types of activities', without specific information on the activities. Where the care recipient lives in the same household, the assistance is for one or more of the following activities:

- cognition or emotion
- communication
- health care
- household chores
- meal preparation
- mobility
- property maintenance
- reading or writing
- self-care
- transport.

Child A person of any age who is a natural, step or foster son or daughter of a couple or lone parent, usually resident in the same household, and who does not have a child or partner of his/her own usually resident in the household.

Cognition or emotion This activity comprises the following tasks:

- making friendships, maintaining relationships, or interacting with others
- coping with feelings or emotions
- decision making or thinking through problems.

Cognition or emotion was termed 'guidance' in earlier SDAC surveys.

Communication This activity comprises the following tasks:

- understanding family or friends
- being understood by family or friends
- understanding strangers
- being understood by strangers.

Continuous care Refers to care that is on-going, or likely to be on-going, for at least six months.

Contributing family worker A person who works without pay in an economic enterprise operated by a relative.

Core activities Core activities are communication, mobility and self-care.

Core activity limitation Four levels of core activity limitation are determined based on whether a person needs help, has difficulty, or uses aids or equipment with any of the core activities (communication, mobility or self-care). A person's overall level of core activity limitation is determined by their highest level of limitation in these activities.

The four levels of limitation are:

- profound – the person is unable to do, or always needs help with, a core activity task.
- severe – the person:
  - sometimes needs help with a core activity task
  - has difficulty understanding or being understood by family or friends
  - can communicate more easily using sign language or other non-spoken forms of communication.
- moderate – the person needs no help, but has difficulty with a core activity task.
- mild – the person needs no help and has no difficulty with any of the core activity tasks, but:
  - uses aids and equipment
  - cannot easily walk 200 metres
  - cannot walk up and down stairs without a handrail
  - cannot easily bend to pick up an object from the floor

Core activity limitation *continued*

- cannot use public transport
- can use public transport, but needs help or supervision
- needs no help or supervision, but has difficulty using public transport.

Disability

In the context of health experience, the International Classification of Functioning, Disability and Health (ICF) defines disability as an umbrella term for impairments, activity limitations and participation restrictions. It denotes the negative aspects of the interaction between an individual (with a health condition) and that individual's contextual factors (environment and personal factors).

In this survey, a person has a disability if they report they have a limitation, restriction or impairment, which has lasted, or is likely to last, for at least six months and restricts everyday activities. This includes:

- loss of sight (not corrected by glasses or contact lenses)
- loss of hearing where communication is restricted, or an aid to assist with, or substitute for, hearing is used
- speech difficulties
- shortness of breath or breathing difficulties causing restriction
- chronic or recurrent pain or discomfort causing restriction
- blackouts, fits, or loss of consciousness
- difficulty learning or understanding
- incomplete use of arms or fingers
- difficulty gripping or holding things
- incomplete use of feet or legs
- nervous or emotional condition causing restriction
- restriction in physical activities or in doing physical work
- disfigurement or deformity
- mental illness or condition requiring help or supervision
- long-term effects of head injury, stroke or other brain damage causing restriction
- receiving treatment or medication for any other long-term conditions or ailments and still being restricted
- any other long-term conditions resulting in a restriction.

Disability rate

The proportion of people with a reported disability, in any given population or sub-population (e.g. age group).

Dressing

Dressing includes physical assistance for dressing or undressing activities, such as doing up buttons or zips, putting on socks and shoes, tying shoe laces, etc. It also includes advising on appropriate clothing.

Dressing aids

Includes aids that are used to assist in the dressing process such as zip pullers, button hooks and tongs for pulling on clothes.

Eating

This includes the physical aspects of eating, as well as supervising to ensure the food is eaten and nothing harmful is placed in the mouth (e.g. bones) and any washing or clothing adjustments that are needed after eating or feeding. The physical aspects of eating include being seated at the table, serving food, cutting food into pieces and feeding.

Eating aids

Eating aids include any special crockery or cutlery that facilitate eating.

Ejector chair

A chair that mechanically 'lifts' the person into a standing position.

Employed

People who reported that they had worked in a job, business or farm during the reference week (the full week prior to the date of interview); or that they had a job in the reference week, but were not at work.

Employee A person who works for a public or private employer and receives remuneration in wages, salary, a retainer fee from their employer while working on a commission basis, tips, piece rates, or payment in kind, or a person who operates their own incorporated enterprise with or without hiring employees. In this publication, employee relates to his/her main job.

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.

Employment restriction An employment restriction is determined for persons with one or more disabilities if, because of their disability, they:

- are permanently unable to work
- are restricted in the type of work they can or could do
- need or would need at least one day a week off work on average
- are restricted in the number of hours they can or could work
- require or would require an employer to provide special equipment, modify the work environment or make special arrangements
- requires assistance from a disability job placement program or agency
- need or would need to be given ongoing assistance or supervision
- would find it difficult to change jobs or get a better job.

This information was collected for persons aged 15 to 64 years with one or more disabilities, living in households.

Episodic care Refers to care that is only provided during episodes where the condition of the main/only recipient deteriorates, that is, for conditions where the main/only recipient suffers attacks or relapses at intervals (e.g. episodes of schizophrenia, epilepsy, etc.). During these episodes the care provided might be continuous; however, the type of care is classified as episodic as it is not provided for an ongoing condition.

Equivalised household income Equivalising adjusts actual income to take into account the different needs of households of different size and composition. There are economic advantages associated with living with others, because household resources, especially housing, can be shared. The equivalence scale used to obtain equivalised income is that used in studies by the Organisation for Economic Co-operation and Development (OECD) and is referred to as the 'modified OECD scale'. The scale gives a weight of 1.0 to the first adult in the household, a weight of 0.5 for each additional adult (persons aged 15 years and over), and a weight of 0.3 for each child. For each household, the weights for household members are added together to form the household weight. Total household income is then divided by the household weight to give an income that a lone person household would need for a similar standard of living. Equivalised household income can be viewed as an indicator of the economic resources available to each member of the household.

Establishment See Cared-accommodation.

Fall-back carer A person identified by the primary carer as being able to take responsibility for the care of the main/only recipient should the primary carer become unavailable. A fall-back carer cannot be a formal provider.

Financial management This includes activities such as keeping track of expenses and paying bills.

Formal assistance/providers Help provided to persons with one or more disabilities by:

- organisations or individuals representing organisations (whether profit making or non-profit making, government or private); or
- other persons (excluding family, friends or neighbours as described in Informal assistance/providers) who provide assistance on a regular, paid basis and who were not associated with any organisation.

Full time workers Employed persons who usually worked 35 hours or more a week (in all jobs) and those who, although usually working less than 35 hours a week, worked 35 hours or more during the reference week.

Health care

This activity comprises two tasks:
- foot care; and
- other tasks, such as:
  - taking medication or administering injections
  - dressing wounds
  - using medical machinery
  - manipulating muscles or limbs.

High technology aids for speaking

This includes aids such as digitised or synthesised speech output systems.

High technology reading or writing aids

This includes aids such as audio tapes, talking word processors, specialised computer software and printout systems.

Highest educational attainment

Highest educational attainment identifies the highest achievement a person has attained in any area of study. It is a ranking of qualifications and other educational attainments regardless of the particular area of study or the type of institution at which the study was undertaken. Highest educational attainment is based on the *Australian Standard Classification of Education (ASCED), 2001* (cat. no. 1272.0).

Hours worked

Hours worked was only collected for people who were employed during the reference period. It refers to the number of hours usually worked in all jobs.

Household

A group of two or more related or unrelated people who usually reside in the same dwelling and who make common provision for food and other essentials for living; or a person living in a dwelling who makes provision for his or her own food and other essentials for living without combining with any other person. Thus a household may consist of:
- one person
- one family
- one family and related individual(s)
- related families with or without unrelated individual(s)
- unrelated families with or without unrelated individual(s)
- unrelated individuals.

Housework

This activity comprises a single task 'household chores', examples of which are:
- washing
- vacuuming
- dusting.

Impairment

In the context of health experience, an impairment is defined by the International Classification of Functioning, Disability and Health (ICF) as a loss or abnormality in body structure or physiological function (including mental functions). Abnormality is used to refer to a significant variation from established statistical norms.

Examples of an impairment are loss of sight or of a limb, disfigurement or deformity, impairment of mood or emotion, impairments of speech, hallucinations, loss of consciousness and any other lack of function of body organs.

Income

Gross current usual (weekly equivalent) cash receipts that are of a regular and recurring nature, and accrue to individual household members at annual or more frequent intervals, from employment, own business, the lending of assets and transfers from Government, private organisations and other households.

Income unit

An income unit is one person or a group of related persons within a household, whose command over income is assumed to be shared. Income sharing is assumed to take place within married (registered or de facto) couples, and between parents and dependent children.

Incontinence aids

Incontinence aids include items such as incontinence pads, urinary appliances, incontinence briefs, waterproof pants and specialised bed linen.

Industry

Industry has been classified according to the *Australian and New Zealand Standard Industrial Classification (ANZSIC), 2006* (cat. no. 1292.0).

Informal assistance/providers

Informal assistance is unpaid help or supervision that is provided to persons with one or more disabilities or persons aged 60 years and over living in households. It only includes assistance that is provided because of a person's disability or because they are older. Informal assistance may be provided by family, friends or neighbours. For this survey, any assistance received from family or friends living in the same household was considered to be informal assistance regardless of whether or not the provider was paid. It does not include providers whose care is privately organised (see Formal assistance/providers).

Informal care in formal care establishments

Care or assistance with activities provided on a regular, unpaid informal basis to people who live in a cared-accommodation facility (e.g. nursing homes).

Labour force status

A classification of the population aged 15 years or over into employed, unemployed or not in the labour force.

Level of communication restrictions

Four levels of communication restrictions are determined based on whether a person needs help, has difficulty, or uses aids or equipment in communicating with others. A person's overall level of communication restriction is determined by their highest level of limitation in these activities.

The four levels of limitation are:

- profound – the person cannot understand or be understood at all. They always need help when communicating with family or friends and people they don't know.
- severe – the person:
  - communicates more easily with sign language or other non-spoken communication
  - sometimes needs help understanding or being understood by someone they don't know
  - sometimes needs help understanding or being understood by family or friends
  - has difficulty understanding or being understood by family or friends.
- moderate – the person has difficulty understanding or being understood by someone they don't know, or the interview was conducted in English with difficulty because of communication problems.
- mild – the person has no difficulty understanding or being understood by someone else, but uses a communication aid.

Level of mobility restrictions

Four levels of mobility restrictions are determined based on whether a person needs help, has difficulty, or uses aids or equipment in moving around. A person's overall level of mobility restriction is determined by their highest level of limitation in these activities.

The four levels of limitation are:

- profound – the person:
  - does not get out of bed
  - does not move around the residence
  - does not leave home because of their condition
  - always needs help or supervision with:
    - moving around places away from their place of residence
    - moving about their place of residence
    - getting into or out of a bed or chair.
- severe – the person sometimes need help or supervision with:
  - moving around places away from their place of residence
  - moving about their place of residence
  - getting into or out of a bed or chair.
- moderate – the person has difficulty, but doesn't need help with:
  - moving around places away from their place of residence
  - moving about their place of residence
  - getting into or out of a bed or chair.

Level of mobility restrictions *continued*

- mild – the person doesn't need any help and doesn't have any difficulty with moving around, but:
  - uses a mobility aid
  - cannot easily walk 200 metres or takes longer to do so than most people their age
  - cannot walk up or down stairs without using a handrail
  - cannot easily bend to pick something off the floor
  - cannot use all forms of public transport without experiencing some difficulty.

Level of non-school educational restriction

Three levels of non-school educational restrictions are determined based on whether a person needs help, has difficulty, or uses aids or equipment in their education. A person's overall level of non-school educational restriction is determined by their highest level of limitation in these activities.

The three levels of limitation are:

- severe – the person:
  - receives personal assistance
  - has a signing interpreter
  - receives special tuition
  - receives assistance from a counsellor/disability support person.
- moderate – the person:
  - often needs time off from school/institution
  - has difficulty at school/institution because of their condition(s)
  - has special assessment procedures.
- mild – the person needs:
  - a special computer or other special equipment
  - special transport arrangements
  - special access arrangements
  - other special arrangements or support services.

Level of schooling restrictions

Four levels of schooling restrictions are determined based on whether a person needs help, has difficulty, or uses aids or equipment in their education. A person's overall level of schooling restriction is determined by their highest level of limitation in these activities.

The four levels of limitation are:

- profound – the person's condition prevents them from attending school.
- severe – the person:
  - attends a special school or special classes
  - receives personal assistance
  - has a signing interpreter
  - receives special tuition
  - receives assistance from a counsellor/disability support person.
- moderate – the person:
  - often needs time off from school
  - has difficulty at school because of their condition(s)
  - has special assessment procedures.
- mild – the person needs:
  - a special computer or other special equipment
  - special transport arrangements
  - special access arrangements
  - other special arrangements or support services.

Level of self-care restrictions

Four levels of self-care restrictions are determined based on whether a person needs help, has difficulty, or uses aids or equipment in looking after themselves. A person's overall level of self-care restriction is determined by their highest level of limitation in these activities.

The four levels of limitation are:

Level of self-care restrictions *continued*

- profound – the person always needs help or supervision with:
  - bathing or showering
  - dressing
  - eating
  - toileting
  - managing bladder or bowel control.
- severe – the person sometimes need help or supervision with:
  - bathing or showering
  - dressing
  - eating
  - toileting
  - managing bladder or bowel control.
- moderate – the person has difficulty, but doesn't need help with:
  - bathing or showering
  - dressing
  - eating
  - toileting
  - managing bladder or bowel control.
- mild – the person:
  - doesn't need any help and doesn't have any difficulty with self-care, but uses an aid
  - does not use the toilet, but does not have difficulty controlling their bladder or bowel.

Limitation

A person has a limitation if they have difficulty doing a particular activity, need assistance from another person or use an aid. See the table in the Survey Content chapter for more detail.

Living arrangements

Living arrangements refer to:

- whether a person lives alone, with other family members or with other unrelated individuals
- whether a person lives in a private dwelling, cared-accommodation or other non-private dwelling.

Relationship in household was not determined for people in cared-accommodation or other non-private dwellings.

Long-term condition

A disease or disorder which has lasted or is likely to last for at least six months; or a disease, disorder or event (e.g. stroke, poisoning, accident etc.) which produces an impairment or restriction which has lasted or is likely to last for at least six months. Long-term conditions have been coded to a classification based on the World Health Organisation's International Classification of Diseases, Version 10 (ICD–10).

Low technology reading or writing aids

Non-electronic aids such as picture boards, symbol boards or large print books.

Low technology speaking aids

Non-electronic aids such as picture boards, symbol boards or letter/word boards.

Main condition

A long-term condition identified by a person as the one causing the most problems. Where only one long-term condition is reported, this is recorded as the main long-term condition.

Main job

The job in which a person usually works the most hours.

Main language spoken at home

The main language spoken by a person in his/her home, on a regular basis, to communicate with other residents of the home and regular visitors to the home.

Main recipient of care Where a primary carer is caring for more than one person, the main recipient of care is the one receiving the most help or supervision. A sole recipient is also classed as a main recipient. The assistance has to be ongoing, or likely to be ongoing, for at least six months and be provided for one or more of the core activities of communication, mobility and self-care.

Meal preparation Includes preparing ingredients and cooking food.

Meal preparation aids Includes items such as cutting aids, opening aids and cooking aids.

Median The median value is that value which divides the population into two equal parts, one half having values lower than the median, and one half having values higher than it.

Medical aids This includes items such as nebulisers, dialysis machines, feeding pumps, pacemakers, oxygen concentrators or cylinders, ventilators, medical dressings, surgical stockings or pain management aids.

Mild core activity limitation See Core activity limitation.

Mobility Mobility comprises the following tasks:
- getting into or out of a bed or chair
- moving about the usual place of residence
- going to or getting around a place away from the usual residence
- walking 200 metres
- walking up and down stairs without a handrail
- bending and picking up an object from the floor
- using public transport.

Moderate core activity limitation See Core activity limitation.

Need for assistance A person with one or more disabilities, or aged 60 years and over, is identified as having a need for assistance with an activity if, because of their disability or age, they report that they need help or supervision with at least one of the specified tasks constituting that activity. Need is not identified if the help or supervision is required because the person has not learned, or has not been accustomed to performing that activity. The person is considered to need assistance whether or not assistance is actually received.

Non-core restriction A restriction in employment and/or schooling.

Non-personal assistance This includes meal preparation, reading or writing, household chores, property maintenance and transport.

Non-private dwelling In this survey, comprises Cared-accommodation and Other non-private dwellings.

Non-school qualification Non-school qualifications are awarded for educational attainments other than those of pre-primary, primary or secondary education. They include qualifications at the Post Graduate Degree level, Master Degree level, Graduate Diploma and Graduate Certificate level, Bachelor Degree level, Advanced Diploma and Diploma level, and Certificates I, II, III and IV levels. Non-school qualifications may be attained concurrently with school qualifications.

Not in the labour force Persons who were not employed or unemployed.

Occupation Classified according to the *Australian and New Zealand Standard Classification of Occupations (ANZSCO), First Edition, 2006* (cat. no. 1220.0).

Older person In this survey, older person refers to a person aged 60 years and over. Information on need for and receipt of assistance for household chores, meal preparation, reading or writing, property maintenance and transport, and on community participation, is available from the survey for persons aged 60 years and over, regardless of whether they have a disability or not.

Other hearing aid(s) This includes aids such as hearing dogs, light signals, or a Teletypewriter (TTY) phone or loop.

Other non-private dwelling Non-private dwellings other than cared-accommodation are defined in this survey as hostels for the homeless, hotels, motels, educational and religious institutions, construction camps, boarding houses, staff quarters, guest houses, short-stay caravan parks, youth camps and camping grounds, and self-care units in a retirement village which may have cared-accommodation on-site.

Own account worker An own account worker is a person who operates his or her own unincorporated economic enterprise or engages independently in a profession or trade and hires no employees.

Part time workers Employed persons who usually worked less than 35 hours a week (in all jobs) and either did so during the reference week, or were not at work during the reference week.

Participation rate In the context of labour force statistics, the participation rate for any group is the number of persons in the labour force (i.e. employed persons plus unemployed persons) expressed as a percentage of the population aged 15 years and over in the same group. In this publication, the population is restricted to persons aged 15 to 64 years.

Partner A person in a couple relationship with another person usually resident in the same household. The couple relationship may be in either a registered or de facto marriage, and includes same-sex couples.

Personal activities These include communication, mobility, self-care, health care and cognition or emotion.

Primary carer A primary carer is a person who provides the most informal assistance, in terms of help or supervision, to a person with one or more disabilities. The assistance has to be ongoing, or likely to be ongoing, for at least six months and be provided for one or more of the core activities (communication, mobility and self-care). In this survey, primary carers only include persons aged 15 years and over for whom a personal interview was conducted. Persons aged 15 to 17 years were only interviewed personally if parental permission was granted.

Principal carer This term is not used in the 2009 SDAC, as there has been a change in the way primary carers were identified compared with previous surveys. In previous surveys, a principal carer was a person who was not identified by the initially responding responsible adult as being the person who provided the most care to a recipient, but who was identified as such by the recipient of care. These carers were not asked to confirm their carer status. In 2009, such persons were subsequently personally interviewed to ascertain whether they were a primary carer or not.

Principal source of personal income Refers to that source from which the greatest amount of cash income is received.

Private dwellings Houses, flats, home units, garages, tents and other structures used as private places of residence at the time of the survey.

Profound core activity limitation See Core activity limitation.

Property maintenance This includes light maintenance and gardening tasks, such as:
- changing light bulbs, tap washers, car registration stickers
- making minor home repairs
- mowing lawns, watering, pruning shrubs, light weeding, planting
- removing rubbish.

Qualification Formal certification, issued by a relevant approved body, in recognition that a person has achieved learning outcomes or competencies relevant to identified individual, professional, industry or community needs. Statements of attainment awarded for partial completion of a course of study at a particular level are excluded.

Quintiles Groupings that result from ranking all households or people in the population in ascending order according to some characteristic such as their household income and then dividing the population into five equal groups, each comprising 20% of the estimated population. The same dollar values for household income can therefore appear in separate quintiles.

Reading or writing This includes tasks such as:
- checking bills or bank statements
- writing letters
- filling in forms.

Receipt of assistance Receipt of assistance is applicable to persons with one or more disabilities, or aged 60 years and over, who needed help or supervision with at least one of the specified tasks comprising an activity. The source of assistance may be informal or formal, but does not include assistance from the use of aids or equipment.

Registered marital status Whether a person has, or has had, a registered marriage with another person. Accordingly, people are classified as either 'never married', 'married', 'widowed' or 'divorced'.

Remoteness area The ABS has defined Remoteness within the *Australian Standard Geographical Classification (ASGC)* (cat. no. 1216.0). The structure defines six Remoteness Areas (RA): Major Cities of Australia; Inner Regional Australia; Outer Regional Australia; Remote Australia; Very Remote Australia; and Migratory.

The delimitation criteria for RAs are based on the Accessibility/Remoteness Index of Australia (ARIA), which measures the remoteness of a point based on the physical road distance to the nearest Urban Centre in each of five size classes. For this survey, the ASGC 2006 CDs were used. The Remoteness Structure is described in detail in the publication *Statistical Geography Volume 1 — Australian Standard Geographical Classification (ASGC), Jul 2006* (cat. no. 1216.0).

Respite care Respite care services provide alternative care arrangements for persons with one or more disabilities, or older people, to allow carers a short-term break from their care commitments. Respite care may be provided on a regular, planned basis, or in an emergency or crisis situation. Respite care services may be in a facility such as a nursing home or community centre or in a person's home.

Restriction A person has a restriction if he/she has difficulty participating in life situations, needs assistance from another person or uses an aid. See the table in the Survey Content chapter for more detail.

Schooling restriction A schooling restriction is determined for persons aged 5 to 20 years who have one or more disabilities if, because of their disability, they:
- are unable to attend school
- attend a special school
- attend special classes at an ordinary school
- need at least one day a week off school on average
- have difficulty at school.

Scooter A mobility aid serving a similar purpose as a wheelchair, but configured like a motor scooter.

Section of State (SOS) This geographical classification uses population counts to define Collection Districts (CDs) as urban or rural and to provide, in aggregate, statistics for urban concentrations and for bounded localities and balance areas.

Section of State categories comprise Major Urban (population clusters of 100,000 or more), Other Urban (population clusters of 1,000 to 99,999), Bounded Locality (200 to 999), Rural Balance (remainder of state/territory) and Migratory, and in aggregate cover the whole of Australia.

Section of State (SOS) *continued*

For more information, refer to *Statistical Geography Volume 1 — Australian Standard Geographical Classification (ASGC), Jul 2006* (cat. no. 1216.0).

Self-care

This activity comprises the following tasks:
- showering or bathing
- dressing
- eating
- toileting
- bladder or bowel control.

Service does not provide sufficient hours

This includes both cases where the person didn't receive any hours and where they received some hours, but not as many as were required from the service.

Severe core activity limitation

See Core activity limitation.

Severity of employment restrictions

Four levels of employment restrictions are determined based on whether a person needs help, has difficulty, or uses aids or equipment in their employment. A person's overall level of employment restriction is determined by their highest level of limitation in these activities.

The four levels of limitation are:
- profound – the person's condition permanently prevents them from working.
- severe – the person:
  - requires personal support
  - needs ongoing supervision or assistance
  - requires a special disability support person
  - receives assistance from a disability job placement program or agency.
- moderate – the person is restricted in the type of job and/or the numbers of hours they can work or has difficulty in changing jobs.
- mild – the person needs:
  - help from someone at work
  - special equipment
  - modifications to buildings or fittings
  - special arrangements for transport or parking
  - training
  - to be allocated different duties.

Showering or bathing

Showering or bathing is defined as getting in and out of the shower or bath, turning on/off taps in the shower or bath, washing, drying and having a bed-bath. It excludes dressing and undressing.

Showering or bathing aids

This includes items such as shower chairs, hoists, shower or bath rails and special shower fittings.

Sign language

This includes all recognised sign languages. Two sign languages used in Australia are Auslan, used by people with hearing difficulties and Makaton, used by people with speech, language or learning difficulties.

Social marital status

Social marital status is the relationship status of an individual in terms of whether she or he forms a couple relationship with another person living in the same usual residence, and the nature of that relationship. A marriage exists when two people live together as husband and wife, or partners, regardless of whether the marriage is formalised through registration. Individuals are, therefore, regarded as married if they are in a de facto marriage, or if they are living with the person to whom they are registered as married. Note: married de facto also includes persons who report de facto, partner, common law husband/wife/spouse, lover, girlfriend or boyfriend.

The term 'not married', as used in this classification, means neither a registered nor a de facto marriage. This includes persons who live alone, with other family members, and those in shared accommodation.

Socio-Economic Indexes for Areas (SEIFA)

SEIFA is a product developed especially for those interested in the assessment of the welfare of Australian communities. The ABS has developed four indexes to allow ranking of regions/areas, providing a method of determining the level of social and economic well-being in each region.

Each of the indexes summarise different aspects of the socio–economic status of the people living in those areas. The index refers to the attributes of the area (the Census Collector's District) in which a person lives, not to the socio–economic situation of a particular individual. The index used in this publication was compiled following the 2006 Census. For further information about the SEIFAs, see *Information Paper: Census of Population and Housing — Socio-Economic Indexes for Areas, Australia* (cat. no. 2039.0).

The four indexes are:

- Index of Relative Socio-economic advantage and disadvantage: includes attributes such as households with low incomes and people with a tertiary education.
- Index of Relative Socio-economic disadvantage: includes attributes such as low income, low educational attainment, high unemployment and dwellings without motor vehicles.
- Index of economic resources: includes attributes such as income, housing expenditure and assets of households.
- Index of education and occupation: includes attributes relating to the educational and occupational characteristics of communities, like the proportion of people with a higher qualification or those employed in a skilled occupation.

Specially modified car or car aid(s)

Car aids or modifications include – extra support handles, extra fittings to support disabled passengers, modifications to accommodate wheelchairs, modifications to appropriately restrain a disabled passenger and modifications to accommodate disabled drivers.

Specific limitation or restriction

A limitation in core activities, or a restriction in schooling or employment. This corresponds with the concept of 'handicap' used in previous ABS publications on disability.

Splints

This includes resting splints, which hold the affected body part stationary and dynamic splints, which allow the person to move the affected body part more easily than they would otherwise be able to.

Standardised disability rate

See Age standardised disability rate.

Supervised activity program

Supervised activity programs are places where people can participate in supervised activities such as craft work, or programs that simply provide a place where people can meet others in similar situations, or just to allow them to spend some time away from home, in a safe, supervised environment. These programs do not provide work, education or training.

Some examples of supervised activity programs include:

- day care programs for frail older people, often held at senior citizen clubs
- early intervention programs for children with developmental disabilities
- special activity programs for young people with disabilities.

Task

A task is a component of an activity, and represents the specific level at which information was collected.

Tenure type

The source of the legal right of a person to occupy a dwelling. Type of tenure may be:

- owner without a mortgage
- owner with a mortgage
- life tenant
- participant of rent/buy (or shared equity) scheme
- renter
- rent-free.

Toileting aids Includes the use of aids such as commodes, toilet frames and toilet chairs.

Transport Transport is a single task activity referring to going to places away from the usual place of residence. Need for assistance and difficulty are defined for this activity as the need to be driven and difficulty going to places without help or supervision.

Unable to arrange service This includes people who didn't know how to arrange help and those who were unable to communicate their need for assistance.

Unconfirmed primary carer People identified by the initial household respondent as being the main carer for a person (in or outside of the dwelling), but who do not have a personal interview. This could be because:

- they refused
- the interviewer could not contact them
- they were aged 15 to 17 years and there was no parental permission
- they were under 15 years
- a proxy interview was obtained due to the person being unable to answer the interview questions for some reason.

Unemployed Persons aged 15 years and over who were not employed during the reference week, and:

- had actively looked for full time or part time work at any time in the four weeks up to the end of the reference week
- were available for work in the reference week.

Unemployment rate The unemployment rate for any group is the number of unemployed persons in that group expressed as a percentage of the labour force (i.e. employed persons plus unemployed persons) in the same group.

Whether provides assistance to other people living outside the household Assistance refers to helping people with 'everyday' activities. Examples may include shopping, transport or housework. The assistance must be provided on a regular, unpaid and informal basis.

FOR MORE INFORMATION . . .

INTERNET **www.abs.gov.au** the ABS website is the best place for data from our publications and information about the ABS.

INFORMATION AND REFERRAL SERVICE

Our consultants can help you access the full range of information published by the ABS that is available free of charge from our website. Information tailored to your needs can also be requested as a 'user pays' service. Specialists are on hand to help you with analytical or methodological advice.

PHONE 1300 135 070

EMAIL client.services@abs.gov.au

FAX 1300 135 211

POST Client Services, ABS, GPO Box 796, Sydney NSW 2001

FREE ACCESS TO STATISTICS

All statistics on the ABS website can be downloaded free of charge.

WEB ADDRESS www.abs.gov.au