



Australian Government
Department of Health and Ageing

2006 Adult Vaccination Survey

Coverage and valid usage - summary results

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Australian Government Department of Health and Ageing
Canberra

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The Policy Reference Group (listed at Appendix 1) was the main steering committee for the survey, with technical development provided by staff of the Australian Government Department of Health and Ageing and the Australian Institute of Health and Welfare.

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Abbreviations and symbols

Abbreviations

AIHW	Australian Institute of Health and Welfare
CATI	Computer-assisted telephone interview
DoHA	Australian Government Department of Health and Ageing
NHMRC	National Health and Medical Research Council
NIPII	National Indigenous Pneumococcal and Influenza Immunisation

Symbols

0, 0.0 Number rounded to zero

– Invalid calculation

Notes

1. State means state and/or territory.
2. The calculations of totals use unrounded data.
3. Unless otherwise stated, results are for Australia in 2006.

Summary

2006 Adult Vaccination Survey

The 2006 Adult Vaccination Survey forms part of the evaluations of two vaccine programs for older Australians. The first is the National Influenza Vaccination Program for Older Australians, which commenced in 1999, and the second is the National Pneumococcal Vaccination Program for Older Australians which commenced on 1 January 2005.

The survey of 8,022 Australians aged 18 years or older was conducted during October 2006. It was the sixth national survey in the current series. Previous surveys focussed predominately on the National Influenza Vaccine Program for Older Australians.

Participants in the survey were asked about their medical and socio-demographic status and about recent experience of influenza and pneumococcal vaccination. Two overall measures of the efficiency and effectiveness of both programs (coverage and valid usage) were derived from the responses to the survey and are included in this report.

Questions about tetanus vaccinations as an adult and shingles were included in the survey for the first time and have been analysed to provide estimated vaccination and prevalence rates respectively.

Influenza vaccination results

The target population for both programs is Australians aged 65 years or older.

Coverage (the proportion of the target population vaccinated)

The estimate of coverage was 77.5% (2.1 million)

When adjusted for the coverage of the residents of aged care facilities (as measured by a separate survey), estimated coverage increases to 78.0%.

The estimated coverage was similar to that estimated for 2003 and 2004.

Valid usage (the proportion of the target population vaccinated with funded vaccine)

The estimate of valid usage was 72.4% (2.0 million)

More details are provided in Figure S.1.

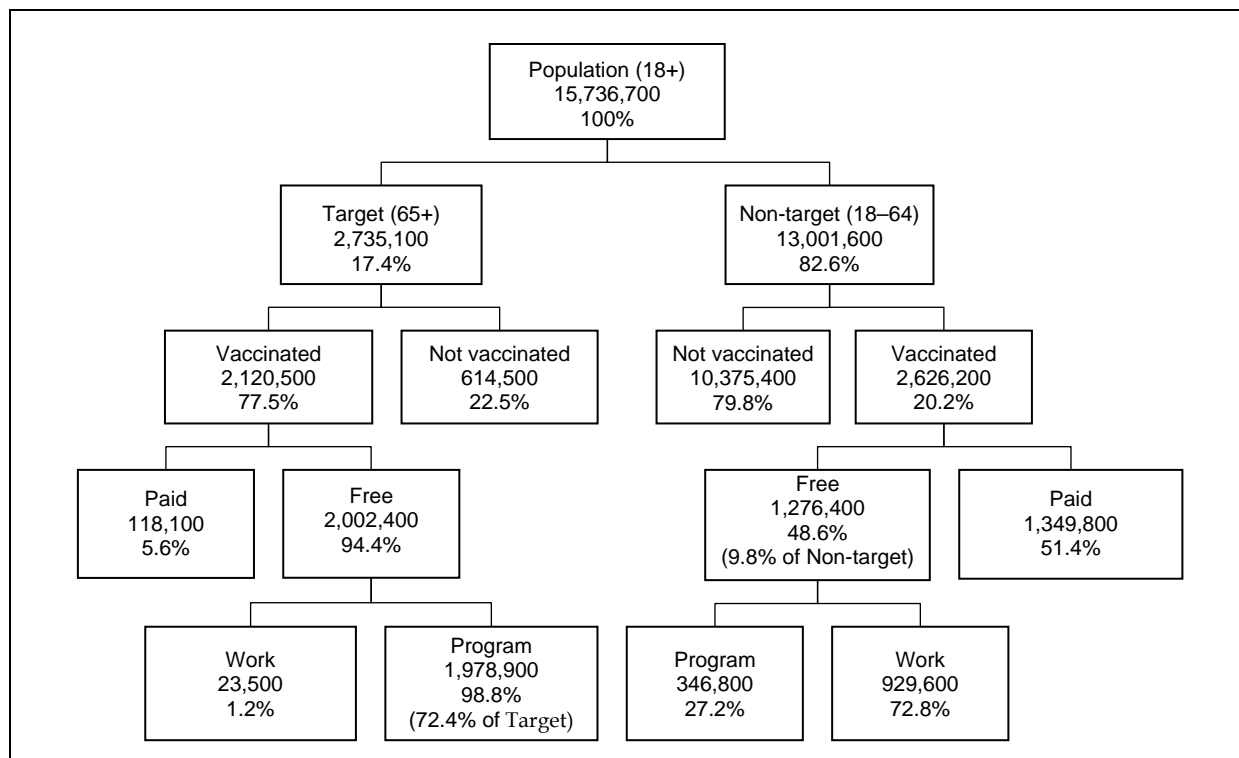


Figure S.1: Influenza vaccination experience, persons aged 18 years or older, Australia, 2006

Pneumococcal vaccination results

In this analysis, a person in the target group is considered to be currently vaccinated against pneumococcal disease if they have been vaccinated at some time during the previous 5 years.

Coverage (the proportion of the target population currently vaccinated):

The estimate of coverage was 62.2% (1.7 million).

The estimate of coverage was 53.0% for 2005.

Valid usage (the proportion of the target population vaccinated in 2006 with funded vaccine):

The estimate of valid usage was 95.8% (411,700).

More details are provided in Figure S.2.

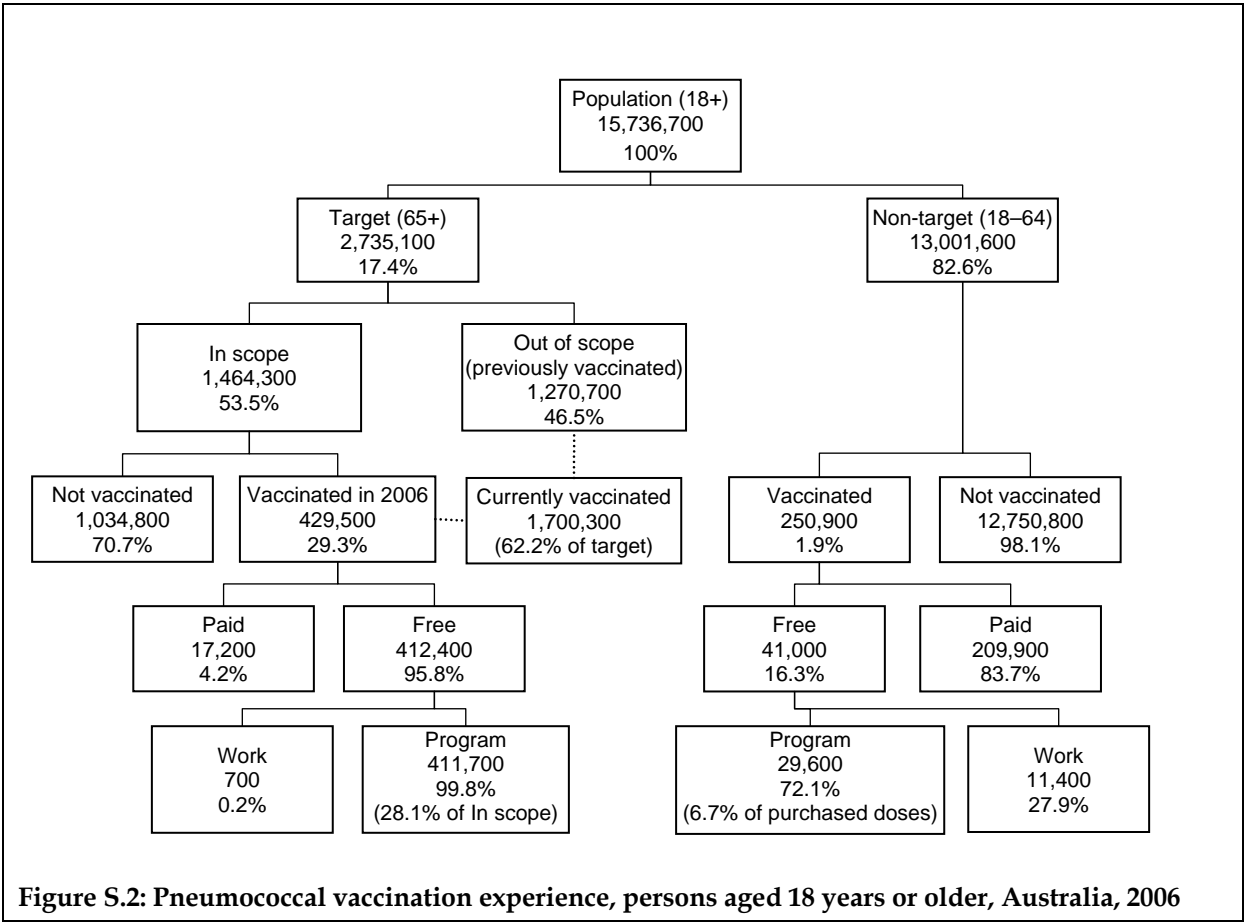


Figure S.2: Pneumococcal vaccination experience, persons aged 18 years or older, Australia, 2006

1 Introduction

Impact of influenza and pneumococcal disease in Australia

Influenza and pneumococcal vaccination are population health interventions that reduce the impact of influenza and pneumococcal diseases on older Australians.

Influenza is an epidemic disease which sometimes becomes pandemic. It can lead to complications such as pneumonia and pleurisy. People in the older age group are at increased risk of serious complications and death following influenza infection. In Australia in 2004, 30 Australians, aged 65 or older, died with influenza as an underlying cause (AIHW National Mortality Database).

Pneumococcal disease most frequently occurs in young children and the elderly. The most common form of the disease in adults is pneumococcal pneumonia. Other forms are meningitis and septicaemia. In the elderly, invasive pneumococcal disease occurs at a rate of 20-60 per 100,000 elderly people per year with a fatality rate of 15-20%. The disease was responsible for 13 deaths of people aged 65 or older in 2004.

National influenza and pneumococcal vaccine programs for older Australians

Two Australian Government programs aim to minimise the impact of influenza and pneumococcal disease for Australians aged 65 years or older. These are the National Influenza Vaccination Program and the National Pneumococcal Vaccination Program. State governments receive funding to purchase vaccine to administer to Australian residents aged 65 years or older. In this report, this group is referred to as the target population or target group.

The Australian Government funds each state government under the National Influenza Vaccination Program to purchase one influenza vaccine dose annually for each state resident aged 65 years or older. The purpose of the National Pneumococcal Vaccination Program is similar. The funding is for the purchase of sufficient doses to vaccinate all people in the target group if they are not currently vaccinated against the disease. Fewer doses of the pneumococcal vaccine need to be purchased since a person in the target group who receives a vaccine dose is protected for 5 years before a booster dose is required and only one booster dose is recommended for those first vaccinated at or after age 65 years.

In 2006, state governments purchased vaccine doses from suppliers (two suppliers for influenza vaccine and one supplier for pneumococcal vaccine) at pre-determined unit prices. State governments distribute the vaccine they purchase to immunisation providers. Immunisation is not compulsory; therefore individuals can choose not to be vaccinated.

Program evaluations

The Australian Government undertakes regular evaluations of the programs through the Adult Vaccination Survey.

Influenza Vaccine Program

The National Influenza Vaccine Program for Older Australians funds the purchase of sufficient influenza vaccine to vaccinate all people in the target population (people aged 65 years or more). Influenza vaccine has a shelf life of at most a year and is destroyed if not used in the program year. A new vaccine is prepared at the start of each year to protect against the particular influenza strains circulating at the time, for which vaccines from previous years may not be effective. Consequently an objective of the program is to minimise any over-supply of the vaccine.

The evaluation examines:

- the proportion of the target population that received influenza vaccine (coverage); and
- the usage of the free vaccine (funded doses), including the proportions of funded doses
 - not purchased, and
 - provided to people in the target population (valid usage).

In previous years, the evaluation has included further analysis of free vaccine doses

- provided to people not in the target population (leakage), and
- lost, destroyed, stored inappropriately, or simply not used in the program year (unknown usage).

The analysis of leakage and unknown usage, however, is complicated by the impact of other Australian Government and state programs providing free influenza vaccination, such as the National Indigenous Pneumococcal and Influenza Immunisation (NIPII) Program. As it can be difficult to determine which programs provided the funding to purchase doses used to vaccinate people, the data may be inaccurate, especially when analysed at jurisdictional level. As a result, estimates of leakage and unknown usage have not been included in this summary report.

Pneumococcal Vaccination Program

The National Pneumococcal Vaccination Program for Older Australians commenced on 1 January 2005. The Program differs slightly from the National Influenza Vaccine Program for Older Australians because of differences in recommendations about revaccination. For those people aged 65 years or more, a single booster shot against pneumococcal disease is recommended to be given 5 years after the first shot. On the other hand, influenza vaccination is recommended yearly.

The pneumococcal vaccine program provides funding to purchase doses for the initial vaccination of all Australians 65 years or older as well as funding for the purchase of doses to vaccinate older Australians requiring a 5 year booster dose.

An estimate is derived of the proportion of the target population who are currently vaccinated. We describe this measure as coverage. It is not precisely the same concept as that applying to the influenza program. In the case of pneumococcal, we include people who have been vaccinated against pneumococcal disease at any time over the previous 5 years.

Unknown usage is less important for the National Pneumococcal Program because, unlike influenza vaccine, unused pneumococcal vaccine can be used in the following year and does not have to be destroyed. As in the case of the National Influenza Vaccine Program for Older Australians, the analysis of leakage and unknown usage is complicated by the impact of other Australian Government and state programs and estimates of leakage and unknown usage have not been included in this summary report.

Adult Vaccination Survey

The 2006 Adult Vaccination Survey (formerly the Influenza Vaccine Survey) is the sixth such survey. As in previous years, the 2006 survey used the computer-assisted telephone interview (CATI) survey method.

The survey sample was 8,022 people aged 18 years or older, ranging from 726 people in the Northern Territory to 1,502 in NSW. The primary focus of the survey was on people aged 65 and above (5,621 survey respondents). A limited survey of people in the 18-64 year age group (2,401 survey respondents) was also included. The participation rate for the survey (completed interviews divided by total eligible calls) was 35.7%.

A supplementary survey of aged care residential facilities was undertaken, as in previous years, to refine the estimates of coverage and valid usage.

Individual survey records were allocated to categories according to sex, age group and state and assigned weightings to reflect the size of these categories within the total Australian population.

About this report

The report presents estimates derived from survey responses weighted to the Australian population aged 18 years or older.

Chapter 2 presents an analysis for influenza of coverage and valid usage and pneumococcal coverage and valid usage.

Chapter 3 describes:

- coverage and valid usage in more detail
- the incidence of people who paid for the vaccine when they did not need to
- coverage of the non-target group
- outcomes for the two population groups that the NHMRC recommends be vaccinated
- adjustments to the overall results to take account of residents of aged care facilities.

Chapter 4 summarises characteristics of the respondents to the survey and the method used.

The appendixes document the governance of the survey, provide the populations underlying the report, give standard error estimates and include the survey questionnaires.

2 Main results

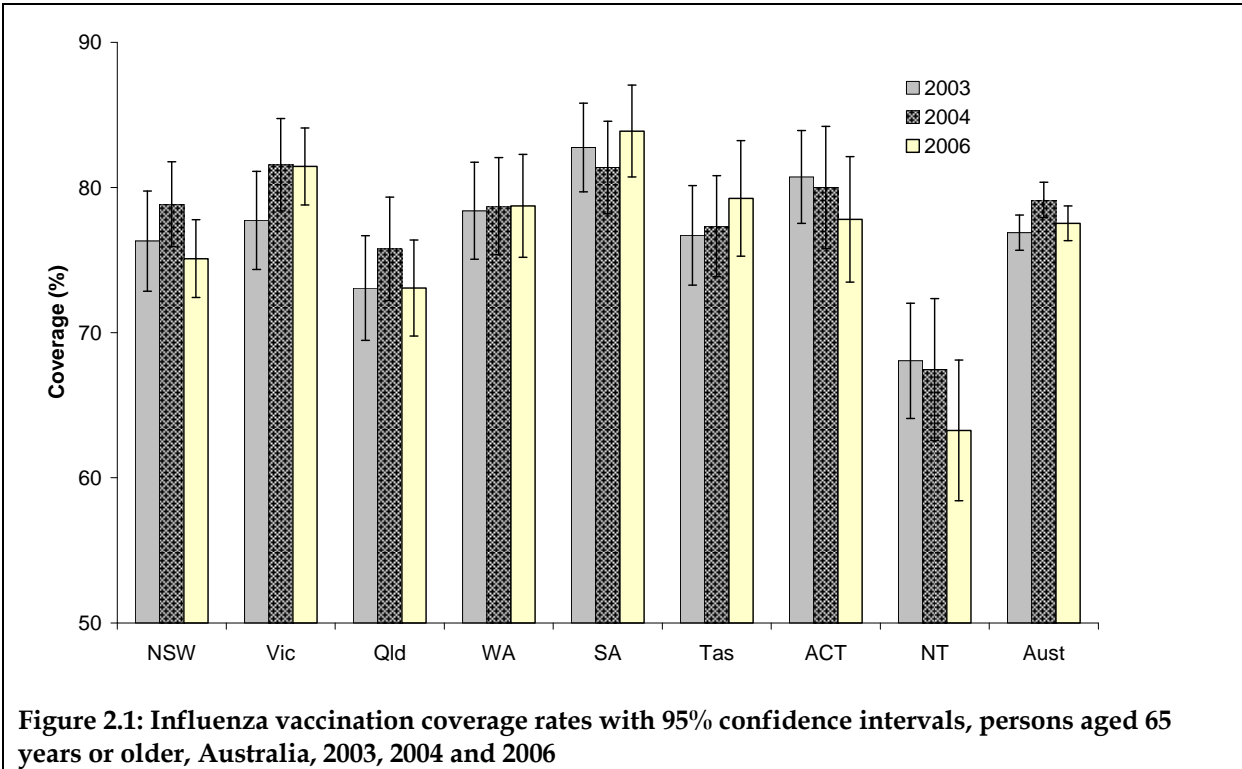
Introduction

The influenza and pneumococcal results are presented separately. This survey records the most recent vaccination received for those who have been vaccinated. It does not record instances of more than one dose of the vaccine being received. It is reasonable to assume that rarely would people receive two or more vaccinations in a single year against either of the two diseases.

Influenza vaccination analysis

Coverage

Coverage is the proportion of the target population vaccinated against influenza. In Australia in 2006, overall coverage was 77.5% (Table 2.1). It was highest for South Australia (83.9%) and lowest for the Northern Territory (63.3%). The coverage rates for jurisdictions were similar to those for 2004.



Valid usage

Valid usage is the proportion of the target population vaccinated against influenza with program-provided vaccine. Valid usage was 72.4% (Table 2.1). The rates for each of the states varied between 68.9% and 77.5% with the exception of the Northern Territory (58.7%).

Some 93.3% of the vaccinated target population were vaccinated with program-provided vaccine (Table 2.1). In other words 6.7% either paid for the vaccine or received vaccine provided by their employer.

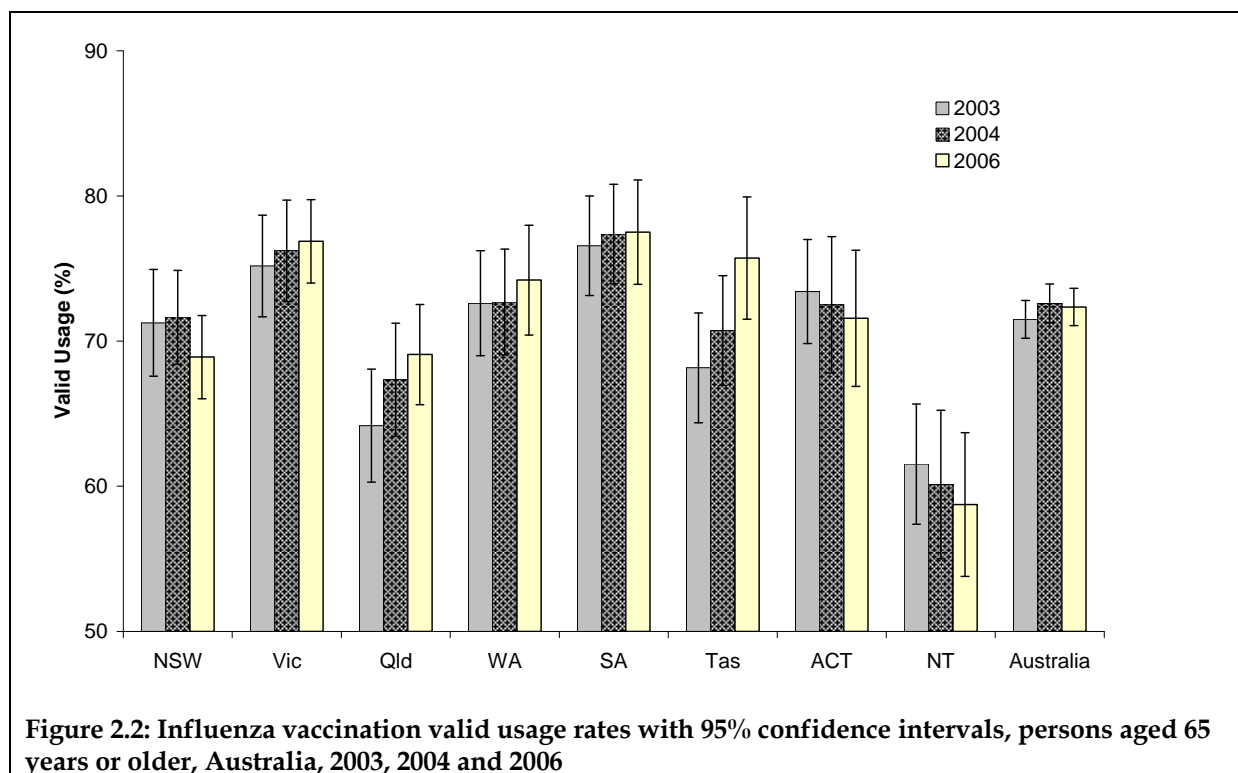


Figure 2.2: Influenza vaccination valid usage rates with 95% confidence intervals, persons aged 65 years or older, Australia, 2003, 2004 and 2006

Table 2.1: Influenza vaccination coverage and valid usage, persons aged 65 years or older, Australia, 2006

Measure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
	('000)								
Target population	945.1	693.2	498.2	246.0	238.2	72.3	32.2	9.8	2,735.1
Vaccinated	709.8	564.6	364.1	193.7	199.8	57.3	25.1	6.2	2,120.5
With program vaccine	651.2	532.9	344.1	182.5	184.6	54.8	23.1	5.8	1,978.9
Not with program vaccine	58.6	31.7	19.9	11.2	15.2	2.6	2.0	0.4	141.6
Not vaccinated	235.3	128.6	134.1	52.3	38.4	15.0	7.2	3.6	614.5
	(per cent)								
Coverage	75.1	81.4	73.1	78.7	83.9	79.2	77.8	63.3	77.5
Valid usage	68.9	76.9	69.1	74.2	77.5	75.7	71.6	58.7	72.4
As a proportion of coverage	91.7	94.4	94.5	94.2	92.4	95.5	92.0	92.8	93.3

Pneumococcal vaccination analysis

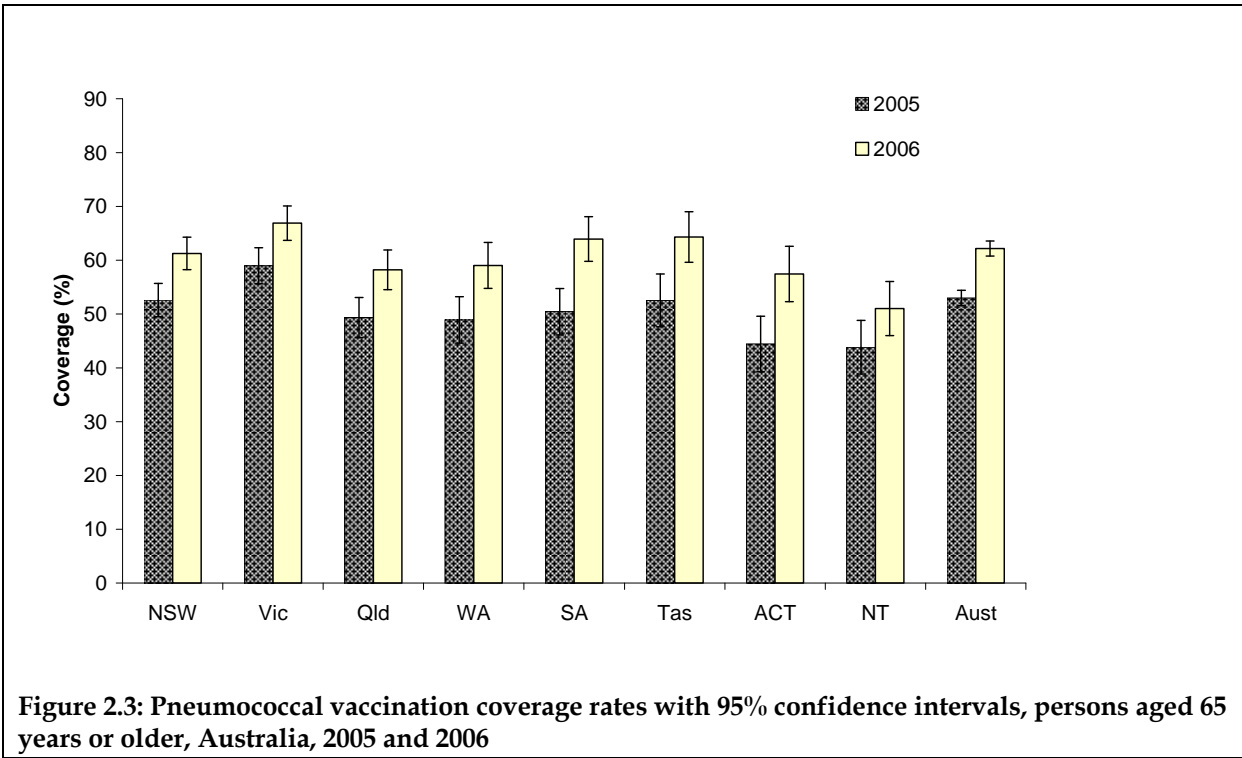
Introduction

The National Pneumococcal Vaccination Program for Older Australians serves two related purposes. It provides funding to purchase doses for the initial vaccination of all Australians 65 years or older as well as funding for the purchase of doses to vaccinate older Australians requiring a 5-year booster dose.

To assist with the analysis, the concept of 'in scope' and 'out of scope' is used for people in the target group. A person is 'in scope' if entitled to be vaccinated. Such a person either has never been vaccinated or has been vaccinated but is due to receive a booster shot. 'Out of scope' refers to people who were currently vaccinated at the commencement of the program year having been vaccinated at some time during the previous 5 years.

Coverage

Coverage is the proportion of the target population currently vaccinated against pneumococcal disease. The vaccination may have occurred in the current year or up to 5 years previously. The coverage has increased from 53.0% in 2005 to 62.2% in 2006 (Figure 2.3 and Table 2.4). The number currently vaccinated increased from 0.9 million at the start of 2005 to 1.3 million by the end of 2005 and 1.7 million by October 2006. The improvement occurred in all states and territories (Figure 2.3).



Valid usage

Valid usage is the proportion of the target population vaccinated against pneumococcal disease with program-provided vaccine. Valid usage in 2006 was estimated to be 95.8% (Table 2.4).

Table 2.4: Pneumococcal vaccination status ^(a), persons aged 65 years or older, Australia, 2006

Measure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
	('000)								
Target population	945.1	693.2	498.2	246.0	238.2	72.3	32.2	9.8	2,735.1
Out of scope	433.0	362.6	216.4	104.9	104.7	33.1	12.1	3.7	1,270.8
In scope	512.1	330.6	281.8	141.1	133.5	39.2	20.1	6.1	1,464.3
Government	140.9	96.0	70.4	37.9	46.0	13.2	6.1	1.3	411.7
Employer	0.4	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.7
Self	4.7	5.0	3.2	2.4	1.6	0.0	0.2	0.0	17.2
Not currently vaccinated	366.1	229.5	208.2	100.7	85.9	25.8	13.7	4.8	1,034.8
Currently vaccinated	579.0	463.7	290.0	145.2	152.3	46.5	18.5	5.0	1,700.3
	(per cent)								
Proportion currently vaccinated	61.3	66.9	58.2	59.0	63.9	64.3	57.5	51.0	62.2
Valid usage	96.5	95.1	95.6	94.0	96.6	98.4	95.5	96.7	95.8

(a) The survey did not identify the age of a person when they received the vaccine if they received it before 2005. The derivation in the above table assumes that if the person received the vaccine more than 5 years previously they are not currently vaccinated.

Influenza and pneumococcal vaccination analysis

Of the people in the target group, who did not receive an influenza vaccination in 2006 (614,500 in total), the number who were currently vaccinated against pneumococcal disease was 99,500 or 16.2 per cent (Table 2.5). Some 1,034,800 people were not currently vaccinated against pneumococcal disease and of these 515,900 or 49.9 per cent received an influenza vaccination in 2006. Of the people currently vaccinated against pneumococcal disease (1.7 million), 1.6 million or 94.1 percent received an influenza vaccination in 2006.

Table 2.5: Influenza and pneumococcal vaccinations, Australia, 2006

Measure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
	('000)								
Target population	945.1	693.2	498.2	246.0	238.2	72.3	32.2	9.8	2,735.0
Vaccination status									
Both	538.8	437.6	272.3	137.8	147.3	44.3	17.8	4.8	1,600.7
Influenza only	168.5	126.5	91.1	55.1	53.0	13.1	7.1	1.5	515.9
Pneumococcal only	40.2	26.1	17.7	7.4	5.0	2.2	0.7	0.2	99.5
Neither	197.6	103.0	117.1	45.6	32.9	12.7	6.6	3.3	518.8
As a proportion of target population	(per cent)								
Both	57.0	63.1	54.7	56.0	61.8	61.3	55.3	49.0	58.5
Influenza only	17.8	18.2	18.3	22.4	22.3	18.1	22.0	15.3	18.9
Pneumococcal only	4.3	3.8	3.6	3.0	2.1	3.0	2.2	2.0	3.6
Neither	20.9	14.9	23.5	18.5	13.8	17.6	20.5	33.7	19.0

3 Other results

Influenza and pneumococcal coverage and valid usage by sex

Nationally, proportionately more women than men were vaccinated against influenza. The largest variations were in the ACT, Northern Territory, Queensland and New South Wales (Table 3.1). The gender difference was more marked in the case of pneumococcal vaccinations and evident in all states (Table 3.2).

Table 3.1: Influenza vaccination coverage and valid usage, by sex, persons aged 65 years or older, Australia, 2006

Sex and measure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
	(per cent)								
Males									
Coverage	71.7	82.3	68.5	78.5	82.0	80.7	73.1	55.5	75.4
Valid usage	65.0	76.0	64.8	73.2	74.8	78.0	66.2	53.3	69.6
Females									
Coverage	77.8	80.8	77.0	79.0	85.2	78.2	81.6	72.3	79.2
Valid usage	68.9	76.8	69.0	74.1	77.4	75.7	71.5	58.7	72.3

Table 3.2: Pneumococcal vaccination coverage and valid usage, by sex, persons aged 65 years or older, Australia, 2006

Sex and measure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
	(per cent)								
Males									
Currently vaccinated	56.2	65.0	51.4	51.1	60.7	57.5	54.2	40.8	57.4
Valid usage	97.9	95.7	100.0	87.8	96.6	100.0	92.9	93.5	96.5
Females									
Currently vaccinated	65.4	68.5	64.0	65.7	66.5	69.7	60.0	62.4	66.1
Valid usage	95.4	94.3	92.5	98.7	96.8	97.7	97.0	100.0	95.2

Vaccinations by month

Some 64% of influenza vaccinations occurred in March or April (Table 3.3). Generally, vaccinations for people in the target group occur earlier on average than for the population as a whole. By the end of April, 75.9% of the target group had been vaccinated compared with 68.4% for the population as a whole.

Table 3.3: Influenza vaccination: month of vaccination, persons aged 18 years or older, Australia, 2006

Scope and month	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
	(per cent)								
All vaccinations									
January	0.9	0.5	1.5	0.8	0.7	1.2	0.2	0.8	0.9
February	3.3	3.6	3.6	3.3	1.7	3.4	2.1	6.0	3.3
March	51.1	28.9	24.6	33.8	28.4	27.6	19.6	22.6	35.0
April	23.0	35.3	34.3	24.5	28.6	26.0	30.0	22.3	29.2
May	14.6	23.1	16.5	24.3	22.2	24.3	36.9	12.2	19.6
June	3.7	6.7	16.3	11.7	14.4	6.5	7.7	7.2	8.8
July	2.0	1.2	1.0	1.0	3.7	7.3	2.6	4.6	1.8
August	1.1	0.2	2.1	0.4	0.3	3.6	0.8	7.9	1.0
September	0.1	0.1	0.1	0.2	0.0	0.1	0.2	12.3	0.2
October	0.1	0.0	0.0	0.0	0.0	0.0	0.0	4.2	0.1
November	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Vaccinations of people in the target group									
January	1.8	1.2	0.8	2.0	1.7	1.6	0.7	0.9	1.4
February	4.3	3.3	5.9	4.5	2.4	6.0	4.6	11.0	4.2
March	41.2	39.3	36.5	35.7	33.7	30.6	32.3	22.2	38.2
April	29.3	33.8	32.7	31.1	35.1	37.2	38.3	12.7	32.0
May	16.3	13.5	16.0	19.3	16.1	15.7	13.8	5.9	15.7
June	3.6	4.7	4.4	5.4	7.7	3.3	5.6	2.3	4.6
July	1.6	2.8	2.4	0.6	2.4	3.1	1.1	0.6	2.1
August	1.3	0.4	1.0	0.9	0.8	2.3	3.0	1.0	1.0
September	0.2	0.3	0.2	0.4	0.0	0.3	0.6	43.3	0.4
October	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.2	0.1
November	0.2	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Program-funded vaccinations of people in the target group									
January	1.2	0.7	0.8	2.0	1.8	1.7	0.8	1.0	1.2
February	4.5	2.9	6.1	4.6	2.6	6.3	3.2	11.8	4.3
March	40.9	40.2	36.9	35.5	34.4	30.6	33.2	23.3	38.4
April	29.8	34.5	32.0	31.9	33.7	36.9	38.0	12.8	32.2
May	16.4	12.8	16.3	18.6	16.2	16.1	14.2	5.6	15.6
June	3.4	4.6	4.1	5.6	7.8	3.5	6.1	2.0	4.5
July	1.6	3.0	2.6	0.6	2.7	2.3	1.2	0.7	2.1
August	1.4	0.4	1.1	0.8	0.9	2.4	2.8	1.1	1.0
September	0.2	0.2	0.2	0.5	0.0	0.3	0.5	41.6	0.4
October	0.3	0.0	0.1	0.0	0.0	0.0	0.0	0.2	0.1
November	0.2	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.3

Target population: payment for vaccine

Fewer than 6% of people who were eligible to receive a vaccination for free under either program paid for the vaccine (Tables 3.4 and 3.5). If they received the vaccine for free, the cost was normally met by the relevant program (the employer paid for the vaccine for 1.1% of people in the case of influenza and 0.2% in the case of pneumococcal).

Some 5.6% of the population who were entitled to free vaccination under the influenza program nevertheless paid for their vaccine – 4.7% to a pharmacy and 0.9% direct to the provider of their vaccination, with a similar pattern for pneumococcal.

Table 3.4: Influenza vaccination: payment for vaccine, persons aged 65 years or older, Australia, 2006

Payment and method	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
	(per cent)								
Paid									
Pharmacy	6.6	3.2	4.4	3.8	3.9	2.8	4.4	4.9	4.7
Direct	0.3	1.5	0.8	0.7	1.5	0.7	0.9	0.8	0.9
<i>Total paid</i>	<i>6.9</i>	<i>4.7</i>	<i>5.3</i>	<i>4.5</i>	<i>5.3</i>	<i>3.5</i>	<i>5.4</i>	<i>5.7</i>	<i>5.6</i>
Free									
Program	91.7	94.4	94.5	94.2	92.4	95.5	92.0	92.8	93.3
Employer	1.3	0.9	0.2	1.2	2.3	0.9	2.6	1.5	1.1
<i>Total free</i>	<i>93.1</i>	<i>95.3</i>	<i>94.7</i>	<i>95.5</i>	<i>94.7</i>	<i>96.5</i>	<i>94.6</i>	<i>94.3</i>	<i>94.4</i>

Table 3.5: Pneumococcal vaccination: payment for vaccine, persons aged 65 years or older, Australia, 2006

Payment and method	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
	(per cent)								
Paid									
Pharmacy	3.1	3.4	3.7	5.1	2.4	0.0	3.0	2.8	3.4
Direct	0.1	1.6	0.7	0.9	0.9	0.0	0.6	0.5	0.6
<i>Total paid</i>	<i>3.2</i>	<i>4.9</i>	<i>4.4</i>	<i>6.0</i>	<i>3.4</i>	<i>..</i>	<i>3.6</i>	<i>3.3</i>	<i>4.0</i>
Free									
Program	96.5	95.1	95.6	94.0	96.6	98.4	95.5	96.7	95.8
Employer	0.3	0.0	0.0	0.0	0.0	1.6	0.9	0.0	0.2
<i>Total free</i>	<i>96.8</i>	<i>95.1</i>	<i>95.6</i>	<i>94.0</i>	<i>96.6</i>	<i>100.0</i>	<i>96.4</i>	<i>96.7</i>	<i>96.0</i>

Coverage of those not in the target group

Some 20.2% of those not in the target group (that is, aged 18–64 years), were vaccinated against influenza (Tables 3.6 and 3.7). The corresponding figure for pneumococcal was 6.5%. Some 13.2% were vaccinated with program vaccine in the case of influenza but only 0.1% for pneumococcal. There was substantial variation across the States for influenza but not for pneumococcal. The ‘coverage’ for influenza vaccinations of people not in the target population ranged from a low of 18.4% in New South Wales to 29.9% in the Australian Capital Territory.

Table 3.6: Influenza vaccination of the non-target population, persons aged 18–64 years, Australia, 2006

Measure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
	(per cent)								
Vaccinated	18.4	21.5	18.7	20.7	25.3	19.9	29.9	18.6	20.2
Used program-funded vaccine	8.0	12.3	25.5	12.7	10.5	9.6	10.2	16.3	13.2

Table 3.7: Pneumococcal vaccination of the non-target population, persons aged 18–64 years, Australia, 2006

Measure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
	(per cent)								
Vaccinated	7.8	6.2	6.3	4.1	5.5	6.5	5.0	6.6	6.5
Used program-funded vaccine	0.0	0.4	0.1	0.0	0.9	0.1	0.0	1.0	0.1

Other groups recommended by the NHMRC

The Australian Immunisation Handbook (NHMRC 2003) lists population groups with a heightened risk from influenza. This section reports for two such groups (people with medical risk factors and carers of people with medical risk factors):

- a coverage measure – the proportion vaccinated, both overall and among those not in the target population (that is, aged from 18–64 years); and
- the proportion vaccinated with program-funded vaccine.

The two population groups are not mutually exclusive. There will be an overlap because some people with medical risk factors care for other people with risk factors.

At-risk population

Australians with various circulatory, respiratory and immuno-suppressant conditions constitute one group of people at further risk from influenza and its complications. Of these, 55.4% were vaccinated in 2006 (Table 3.8). The proportion vaccinated of those at risk but not in the target, population was 29.8%. In this latter group, 61.8% paid for the vaccination.

Table 3.8: Influenza vaccination among the at-risk population ^(a), persons aged 18 years or older, Australia, 2006

Measure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
(per cent)									
Persons aged 18 years or older									
Vaccinated	52.0	60.2	45.5	70.6	64.4	58.1	43.8	53.9	55.4
Program-funded	41.3	49.0	27.7	46.3	40.8	35.3	23.9	32.2	40.2
Employer-funded	4.7	1.2	0.2	5.8	2.6	3.1	6.3	10.8	2.7
Self-funded	6.0	10.0	17.6	18.5	21.1	19.7	13.7	10.9	12.4
Persons aged 18–64 years									
Vaccinated	19.0	31.9	27.8	47.2	46.8	39.0	30.3	36.4	29.8
Program-funded	6.4	15.4	3.2	5.9	5.9	2.1	4.3	3.5	7.3
Employer-funded	8.0	1.8	0.0	8.4	4.2	5.3	8.5	17.6	4.1
Self-funded	4.6	14.7	24.5	32.9	36.7	31.6	17.5	15.2	18.4

(a) Australians suffering from various circulatory, respiratory and immuno-suppressant conditions.

Carers for the at-risk population

Care for at-risk people typically occurs in aged care and similar facilities. Other carers reside with at-risk people. Some 29.3% of these carers were vaccinated in 2006 (Table 3.9). Of these carers not in the target population, 26.7% were vaccinated in 2006, of which less than half (11.3% out of 26.7%) were funded by their employer.

Table 3.9: Influenza vaccination among carers of the at-risk population, persons aged 18 years or older, Australia, 2006

Measure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
(per cent)									
Total carers (persons aged 18 years or older)									
Vaccinated	16.4	37.2	34.3	27.3	19.6	16.0	25.6	36.7	29.3
Program-funded	3.7	4.5	17.2	5.7	3.4	1.1	4.4	2.6	7.6
Employer-funded	7.9	10.7	11.5	14.6	16.0	12.0	18.4	22.7	11.1
Self-funded	4.8	21.9	5.6	7.0	0.2	2.9	2.7	11.4	10.6
Carers not in the target population (persons aged 18–64 years)									
Vaccinated	10.9	35.6	33.2	21.2	16.4	14.2	24.1	35.2	26.7
Program-funded	0.0	2.0	15.7	0.0	0.0	0.0	2.7	0.0	4.9
Employer-funded	7.8	10.9	11.8	14.0	16.4	11.2	18.7	23.9	11.3
Self-funded	3.1	22.6	5.7	7.2	0.0	2.9	2.7	11.4	10.6

Residents of aged care facilities—exclusion from survey

The sample for the Adult Vaccination Survey excluded residents of institutions. Therefore, the survey results are not representative of the institutional population, which because of age, frailty and medical risk factors, is a group at particular risk of influenza and pneumonia. There were an estimated 164,000 aged care facility residents aged 65 years or older at the

time of the survey, based on stock-take data provided by the Australian Government Department of Health and Ageing.

A survey of aged care residential facilities was taken at the same time as the main CATI survey. Some 220 facilities were called and 200 usable responses gathered.

Influenza vaccination coverage and valid usage were estimated from these responses (84.7% and 83.3% respectively, Australia-wide) (Table 3.10).

Adjusting the main survey coverage and valid usage results for the residential facilities results produces a small increase in the main results.

Table 3.10: Influenza vaccination: coverage and valid usage adjusted for vaccination of aged care residents, persons aged 65 years or older, Australia, 2006

Measure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
(per cent)									
Survey results									
Coverage	75.1	81.4	73.1	78.7	83.9	79.2	77.8	63.3	77.5
Valid usage	68.9	76.9	69.1	74.2	77.5	75.7	71.6	58.7	72.4
Residential facilities survey results									
Coverage	88.5	85.8	81.5	77.7	79.3	88.9	77.7	94.3	84.7
Valid usage	88.5	84.2	78.3	77.7	76.6	88.9	65.2	94.3	83.3
Adjusted results									
Coverage	75.9	81.7	73.6	78.7	83.6	79.8	77.8	64.6	78.0
Valid usage	70.1	77.3	69.6	74.4	77.4	76.5	71.3	60.3	73.0

The survey of aged care residential facilities included questions about pneumococcal vaccination of the residents. The survey addressed coverage only and was not a complete assessment of current pneumococcal vaccination status. Notwithstanding this qualification, the adjusted estimate of pneumococcal vaccination is slightly lower than that derived from the main survey (Table 3.11).

Table 3.11: Pneumococcal vaccination: coverage adjusted for vaccination of aged care residents, persons aged 65 years or older, Australia, 2006

Measure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
(per cent)									
Survey results									
Currently vaccinated	61.3	66.9	58.2	59.0	64.0	64.3	57.4	51.2	62.2
Residential facilities survey results									
Currently vaccinated	30.9	32.6	28.4	22.2	27.2	77.8	..	100.0	30.9
Adjusted results									
Currently vaccinated	59.5	64.8	56.5	57.0	61.5	65.1	54.6	53.4	60.3

Tetanus vaccinations

The 2006 Adult Vaccination Survey included questions on adult vaccinations against tetanus. Some 77.2% of adult Australians have been vaccinated against tetanus (Table 3.12).

Table 3.12: Tetanus vaccination as an adult: proportion of population, Australia, 2006

Measure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
	(per cent)								
Proportion vaccinated	72.6	76.8	82.0	82.2	77.6	84.0	73.9	82.0	77.2

Most of those who were vaccinated for tetanus as an adult received their vaccination within the past 10 years (Table 3.13).

Table 3.13: Tetanus vaccination as an adult: proportion vaccinated in last 10 years, by age group, Australia, 2006

Age group ^(a)	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
	(per cent)								
18–34	91.4	92.6	86.3	89.8	81.8	87.0	91.3	91.1	89.9
35–49	76.9	68.3	80.8	78.9	76.9	75.4	82.8	72.1	75.9
50–64	72.5	65.4	69.4	57.7	58.8	71.3	60.3	63.4	67.3

(a) Because of the survey design, it was not possible to undertake an analysis for the age group 65 years or older.

Respondents to the survey were asked to nominate a reason for the most recent vaccination against tetanus from a list of eight possible reasons. Three of the reasons (injury/trauma, routine vaccination and preparation for travel) accounted for more than 90 per cent of all responses (Table 3.14). The most common reason given was injury/trauma. Routine vaccination accounted for about one-quarter of those vaccinated younger than 35 or older than 50.

Table 3.14: Tetanus vaccination as an adult: reason vaccinated as a proportion of total, by age group, Australia, 2006

Age group and reason	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
	(per cent)								
18–34									
Injury/trauma	48.1	46.3	51.5	60.8	71.3	48.5	43.0	44.2	50.8
Routine vaccination	25.7	23.9	34.0	30.2	20.4	37.7	15.7	45.7	27.5
In preparation for travel	17.9	19.6	12.5	9.0	4.6	12.0	40.1	3.7	15.7
Other	8.3	10.2	1.9	0.0	3.7	1.8	1.3	6.4	6.0
35–49									
Injury/trauma	71.6	53.7	70.1	67.2	55.3	60.5	63.8	57.5	64.5
Routine vaccination	10.3	11.1	18.9	24.7	31.8	28.9	26.9	27.1	16.9
In preparation for travel	5.6	34.3	2.2	3.6	8.3	0.9	8.8	9.3	11.8
Other	12.4	0.9	8.8	4.5	4.7	9.7	0.4	6.1	6.9
50–64									
Injury/trauma	76.9	61.1	66.6	56.1	55.6	56.9	53.9	65.2	66.2
Routine vaccination	9.8	13.5	18.2	36.3	29.1	25.9	26.4	28.6	17.8
In preparation for travel	7.3	14.4	5.3	4.4	7.4	11.8	15.4	4.0	8.3
Other	6.1	10.9	9.9	3.2	7.9	5.4	4.4	2.1	7.8
65+									
Injury/trauma	61.7	60.1	54.4	54.9	48.7	48.8	58.4	52.6	57.7
Routine vaccination	23.8	22.8	30.1	25.3	33.2	30.2	20.6	29.8	25.9
In preparation for travel	5.4	5.0	4.8	6.6	4.7	4.0	11.8	4.8	5.3
Other	9.1	12.1	10.7	13.2	13.4	17.1	9.2	12.9	11.1

Shingles

The 2006 Adult Vaccination Survey also included questions on shingles. Some 8.9% of Australians have suffered from shingles (Table 3.15). Approximately 5.5% of people suffering from shingles have been admitted to hospital, with the highest incidence being for people who first got shingles when they were younger than 30 years, while the proportion of people with continuing pain problems increases with age (Table 3.16).

Table 3.15: Life-time prevalence of shingles, Australia, 2006

Measure	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
	(per cent)								
Life-time prevalence	8.7	9.4	9.0	8.3	10.6	6.6	7.2	5.5	8.9

Table 3.16: Characteristics of shingles, by age when first got shingles, Australia, 2006

Characteristic	Age when first got shingles				Total
	<30	30–39	40–49	50+	
	(per cent)				
Ever admitted to hospital	10.7	1.3	0.2	4.9	5.5
Any ongoing pain or problems	4.8	2.2	9.8	13.3	8.6

4 Explanatory notes

Main survey

Introduction

The 2006 Adult Vaccination Survey was commissioned by the Australian Government Department of Health and Ageing. It was the sixth such survey and the third involving the AIHW. A Policy Reference Group supported the AIHW in preparing this report.

The Social Research Centre was selected by competitive tender in August 2006 to conduct the survey. The survey, using CATI, was conducted in October 2006. Respondents were asked about their recent medical and financial experience of influenza and influenza vaccination, and about their pneumococcal vaccination history. Questions about tetanus vaccination and experience of shingles were included for the first time.

Scope

The estimates for 2006 contained in this publication are based on information obtained from persons aged 18 years or older from the populations of all states and territories.

Respondents

A total of 8,022 respondents nationally were interviewed. Quotas of 300 respondents in each state were set for the population not in the target group (those aged 64 years or younger). The sample for respondents in the target group was set consistent with population share for each State subject to a minimum quota of 418 respondents for each State (Table 4.1).

Table 4.1: Respondents by sex, age group and Indigenous status, 2006

Characteristic	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
	(number)								
Sex									
Male	603	507	439	359	364	288	349	305	3,214
Female	899	787	689	562	553	490	407	421	4,808
<i>Total</i>	<i>1,502</i>	<i>1,294</i>	<i>1,128</i>	<i>921</i>	<i>917</i>	<i>778</i>	<i>756</i>	<i>726</i>	<i>8,022</i>
Age Group									
65 years or older	1,201	994	828	621	617	478	456	426	5,621
18 – 64 years	301	300	300	300	300	300	300	300	2,401
<i>Total</i>	<i>1,502</i>	<i>1,294</i>	<i>1,128</i>	<i>921</i>	<i>917</i>	<i>778</i>	<i>756</i>	<i>726</i>	<i>8,022</i>
Indigenous status									
Indigenous	8	8	12	13	7	16	3	32	99
Other Australian	1,489	1,283	1,112	906	903	758	753	688	7,892
Not ascertained	5	3	4	2	7	4	0	6	31
<i>Total</i>	<i>1,502</i>	<i>1,294</i>	<i>1,128</i>	<i>921</i>	<i>917</i>	<i>778</i>	<i>756</i>	<i>726</i>	<i>8,022</i>

Methodology

Survey design

The 2006 survey used the CATI survey method. The sample was generated by a random digit dialling technique, using an electronic directory of residential telephone numbers to inform the geography of the generated sample.

The eligible household respondent was the person aged 18 years or older whose birthday fell next.

Weighting

Individual survey records were weighted according to sex, age group and state. The weighting was calculated so that the weighted contribution of each such group to the analysis is appropriate to the contribution of that sex/age group/state within the Australian population. The weighting was further adjusted for 'likelihood of selection', based on the number of non-business-related telephone lines to the respondent household and the number of in-scope persons living in the household.

The represented population (aged 18 years or older) was 15.7 million (Table 4.2). Of these, a small majority were female. The target group (65 years of age or older) was 2.7 million.

Table 4.2: Australian population 18 years or older by sex, age group and Indigenous status, 2006

Characteristic	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
	('000)								
Sex									
Male	2,584	1,909	1,516	773	591	181	123	77	7,754
Female	2,659	2,000	1,543	780	613	191	128	69	7,983
<i>Total</i>	<i>5,243</i>	<i>3,910</i>	<i>3,059</i>	<i>1,553</i>	<i>1,204</i>	<i>372</i>	<i>251</i>	<i>145</i>	<i>15,737</i>
Age Group									
65 years or older	945	693	498	246	238	72	32	10	2,735
Not eligible	4,298	3,217	2,561	1,307	966	300	219	136	13,002
<i>Total</i>	<i>5,243</i>	<i>3,910</i>	<i>3,059</i>	<i>1,553</i>	<i>1,204</i>	<i>372</i>	<i>251</i>	<i>145</i>	<i>15,737</i>
Indigenous status									
Indigenous	141	26	84	36	17	8	1	6	318
Other Australian	5,099	3,880	2,973	1,515	1,182	363	251	139	15,401
Not ascertained	4	4	2	2	5	1	--	1	18
<i>Total</i>	<i>5,243</i>	<i>3,910</i>	<i>3,059</i>	<i>1,553</i>	<i>1,204</i>	<i>372</i>	<i>251</i>	<i>145</i>	<i>15,737</i>

Participation rates

Under the CATI methodology, response management is highly automated, at least in the initial scoping and selection of participants. In the 2006 survey, the participation rate (completed interviews divided by total eligible calls) was 35.7% (Table 4.3).

Table 4.3: Sample disposition, The Social Research Company CATI, Australia, October 2006

Sample outcome	Number	Proportion
Completed interviews	8,022	35.7
Refusals/screened out—refused to specify age	13,276	59.1
Unable to contact selected respondent	193	0.9
Inadequate English	369	1.6
Excluded (missing key variables)	587	2.6
<i>Total eligible</i>	<i>22,447</i>	<i>100.0</i>
No one of qualifying age in household	25,692	..
Other out of scope (business/fax/etc.), or not connected	23,552	..
No contact after at least 9 attempts	11,258	..
Other ineligible	297	..
Total numbers contacted	83,246	..

Editing

Minimal editing was required because of the survey method (CATI). Pilot testing cases and those that could not be weighted were excluded and over-quota cases were retained.

Reliability of estimates

Sampling error

The estimates are based on a sample. They are subject to sampling variability (that is, the extent to which the sample varies from all persons, had a census been conducted). Estimates in this publication are assumed to be reliable if the relative standard error (the ratio of the sampling error to the population estimate) is less than 25%. Estimates with relative standard errors between 25% and 50% should be interpreted with caution. Estimates with relative standard errors over 50% should be considered unreliable for most practical purposes. To assist readers with these judgments, a table of indicative standard errors is provided in Appendix 2.

Non-sampling error

In addition to sampling errors, the estimates are subject to non-sampling errors. These can arise from errors in transcription of responses, errors in reporting of responses (for example, failure of respondents' memories), and the unwillingness of respondents to reveal their 'true' responses.

Limitations of the data

Excluded from sampling were non-private dwellings (hotels, motels, boarding houses, etc.) and institutional settings (hospitals, nursing homes, other clinical settings such as drug and alcohol rehabilitation centres, prisons, military establishments and university halls of residence). Homeless persons were also excluded. The territories of Jervis Bay, Christmas Island and Cocos Island were excluded as well.

Comparability with previous surveys

Limited comparisons have been undertaken. The sample size, in this and past surveys, limits the significance of any derived statistics.

Residential facilities survey

Because it is CATI-based and designed for households and individuals, the main survey excludes institutional residents. In particular, the exclusion of residential aged care facilities leaves out a population of particular interest to the program managers – residents aged 65 years or older.

A residential facilities survey was conducted to provide additional information. From a listing of residential facilities, 280 were selected at random and some 220 of those were called. Of these, 200 (directors of nursing and similar) responded to a short survey, yielding a participation rate of more than 90%.

Respondents were asked how many residents were aged 65 years or older, how many had been vaccinated against influenza and pneumococcal (in 2006) and how many had paid for the influenza vaccine. The survey results were weighted to bring the sample of facilities in line with the distribution of facilities (and places within those facilities) across the nation.

From these responses were estimated coverage (influenza and pneumococcal) and valid usage (influenza only) Australia-wide.

Appendix 1: Membership of Policy Reference Group

Table A1.1: Membership of the Adult Vaccination Survey Policy Reference Group

Member	Role	Affiliation
Letitia Toms	Chair	Australian Government Department of Health and Ageing
Paul Roche	Member	Australian Government Department of Health and Ageing
Sue Campbell-Lloyd	Member	National Immunisation Committee
Irene Passaris	Member	National Immunisation Committee
Robert Menzies	Member	National Centre for Immunisation Research and Surveillance
Leeann Galloway	Secretariat	Australian Government Department of Health and Ageing

Appendix 2: Standard errors

Table A2.1: Standard errors and relative standard errors, Australia, 2006

Target population										
Prevalence ^(a)	Indicative base population									
	2,600,000		1,300,000		500,000		50,000		5,000	
	SE ^(b)	RSE	SE	RSE	SE	RSE	SE	RSE	SE	RSE
	(per cent)									
90	0.4	0.5	0.6	0.7	1.0	1.1	3.2	3.5	10.0	11.1
80	0.6	0.7	0.8	1.0	1.3	1.7	4.2	5.3	13.4	16.7
70	0.7	1.0	0.9	1.4	1.5	2.2	4.8	6.9	15.3	21.9
60	0.7	1.2	1.0	1.7	1.6	2.7	5.2	8.6	16.4	27.3
50	0.7	1.5	1.0	2.1	1.7	3.3	5.3	10.6	16.7	33.4
20	0.6	2.9	0.8	4.1	1.3	6.7	4.2	21.1	13.4	66.8
10	0.4	4.4	0.6	6.2	1.0	10.0	3.2	31.7	10.0	100.1

Non-target population										
Prevalence ^(a)	Indicative base population									
	12,700,000		6,300,000		3,000,000		300,000		30,000	
	SE ^(b)	RSE	SE	RSE	SE	RSE	SE	RSE	SE	RSE
	(per cent)									
90	0.7	0.7	1.0	1.1	1.4	1.5	4.4	4.8	13.8	15.3
80	0.9	1.1	1.3	1.6	1.8	2.3	5.8	7.3	18.4	23.0
70	1.0	1.5	1.5	2.1	2.1	3.0	6.7	9.5	21.1	30.1
60	1.1	1.8	1.6	2.6	2.3	3.8	7.1	11.9	22.5	37.6
50	1.1	2.2	1.6	3.2	2.3	4.6	7.3	14.5	23.0	46.0
20	0.9	4.5	1.3	6.3	1.8	9.2	5.8	29.1	18.4	92.0
10	0.7	6.7	1.0	9.5	1.4	13.8	4.4	43.6	13.8	138.0

(a) Prevalence estimate (values taken from tables in the report can be interpolated between those provided in this table).

(b) Standard error expressed in same units as prevalence.

Appendix 3: Population estimates

Table A3.1: Population estimates, by age and sex, Australia, as at 30 June 2006

Age group	NSW	Vic	Qld	WA	SA	Tas	ACT	NT	Australia
	(number)								
	Males								
18–24	181,000	153,100	58,800	66,600	62,400	16,300	11,400	10,000	559,600
25–34	348,200	239,200	196,600	110,000	68,900	20,300	18,600	9,100	1,011,000
35–44	714,800	309,800	353,800	233,100	64,700	36,500	29,100	19,300	1,760,900
45–54	357,400	594,100	289,600	118,300	166,200	52,200	33,800	24,200	1,635,900
55–64	558,900	304,600	386,000	132,600	123,400	23,500	15,600	8,800	1,553,400
65–74	269,000	172,100	148,700	75,600	58,800	17,800	10,000	4,000	756,000
75–84	133,500	114,900	71,600	31,100	41,100	12,500	3,800	1,200	409,600
85 or older	21,600	21,400	10,900	5,600	5,200	2,400	600	100	67,700
Total 18 or older	2,584,400	1,909,300	1,515,900	772,900	590,600	181,400	122,900	76,700	7,754,100
Total 65 or older	424,100	308,400	231,200	112,300	105,100	32,600	14,400	5,300	1,233,300
	Females								
18–24	207,800	148,800	145,300	91,500	25,500	9,700	23,000	1,900	653,400
25–34	513,900	286,000	299,600	123,200	48,800	37,800	19,600	9,900	1,338,800
35–44	533,300	324,900	286,300	149,900	120,800	26,200	15,600	21,900	1,479,000
45–54	526,500	442,300	344,300	177,200	164,400	34,600	35,700	15,800	1,740,800
55–64	356,100	413,700	200,300	104,300	120,600	42,800	16,400	14,700	1,269,000
65–74	291,900	227,600	168,500	79,800	78,400	25,200	11,200	3,400	886,000
75–84	196,900	138,200	82,700	47,400	46,200	11,700	5,800	1,000	529,900
85 or older	32,200	19,000	15,900	6,500	8,400	2,800	800	200	85,900
Total 18 or older	2,658,600	2,000,400	1,542,800	779,800	613,200	190,700	128,200	68,700	7,982,600
Total 65 or older	521,000	384,800	267,100	133,700	133,100	39,700	17,800	4,500	1,501,700
	Persons								
18–24	388,800	301,900	204,100	158,100	87,900	25,900	34,300	11,900	1,213,000
25–34	862,100	525,200	496,300	233,200	117,700	58,100	38,300	19,000	2,349,800
35–44	1,248,100	634,700	640,100	383,000	185,500	62,700	44,700	41,200	3,239,800
45–54	883,900	1,036,400	633,800	295,500	330,600	86,800	69,600	40,000	3,376,600
55–64	915,100	718,300	586,300	236,900	243,900	66,300	32,000	23,500	2,822,400
65–74	560,900	399,700	317,200	155,400	137,300	43,000	21,300	7,300	1,642,000
75–84	330,400	253,100	154,300	78,500	87,300	24,200	9,600	2,200	939,500
85 or older	53,800	40,400	26,800	12,000	13,600	5,200	1,400	300	153,600
Total 18 or older	5,243,100	3,909,700	3,058,800	1,552,700	1,203,800	372,100	251,100	145,300	15,736,700
Total 65 or older	945,100	693,200	498,200	246,000	238,200	72,300	32,200	9,800	2,735,100

Source: AIHW National Population Database

Appendix 4: Survey Instruments

2006 Adult Vaccination Survey – Main Questionnaire October 2006

INTRODUCTION

PROGRAMMER NOTE: ONLY DISPLAY TEXT IN BRACKETS IN INTRODUCTION IF 18-64 YEAR OLD QUOTA IS FULL IN STATE.

Good morning/afternoon/evening. My name is (...). I'm calling on behalf of the Australian Government Department of Health and Ageing from the Social Research Centre. We're conducting an important public health study (amongst older Australians) about influenza and pneumonia vaccinations and some related health issues. Can you spare me a minute please to see if anyone in this household is able to help?

(IF NECESSARY: This is a public health study not a sales call)

EXPLAIN IF NECESSARY: Your telephone number has been automatically generated by computer as it is important to give everyone a chance to participate in this important study not just those people who have their phone number in the White Pages.

1. Continue

S1 To see if there's anyone in the household who can help, we need to ask a couple of quick questions. Firstly, can you please tell me how many people, in total, including yourself and any children, usually live in this household?

1. (SPECIFY 1 to 15) (GO TO S2)
2. Don't know / Can't say (GO TO S2)
3. Respondent requires further information (GO TO PLET1)
4. Household refusal (GO TO R1)
5. HH LOTE - Italian, Greek Cantonese, Arabic, Lebanese, Vietnamese, Mandarin (language follow up) (GO TO PLOTE)
6. HH LOTE – Other language identified (no language follow up) (RECORD ON SMS)
7. HH LOTE – Language not identified (make appointment) (RECORD ON SMS)
8. No one in household over 18 (TERMINATE)
9. None live permanently in household (OUT OF SCOPE, TERMINATE)

*(LOTES)

PLOTE	RECORD LANGUAGE
1.	Italian
2.	Greek
3.	Cantonese
4.	Arabic
5.	Lebanese
6.	Vietnamese
7.	Mandarin

*(WOULD LIKE MORE INFORMATION)

PLET1 If you would like more information, you can contact the Department of Health and Ageing Immunisation Info line on 1800 671 811. I can also arrange for the Department to send a letter to you about the survey. There is also information about the survey available on our website and the Department of Health and Ageing's website. I can give you those links if you like: www.srcentre.com.au or www.immunise.health.gov.au.

If you have any concerns or complaints on the ethical conduct of this research, please contact the Executive Officer, Australian Government Department of Health and Ageing Departmental Ethics Committee on phone (02) 6289 4583 or by post: Department of Health and Ageing, Departmental Ethics Committee, GPO Box 9848, CANBERRA ACT 2601, MDP 132. Please quote Project Number 7/2006.

1. Respondent would like to be sent a copy of the letter (GO TO PLET2)
2. Letter not required – continue on with survey (GO TO S1)
3. Household refusal (ATTEMPT CONVERSION / RECORD REASON) (GO TO R1)

*PROGRAMMER NOTE: IF REQUESTS LETTER, DISPLAY AND EDIT ADDRESS IF MATCHED SAMPLE (LISTED=4 IN SAMPLE), ELSE COLLECT. USE RANGE CHECKS FOR POSTCODE (0800 TO 9800) AND PRECODES FOR STATES

*(WANT TO RECEIVE A COPY OF THE LETTER)

PLET2 Would you like us to mail or fax you a copy of the letter?

1. Mail (RECORD NAME AND ADDRESS DETAILS FROM SAMPLE / COLLECT ADDRESS DETAILS)
2. Fax (COLLECT NAME AND FAX NUMBER)

PRES2 IF S1=1 (SINGLE PERSON H/HOLD) DISPLAY INTROB, ELSE DISPLAY INTROA

*(ALL)

S2 INTROA. How many of these people are aged between 18 and 64 years?

S2 INTROB. Are you between 18 and 64 years? (IF YES, RECORD 1. IF NO, RECORD NONE).

1. Number given (Specify_____) (ALLOWABLE RANGE 1 TO 15) [IF NUMBER PROVIDED AT S2 IS GREATER THAN NUMBER PROVIDED AT S1=1RE-CHECK ANSWER]
2. None
3. Don't know / Can't say
4. Refused (GO TO R4)

*PROGRAMMER NOTE: IF NUMBER PROVIDED AT S2 IS EQUAL TO NUMBER PROVIDED AT S1=1, AUTOFILL RESPONSE S3=2 (NONE), THEN GO TO QUOTA CHECK.

PRES3 IF S1=1 (SINGLE PERSON H/HOLD) DISPLAY INTROB, ELSE DISPLAY INTROA

*(ALL)

S3. INTROA. And how many of these people are aged 65 years and over?

S3. INTROB. Can I just confirm that you are 65 years and over? (IF YES, RECORD 1. IF NO, RECORD NONE).

1. Number given (Specify_____) (ALLOWABLE RANGE 1 TO 15) [IF NUMBER PROVIDED AT S3 IS GREATER THAN NUMBER PROVIDED AT S1=1, OR IF NUMBER PROVIDED AT S2 AND S3 IS GREATER THAN NUMBER PROVIDED AT S1=1, RE-CHECK ANSWERS]
2. None
3. Don't know / Can't say
4. Refused (GO TO R4)

QUOTA CHECK:

PRES4A : IF 18-64 QUOTA IS FULL AND S3=2 (NO RESIDENT AGED 65+ IN H/HOLD) GO TO T1

PRES4B: IF S1=1 (SINGLE PERSON H/HOLD) GO TO S6, ELSE GO TO PRES4C

PRES4C: IF ONLY ONE IN-SCOPE RESIDENT IN OPEN QUOTA CONTINUE, ELSE GO TO PRES5A

*(ONLY ONE-IN SCOPE PERSON IN OPEN QUOTA)

S4 The person selected for this interview is aged (18 / 65) years or over. Is that you? / Can I speak to that person please?

1. Person speaking (GO TO S6)
2. Other person available (GO TO INTRODUCTION THEN S6)
3. Person not available now (MAKE APPOINTMENT)
4. Refused (GO TO R4)

PRES5A IF S2 CODE 1= >1 OR S3 CODE 1= >1 (MORE THAN ONE IN-SCOPE RESIDENT IN OPEN QUOTA) CONTINUE, ELSE GO TO S6.

PRES5B IF 18-64 QUOTA IS FULL DISPLAY INTROB, ELSE DISPLAY INTROA.

*(MORE THAN ONE IN-SCOPE PERSON AGED OVER 18 OR 65 IN OPEN QUOTA)

S5. INTROA. Can I please speak to the person aged over 18 who has the next birthday?

S5. INTROB. Can I please speak to the person aged over 65 who has the next birthday?

1. Person speaking (CONTINUE)
2. Other person available (CONTINUE)
3. Person not available now (STOP INTERVIEW, RECORD NAME AND AGE IN APPOINTMENTS FILE)
4. Refused (GO TO R4)

S6 WHEN TALKING TO RESPONDENT RE-INTRODUCE AS NECESSARY AND SAY: (DISPLAY INTRO)

If you are willing to help me I need less than 10 minutes of your time. Any answers given are completely confidential and protected by the Commonwealth Privacy Act. Please be assured that you cannot be personally identified by participating in this study.

1. Continue

S6a Just to confirm, are you happy to talk about immunisation issues?

1. Yes (CONTINUE)
2. No/ refused (GO TO R4)

S7 Is now a convenient time to talk to you?

1. Start survey (GO TO S8)
2. Stop interview, make appointment (RECORD NAME AND ARRANGE CALL BACK)
3. Respondent refusal (GO TO R4)
4. HH LOTE - Italian, Greek Cantonese, Arabic, Lebanese, Vietnamese, Mandarin (language follow up) (GO TO PLOTE)
5. HH LOTE – Other language identified (no language follow up) (RECORD ON SMS)
6. HH LOTE – Language not identified (make appointment) (RECORD ON SMS)

S8 This call may be monitored for training and quality purposes. Is that OK?

1. Monitor
2. Do not monitor

S9 Before we begin the main part of the survey, to make sure we are interviewing a random sample of the population I need to ask a couple of questions.

1. Continue

AGE1 Would you mind telling me your age please?

1. (SPECIFY 18 to 100) (GO TO S10)
2. Reluctant to answer
3. Refused

AGE2 Would you mind telling me which of the following age groups you fall in to?

- READ OUT
1. 18 to 24
 2. 25 to 34

3. 35 to 44
4. 45 to 54
5. 55 to 64
6. 65 to 74
7. 75 to 84
8. 85 and over
9. Refused (GO TO T2)
10. (Under 18) (GO TO T3)

S10 And which State or Territory are you in?

1. NSW
2. Victoria
3. Queensland
4. South Australia
5. Western Australia
6. Tasmania
7. ACT
8. Northern Territory
9. Refused (GO TO TERMINATION SCRIPT T2)

QUOTA CHECK QUOTAS: IF QUOTA IS FULL GO TO T1

SEX RECORD GENDER

1. Male
2. Female

SECTION A: AWARENESS OF FLU INJECTION

The first lot of questions I'm going to ask are about the influenza vaccination, sometimes called the flu shot. To begin with I'm going to describe what I mean by the flu, as it is often confused with the common cold. Symptoms of the flu include all those you get with a common cold, but with the ADDITION of a rapid onset of fever, muscle aches, fatigue and extreme weariness lasting several days. It can also cause serious respiratory complications including pneumonia.

A1 Have you been sick with the flu at all since the 1st of January this year?

1. Yes
2. No
3. Don't Know / Can't Say
4. Refused

A2 In Australia, it's possible to have an influenza vaccination. This is often called the flu shot or flu injection. This is administered by a doctor or health worker to protect people from catching the flu. Before today, had you heard of the flu injection?

1. Yes
2. No (GO TO C2)
3. Don't Know / Can't Say (GO TO C2)

SECTION B: INFLUENZA VACCINATION STATUS

HEARD OF THE FLU INJECTION

B1 Have you had the flu INJECTION since the 1st of January this year?

1. Yes (GO TO B2)
2. No (GO TO B1a)
3. Don't Know / Can't Say (GO TO B2a)
4. Refused (GO TO B2a)

B1a What was the main reason you didn't have a flu injection this year? (Single response)

Low Risk / Low Perceived Relevance

1. Don't come into contact with a lot of people who have the flu
2. Only good for elderly people
3. I don't get the flu/rarely get the flu/I seldom fall sick

Problems with Vaccine / Injection / Side-effects

4. It doesn't work/is ineffective
5. It brings on the flu/I may get the flu from it/it might make me sick/I fear the side effects
6. Got the flu from it last time/had the worse case of flu from it/had a bad reaction to it/it has side effects on me
7. People I know who've had it got the flu from it
8. People I know have had a bad reaction or complications from it/they have (nearly) died
9. I'm allergic to the flu vaccination/allergic to the egg in it
10. I don't like injections

Problems with awareness / access / affordability

11. Did not think about it/ Forgot to ask about it this year
12. Wasn't offered the flu injection by my family doctor/GP
13. Didn't know the flu injection was available to me
14. No time/too busy/didn't get around to it
15. Difficult to get to the doctor
16. Could not afford the vaccine itself
17. Could not afford the GP's/doctor's consultation fee

Medical Condition / Advice

18. I have a medical condition or on medication for something else
19. Family doctor/GP said I did not need one
20. Other
21. No reason
22. Can't say/don't know/don't recall
23. Refused

NOW GO TO B2A

HAD FLU INJECTION THIS YEAR

B2 What month was that?

1. January
2. February
3. March
4. April
5. May
6. June
7. July
8. August
9. September
10. October
11. November
12. Don't know / Can't say
13. Refused

HEARD OF THE FLU INJECTION

B2a Did you have a flu injection last year ... that is any time in 2005?

1. Yes
2. No
3. Don't Know / Can't Say
4. Refused

HEARD OF THE FLU INJECTION

B2b Do you intend to have a flu injection next year ... that is, any time in 2007?

1. Yes, definitely
2. Yes, probably
3. No, probably not
4. No, definitely not
5. Don't Know / Can't Say
6. Refused

PREB4 (IF B1=1 CONTINUE ELSE GO TO C1)

HAD FLU INJECTION THIS YEAR

B4 Now, thinking about the flu injection that you had this year. Who gave you that flu injection? (NOTE: IF HAD MORE THAN ONE, ASK ABOUT MOST RECENT INJECTION)

1. Doctor / GP (Including nurse / sister / health worker employed there)
2. Council clinic / mobile clinic
3. Someone at place of work
4. Someone in a hospital
5. Some other person
6. Don't know / Can't say
7. Refused

HAD FLU INJECTION THIS YEAR

B5 When you had the flu injection, did you have to pay in full, in part or not at all for the consultation? I don't mean payment for the vaccine, just the consultation. (PROBE TO CLARIFY)

1. Yes, paid in full (IF NEEDED CLARIFY – Did not get reimbursed at all) (GO TO B7)
2. Yes, paid in part (IF NEEDED CLARIFY – Got partially reimbursed)
3. No, did not pay (IF NEEDED CLARIFY – Didn't pay anything at all – not out of pocket)
4. Don't know / Can't say (GO TO B7)
5. Refused (GO TO B7)

DID NOT HAVE TO PAY FOR FULL COST OF CONSULTATION

B6 Why didn't you have to pay (the full cost of/ for) the consultation? (SINGLE RESPONSE)

1. Bulk billed
2. Went to a free clinic
3. Employer paid
4. Covered on pension / veteran's affairs health card
5. Covered by Medicare
6. Because of age
7. Covered by health care card
8. Some other reason
9. Don't know / Can't say
10. Refused

HAD FLU INJECTION THIS YEAR

B7 Did you have to pay for the vaccine (also)?

1. Yes
2. No (GO TO B9)
3. Don't Know / Can't Say (GO TO C1)
4. Refused (GO TO C1)

HAD TO PAY FOR FLU VACCINE

B8 Was this via prescription and payment to a pharmacist or was it a direct payment to the provider of the vaccine?

1. Pharmacist
 2. Direct payment to provider of vaccine
 3. Other (SPECIFY)
 4. Don't Know / Can't Say
 5. Refused
- (NOW GO TO C1)

DID NOT HAVE TO PAY FOR FLU VACCINE

B9 Why didn't you have to pay for the vaccine? (SINGLE RESPONSE ONLY)

1. Bulk billed
2. Went to a free clinic
3. Employer paid
4. Covered on pension / veteran's affairs health card
5. Because of age
6. Because I meet other eligibility criteria

7. Doctor just gave it to me
8. Covered by health care card
9. Some other reason
10. Don't know / Can't say
11. Refused

SECTION C: DOCTOR RECOMMENDATIONS

HEARD OF THE FLU INJECTION (IF A2=1 CONTINUE OTHERWISE GO TO PREC2)

C1 (Even if you didn't have one), did your doctor recommend that you have a flu injection?

1. Yes (GO TO PREG1)
2. No
3. Don't have a doctor / GP
4. Don't Know / Can't Say
5. Refused

PROGRAMMER NOTE: IF B2B=1 use "Just to clarify"

PREC2 IF DOCTOR DID NOT RECOMMEND FLU INJECTION (C1=2 TO 5) OR NOT HEARD OF FLU INJECTION (CODES 2 OR 3 ON A2) CONTINUE OTHERWISE GO TO PREG1

DOCTOR DID NOT RECOMMEND INJECTION / NOT HEARD OF THE FLU INJECTION

C2 (Just to clarify) Would you have a flu injection if a doctor or GP recommended it to you? (NOTE: If no doctor, probe for answer anyway) (PROBE TO CLARIFY)

1. Yes, definitely
2. Yes, probably
3. No, probably not
4. No, definitely not
5. Don't Know / Can't Say
6. Refused

SECTION G: PNEUMOCOCCAL VACCINATION

PREG1 We are also interested in whether or not people have been vaccinated against pneumonia. This vaccine is sometimes given at the same time as the flu injection and is usually given once every five years.

1. Continue

G1 Have you ever been vaccinated against pneumonia (IF NECESSARY EXPLAIN: This is sometimes called the pneumococcal vaccination or Pneumovax)

1. Yes GO TO G2
2. No
3. Don't know
4. Refused

NEVER BEEN VACCINATED AGAINST PNEUMONIA

G1a What is the main reason you haven't been vaccinated against pneumonia? DO NOT PROMPT

1. Only good for elderly people
2. I don't get sick / I'm healthy / Rarely go to the Doctor
3. I'm not at risk / Don't need it
4. Never had pneumonia
5. Problems with Vaccine / Injection / Side-effects
6. It doesn't work/is ineffective
7. I'm allergic to the vaccination/
8. I don't like injections / vaccinations
9. Problems with awareness / access / affordability
10. Did not think about it/ Forgot to ask about
11. Never been offered the injection
12. Didn't know about it / Didn't know it was available
13. No time/too busy/didn't get around to it
14. Difficult to get to the doctor
15. Could not afford the vaccine itself
16. Could not afford the GP's/doctor's consultation fee

17. Medical Condition / Advice / On medication for something else
18. Family doctor/GP said I did not need one
19. Other (Specify _____)
20. No reason
21. Can't say/don't know/don't recall
22. Refused

NOW GO TO G10a

BEEN VACCINATED AGAINST PNEUMONIA

G2 Have you been vaccinated against pneumonia within the last 5 years?

1. Yes
2. No (Go to G10a)
3. Don't know (Go to G10a)
4. Refused (Go to G10a)

HAD PNEUMOCOCCAL VACCINATION IN LAST 5 YEARS

G3 Would this have been since 1st of January this year, at some stage in 2005, or before then?

1. This year
2. 2005
3. Before then GO TO G10a
4. Don't know GO TO G10a
5. Refused GO TO G10a

HAD PNEUMOCOCCAL VACCINATION IN LAST 2 YEARS

G4 Who gave you that injection? (NOTE: IF HAD MORE THAN ONE, ASK ABOUT MOST RECENT INJECTION)

1. Doctor / GP (Including nurse / sister / health worker employed there)
2. Council clinic / mobile clinic
3. Someone at place of work
4. Someone in a hospital
5. Some other person
6. Don't know / Can't say
7. Refused

PREG5A IF G3=1 OR 2 (HAD PNEUMOCOCCAL VACCINATION IN LAST 2 YEARS) AND B1=1 OR B2A1=1 (HAD FLU VACCINATION IN LAST 2 YEARS) CONTINUE, ELSE GO TO G5.

*HAD PNEUMOCOCCAL AND FLU VACCINATION IN LAST 2 YEARS

G5a Did you have this injection at the same time as you had the flu injection?

1. Yes (GO TO G7)
2. No
3. Don't Know / Can't Say
4. Refused

G5 When you were vaccinated against pneumonia, did you have to pay in full, in part or not at all for the consultation? I don't mean payment for the vaccine, just the consultation. (PROBE TO CLARIFY)

1. Yes, paid in full (IF NEEDED CLARIFY – Did not get reimbursed at all)(GO TO G7)
2. Yes, paid in part (IF NEEDED CLARIFY – Got partially reimbursed)
3. No, did not pay (IF NEEDED CLARIFY – Didn't pay anything at all – not out of pocket)
4. Don't know / Can't say (GO TO G7)
5. Refused (GO TO G7)

*DID NOT HAVE TO PAY FOR FULL COST OF CONSULTATION

G6 Why didn't you have to pay (the full cost of/ for) the consultation? (SINGLE RESPONSE)

1. Bulk billed
2. Went to a free clinic
3. `Employer paid
4. Covered on pension / veteran's affairs health card
5. Covered by Medicare
6. Because of age
7. Covered by health care card

8. Some other reason
9. Don't know / Can't say
10. Refused

HAD PNEUMOCOCCAL VACCINATION IN LAST 2 YEARS

G7 Did you have to pay for the vaccine (also)?

1. Yes
2. No (GO TO G9)
3. Don't Know / Can't Say (GO TO G10a)
4. Refused (GO TO G10a)

HAD TO PAY FOR PNEUMOCOCCAL VACCINE

G8 Was this via prescription and payment to a pharmacist or was it a direct payment to the provider of the vaccine?

1. Pharmacist
2. Direct payment to provider of vaccine
3. Other (SPECIFY)
4. Don't Know / Can't Say
5. Refused

NOW GO TO G10a

DID NOT HAVE TO PAY FOR PNEUMOCOCCAL VACCINE

G9 Why didn't you have to pay for the vaccine? (SINGLE RESPONSE ONLY)

1. Bulk billed
2. Went to a free clinic
3. Employer paid
4. Covered on pension / veteran's affairs health card
5. Because of age
6. Because I meet other eligibility criteria
7. Doctor just gave it to me
8. Covered by health care card
9. Some other reason
10. Don't know / Can't say
11. Refused

G10a And finally on vaccinations, a question about tetanus.

It is common for most children in Australia to be vaccinated against tetanus while still at school. For adults, booster vaccinations are sometimes given as part of a vaccination program or if there is an increased risk of infection due to something like a deep wound, a compound fracture or a bad burn?

To the best of your knowledge have you been vaccinated against tetanus as an adult?

1. Yes
2. No (GO TO D1)
3. Don't Know / Can't Say (GO TO D1)
4. Refused (GO TO D1)

G10b Approximately, how old were you when you were last vaccinated against tetanus? For example, were you less than 30, in your thirties, in your forties or 50 and over?

1. 18 to 29
2. 30 to 39
3. 40 to 49
4. 50 or over
5. Don't Know
6. Refused

G10c Was your most recent tetanus vaccination given as a routine vaccination, due to an accident or trauma or for some other reason?

1. Routine vaccination
2. Injury / Trauma
3. I requested it
4. In preparation for travel
5. Some other reason
6. Don't Know / Can't Say
7. Refused

SECTION D: RISK FACTORS AND GENERAL HEALTH

ALL

D1 I've now got a couple of questions about selected health issues that may or may not apply to you. If there's anything you don't want to answer just let me know.

Do you now smoke cigarettes ...READ OUT

EXPLAIN AS NECESSARY: By cigarettes, we mean factory-made or roll-your-own cigarettes

1. Daily
2. At least weekly
3. Less often than weekly, or
4. Not at all
5. (Can't say)

D1a Have you ever had a heart attack or a stroke?

1. Yes (GO TO D2)
2. No
3. Don't know / Can't say
4. Refused

NO HEART ATTACK OR STROKE (OR DON'T KNOW / REFUSED)

D1b Do you have chronic heart disease?

1. Yes (GO TO D2)
2. No
3. Don't know / Can't say
4. Refused

NO CHRONIC HEART DISEASE (OR DON'T KNOW / REFUSED)

D1c Are you currently on medication that may affect your immune system, for example cortisone tablets (PAUSE – WAIT FOR REPLY), or having cancer treatment (PAUSE – WAIT FOR REPLY), or have you had an organ transplant?

1. Yes to any of above (GO TO D2)
2. No to all of above
3. Don't know / Can't say
4. Refused

NO MEDICATION THAT AFFECTS IMMUNE SYSTEM /CANCER TREATMENT /ORGAN TRANSPLANT (OR DK/REF)

D1d Do you have chronic lung disease such as chronic bronchitis or emphysema?

1. Yes (GO TO D2)
2. No
3. Don't know / Can't say
4. Refused

NO CHRONIC LUNG DISEASE (OR DON'T KNOW / REFUSED)

D1ea Do you have diabetes?

1. Yes
2. No (GO TO D1fa)
3. Don't know / Can't say (GO TO D1fa)
4. Refused (GO TO D1fa)

HAS DIABETES

D1eb Does that require regular hospitalisation or medical follow up?

1. Yes (GO TO D2)
2. No
3. Don't know / Can't say
4. Refused

NO DIABETES (OR DON'T KNOW / REFUSED)

D1fa Do you have severe Asthma?

1. Yes
2. No (GO TO D2)
3. Don't know / Can't say (GO TO D2)
4. Refused (GO TO D2)

HAS SEVERE ASTHMA

D1fb Have you required hospitalisation for this in the last 12 months?

1. Yes
2. No
3. Don't know / Can't say
4. Refused

D2 Have you ever been told by a Doctor that you have "Shingles or "Zoster"? (EXPLAIN IF REQUIRED: Shingles is a localised rash that is very painful. It is caused by a reactivation of the chickenpox virus)

1. Yes
2. No GO TO D3
3. Don't know / Can't say GO TO D3
4. Refused GO TO D3

D2a To the best of your memory, approximately, how old were you when you first had Shingles? (PROBE, AS REQUIRED) For example, were you less than 30, in your thirties, in your forties or 50 and over?

1. 18 to 29
2. 30 to 39
3. 40 to 49
4. 50 or over
5. Don't Know
6. Refused

D2b Have you ever been admitted to hospital due to Shingles?

1. Yes
2. No
3. Don't know / Can't say
4. Refused

D2c Do you have any ongoing pain or problems as a result of Shingles?

1. Yes
2. No
3. Don't know / Can't say
4. Refused

ALL

D3 Are you a health care provider, or do you work at a nursing home or other residential aged care facility?

1. Yes
2. No
3. Don't know / Can't say
4. Refused

*PROGRAMMER NOTE: ONLY DISPLAY TEXT IN BRACKETS IN RESPONDENT IS AGED 18-64
PRED4 (IF ANOTHER PERSON IN HH AGED UNDER 65 CONTINUE ELSE GO TO E1) (IF SINGLE PERSON
HOUSEHOLD AND PERSON IS AGED LESS THAN 65 GO TO E1)

D4 Do any people in your household aged under 65 (not including yourself) have any long-term illnesses such as heart disease, stroke, chronic lung disease, chronic bronchitis, emphysema, or cancer that they are receiving treatment for?

1. Yes
2. No
3. Don't know / Can't say
4. Refused

SECTION E: DEMOGRAPHICS

ALL

E1 And just three final questions to help us analyse the results.

Are you of Aboriginal or Torres Straight Islander origin?

1. Yes
2. No
3. Don't know / Can't say
4. Refused

ALL

E2 May I please have your postcode?

1. Postcode (SPECIFY 0001 to 9999)
2. Don't know postcode (SPECIFY SUBURB / TOWN)
3. Refused

E3 And, how many fixed telephone lines does this household have for personal use? (PAUSE) (IF MORE THAN 'ONE' CLARIFY: Please don't count numbers mobile numbers or numbers ONLY used for the internet or fax or business purposes).

1. (SPECIFY 1 to 10)
2. None - should not be listed
3. Don't Know (Avoid if possible)
4. Refused (Avoid if possible)

GO TO END

T1 TERMINATION SCRIPT FOR OVER QUOTA

Thanks anyway, but for this survey we need to speak to people aged 65 years and over?

T2 TERMINATION SCRIPT FOR INSUFFICIENT DETAILS

Thanks anyway, but for this survey we need to need to know (your age / the State or Territory you live in) in order to continue.

T3 TERMINATION SCRIPT FOR THOSE UNDER 18

Thanks anyway, but for this survey we need to speak to people aged 18 years and over.

R1 REFUSAL SCRIPT

R2 Just before I hang up it would help us tremendously if you could tell us how many people in this household are aged 18 and older?

1. None
2. One

3. Two
4. Three
5. Four
6. Five
7. Six or more
8. Don't know / Can't say (GO TO R4)
9. Refused (GO TO R4)

R3 And how many of these people are aged 65 years and over?

1. None
2. One
3. Two
4. Three
5. Four
6. Five
7. Six or more
8. Don't know / Can't say
9. Refused

NOW GO TO END

R4 OK, that's fine, no problem, but could you just tell me the main reason you do not want to participate, because that's important information for us?

1. No comment / just hung up
2. Too busy
3. Not interested
4. Too personal / intrusive
5. Don't like subject matter
6. Don't believe surveys are confidential / privacy concerns
7. Silent number
8. Don't trust surveys / government
9. Never do surveys
10. 5 to 10 minutes is too long
11. Get too many calls for surveys / telemarketing
12. Not a residential number (business, etc
13. Too old / frail / deaf / unable to do survey
14. Will only do survey if send letter (GO BACK TO Q1 AND RECORD DETAILS)
15. Other (SPECIFY)

GO TO END

QF1 Thanks for being prepared to help, but there's no one in your household that qualifies for the survey. Thanks again (RECORD AS QUOTA FULL)

END That's the end of survey. Thanks very much for your time. Just in case you missed it my name is (...) and this survey was conducted on behalf of the Australian Government Department of Health and Ageing. Thank you for your help.

INTERVIEWER RECORD: Interview conducted in

1. English
2. Other language

Interviewer Declaration

I certify that this is a true, accurate and complete interview, conducted in accordance with the briefing instructions, the IQCA standards and the MRSA Code of Professional Behaviour (ICC/Esomar). I will not disclose to any other person the content of this questionnaire or any other information relating to the project.

Interviewer name:

Interviewer

I.D:

Signed:

Date

2006 Adult Vaccination Survey – Residential facilities

October 2006

CALL OUTCOME CODES (SMS SCREEN)

1. No answer
2. Answering machine
3. Fax machine / modem
4. Engaged
5. Appointment
6. Stopped interview
7. Telstra message / Disconnected
8. Not an aged care facility
9. Claims to have done survey
10. Away for duration
11. Other out of scope
12. Terminated during screening / midway (HIDDEN CODE)

FROM SAMPLE

Service name

INTRODUCTION

- S1. Good morning/afternoon/evening. My name is (...). I'm calling on behalf of the Australian Government Department of Health and Ageing from the Social Research Centre. We are conducting an important survey amongst residential aged care facilities about influenza and pneumococcal vaccination.

Can I just confirm that this is <service name>? (INTERVIEWER NOTE: Need to be talking to the actual facility and not administrative Head Office)

1. Yes (CONTINUE)
2. No – this is the administrative centre or head office (CONTINUE)
3. No - never heard of named residential facility (GO TO TERM1)
4. Make appointment

- S2. To get the information we need for this survey, I'd like to speak to the Director of Nursing at <service name> or someone in a similar position. Can you put me through to that person please or provide me with their contact details?

1. Respondent available (GO TO S3)
2. Willing to provide contact details (GO TO S4)
3. Refused (GO TO TERM1)

- S3. REINTRODUCE AS NECESSARY AND SAY: The reason for this survey is to obtain an estimate of the proportion of residents in aged care facilities vaccinated against influenza and pneumococcal disease. The results will be combined with those of a major household survey to provide an accurate estimate of the proportion of the population vaccinated against influenza and pneumonia.

Do you have two or three minutes to do the survey?

1. Yes – available now
(GO TO S5)
2. Not available now, Contact details provided (GO TO S4)
3. Refused
(GO TO TERM1)

S4. RECORD CONTACT DETAILS AND STOP INTERVIEW

1. Yes – record details (STOP INTERVIEW AND RECORD DETAILS IN APPOINTMENTS FILE)
2. No (GO TO TERM1)

*PROGRAMMER NOTE – WHEN RECOMMENCING FROM A STOPPED INTERVIEW DISPLAY THE FOLLOWING ...

Good morning/afternoon/evening. My name is (...). I'm calling on behalf of the Australian Government Department of Health and Ageing from the Social Research Centre. May I speak to (name of respondent) please? I'm calling to follow up a previous call about an important survey amongst residential aged care facilities about influenza and pneumococcal vaccination.

*(ALL)

S5 This call may be monitored for training and quality purposes. Is that OK?

1. Monitor
2. Do not monitor

*(ALL)

Q1. To start, can you tell me the number of residents you have at this site aged 65 years and over?

1. Record number (specify) [ALLOWABLE RANGE 1-999]
2. (AVOID) Record range (specify)
3. (AVOID) Don't know (GO TO TERM2)
4. (AVOID) Refused (GO TO TERM2)

*(ALL)

Q2. Thinking firstly about influenza vaccination (PAUSE), can you tell me how many of your residents aged 65 and over have been vaccinated against INFLUENZA, since January this year?

1. Record number (specify) [(ALLOWABLE RANGE 1- Response given at Q1=1)
2. (AVOID) Record range (specify)
3. (AVOID) Record percentage (specify)
4. (AVOID) Don't know (GO TO TERM2)
5. (AVOID) Refused (GO TO TERM2)

*(ALL)

Q3. Do you know [can you estimate] how many of these vaccinated older residents paid for the vaccine (I don't mean payment for the doctor's attendance)?

1. None

2. Record number (specify) (ALLOWABLE RANGE 1-Response given at Q2=1)
3. (AVOID)Record range (specify)
4. (AVOID)Record percentage (specify)
5. Don't know
6. Refused

*(ALL)

Q4. Do you have a specific influenza vaccination policy?

1. Yes
2. No (GO TO Q6)
3. Don't Know (GO TO Q6)

*(HAS A SPECIFIC INFLUENZA VACCINATION POLICY)

Q5. How does YOUR influenza vaccination policy work?

1. Record answer (specify)
2. Don't know
3. Refused

*(ALL)

Q6. Now for the pneumococcal vaccination (PAUSE), as you probably know, pneumococcal vaccination should be given to adults aged 65 years and older, with a single revaccination 5 years after their primary vaccination. To the best of your knowledge, how many of your residents aged 65 years or older are vaccinated against pneumococcal disease?

1. Record number (specify) (ALLOWABLE RANGE 1- Response given at Q1=1)
2. (AVOID) Record range (specify)
3. (AVOID) Don't know
4. (AVOID) Refused

END. This concludes the survey—thank you. The information you have provided will be used only for research purposes and its collection, storage and use are protected under the provisions of the Commonwealth Privacy Act. Thank you again.

TERM1. Thank you for your time.

TERM2. I am sorry but we can't go any further without this information. Thank you for your time today.

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