



# **SPORTS ATTENDANCE** AUSTRALIA

EMBARGO: 11:30AM (CANBERRA TIME) MON 20 DEC 1999

## CONTENTS

	<i>page</i>
Notes.....	2
Data highlights .....	3

### TABLES

<b>1</b> Characteristics of persons who have attended sport .....	12
<b>2</b> Persons attending sport, by State or Territory of usual residence .	13
<b>3</b> Persons attending sport, by occupation, attendance rates .....	14
<b>4</b> Persons attending sport, by educational attainment, attendance rates .....	14
<b>5</b> Persons attending selected sports .....	15
<b>6</b> Persons attending main sports, by State or Territory of usual residence .....	16
<b>7</b> Persons attending main sports, by age and sex .....	18
<b>8</b> Persons attending main sports, by occupation, attendance rates .	20
<b>9</b> Persons attending main sports, by educational attainment, attendance rates .....	20
<b>10</b> Frequency of attendance at main sports .....	21
<b>11</b> Persons attending sport, by State or Territory, 1995 and 1999 ..	22
<b>12</b> Persons attending sport, by age, 1995 and 1999 .....	25

### ADDITIONAL INFORMATION

Explanatory notes .....	28
Technical note: Sampling variability .....	32
Glossary .....	35

- For further information about these and related statistics, contact Heather Latz on Adelaide 08 8237 7402, or Client Services in any ABS office as shown on the back cover of this publication.

## NOTES

### ABOUT THIS PUBLICATION

This publication presents results from the Survey of Sports Attendance, April 1999. The survey obtained data about the characteristics of persons who attend sporting matches or competitions as spectators (excluding junior and school sport) and provides an update to data collected in March 1995. The survey was conducted to assist sporting bodies to understand the profile of their spectators and was developed in consultation with the Commonwealth's National Office of Sport and Recreation Policy, the Australian Sports Commission and State Recreation and Sports Departments.

Details on the number of persons who attended sporting matches or competitions in the 12 months ending April 1999 are provided. Socio-demographic details of these spectators, information about the most popular sports, and frequency of attendance are presented.

Information on the concepts and methods used in the survey, definitions and interpretation and reliability of the results are given in the Explanatory Notes (pages 28–31), Technical Note (pages 32–34) and Glossary (pages 35–37).



### ROUNDING

Where figures have been rounded, discrepancies may occur between sums of the component items and totals. Published percentages are calculated prior to rounding of the figures and therefore some discrepancy may occur between these percentages and those that could be calculated from the rounded figures.



### SYMBOLS AND OTHER USAGES

ABS	Australian Bureau of Statistics
RSE	relative standard error
SE	standard error
*	subject to sampling variability too high for most practical purposes (i.e. relative standard error between 25% and 50%) (see Technical Note)
**	subject to sampling variability too high for practical purposes (i.e. relative standard error greater than 50%)
—	nil or rounded to zero

W. McLennan  
Australian Statistician

# DATA HIGHLIGHTS

## CHARACTERISTICS OF SPECTATORS

### SUMMARY

During the 12 months ending April 1999, 7.0 million persons, or 47.1% of the Australian population aged 15 years and over, attended sporting matches or competitions (excluding junior and school sport).

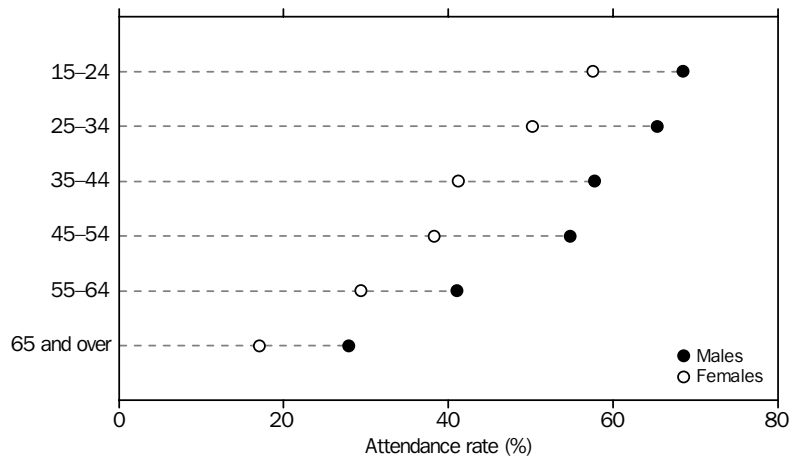
### AGE AND SEX

One million more males than females attended sport at some time during the 12 months prior to April 1999. More than half of the male population aged 15 years and over (54.7%) attended sport compared with 39.8% of females.

For both sexes, sports attendance gradually declined with age. The attendance rate for persons aged 15–24 years was 63.1% and nearly three times that of persons aged 65 years and over (21.8%).

For each age group, males had an attendance rate significantly higher than that for females.

SPORTS ATTENDANCE, By Age and Sex

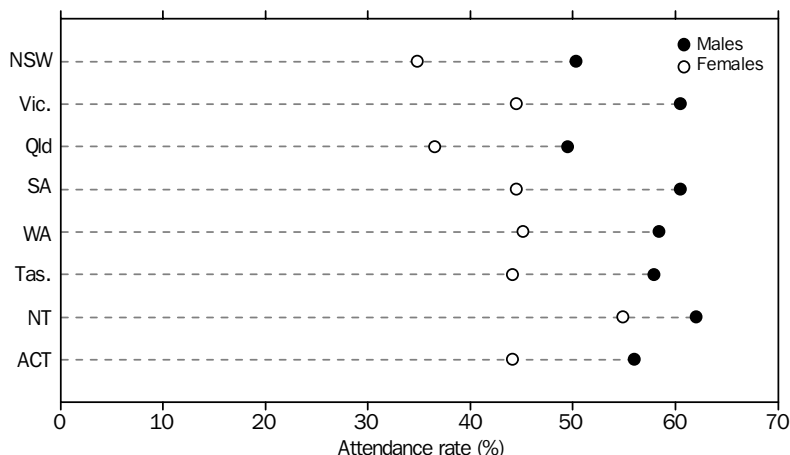


**CHARACTERISTICS OF SPECTATORS** *continued*

**AREA OF RESIDENCE**

Persons living outside the six State capital cities had a marginally higher attendance rate (48.5%) than persons residing in the capital city regions (46.3%). Northern Territory had the highest attendance rate (58.6%), while New South Wales (42.4%) and Queensland (42.9%) had the lowest rates.

SPORTS ATTENDANCE, By State or Territory of Usual Residence and Sex



**BIRTHPLACE**

Australian-born persons had an attendance rate of 52.8%. This was 21 percentage points higher than the rate for overseas-born Australians (32.0%). Of the latter group, persons born in the main English-speaking countries had a rate of 41.9% and persons from other overseas countries had a rate of 25.5%.

**EMPLOYMENT STATUS**

Employed persons had a higher attendance rate (57.7%) than those who were unemployed (47.8%). Both rates were significantly higher than the attendance rate of persons not in the labour force (29.7%).

**OCCUPATION**

Attendance rates by occupation varied from 53.2% (for labourers and related workers) to 62.4% (for associate professionals).

**MAIN SPORTS ATTENDED**

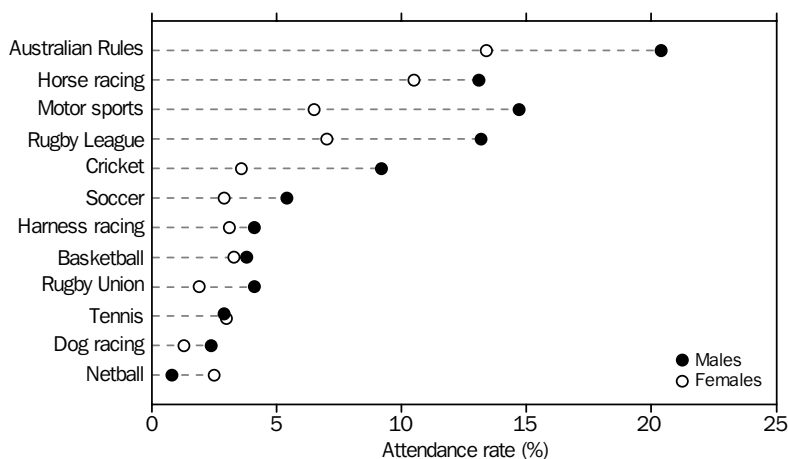
Australian Rules was the most popular spectator sport, attracting 2.5 million persons or 16.8% of the population 15 years of age and over. Horse racing was the second most popular with 1.8 million persons (11.8%).

Other sports attracting more than a million spectators were motor sports (1.6 million persons) and Rugby League (1.5 million persons).

Cricket, soccer, harness racing and basketball all attracted over half a million persons.

The attendance rate for males was higher than that for females for most of the main spectator sports. Nearly half a million more males than females attended Australian Rules, while at least twice as many males as females attended motor sports, cricket and Rugby Union. Netball was an exception with at least three times as many female spectators as males.

**ATTENDANCE AT MAIN SPORTS, By Sex**



There were significant differences in the frequency of attendance for the various sports. More than two-thirds of persons attending dog racing, tennis and motor sports only went once or twice. Over half (54.8%) of netball spectators went at least six times.

**COMPARISON WITH 1995 SURVEY**

The number of Australians aged 15 years and over attending a sporting match or competition (excluding motor sports, junior and school sport) increased from 6.1 million in 1995 to 6.4 million in 1999. The attendance rate, which takes into account population change, was 43.1% in 1999, virtually unchanged from 1995. The table below shows those sports where the changes in attendance between 1995 and 1999 were statistically significant.

**MAIN SPORTS ATTENDED**

Sport	1995.....		1999.....	
	Persons '000	Attendance rate	Persons '000	Attendance rate
		%		%
Australian Rules	1 874.2	13.3	2 509.2	16.8
Cricket	1 165.9	8.3	942.5	6.3
Harness racing	599.7	4.3	534.8	3.6
Basketball	691.6	4.9	526.0	3.5
Rugby Union	358.4	2.5	446.2	3.0
Netball	312.3	2.2	248.7	1.7

The number of persons attending Australian Rules increased from 1.9 million in 1995 to 2.5 million in 1999—the attendance rate increased from 13.3% to 16.8%. The largest decreases in attendance were for cricket and basketball, with attendance rates falling 2.0 and 1.4 percentage points respectively. Changes in attendances at other main sports (horse racing, rugby league, soccer, tennis and dog racing) were not statistically significant.

## SELECTED SPORTS

### AUSTRALIAN RULES

Australian Rules was the spectator sport most attended by Australians; it was attended at least once by almost 2.5 million persons or 16.8% of Australians aged 15 years and over.

The highest attendance rates occurred in Victoria (33.9%) and South Australia (33.7%), followed by Tasmania (27.1%) and Western Australia (24.5%). The attendance rates for New South Wales and Queensland were 4.3% and 4.4% respectively.

The rate of attendance of males at Australian Rules matches (20.4%) was 7 percentage points higher than that of females (13.4%). Males in Victoria and South Australia had the highest attendance rates with 41.9% and 40.6% respectively.

Nearly one million persons attended Australian Rules matches during the previous 12 months at least six times. This was 38.4% of all Australian Rules spectators. Another 24.7% of spectators attended Australian Rules three to five times.

### HORSE, HARNESS, OR DOG RACING

Almost 2.2 million persons had been to at least one horse, harness or dog race meeting during the 12 months to April 1999, which represented an attendance rate of 14.5%. Of these, horse racing was the most popular with 1.8 million persons attending at least once, followed by harness racing (0.5 million) and dog racing (0.3 million).

Horse racing was most popular in the Northern Territory with an attendance rate of 16.3%, followed by Victoria with 13.0%. Western Australia had the highest attendance rate for both harness racing (7.5%) and dog racing (3.8%).

For all three racing codes, attendance rates of males were higher than those for females. Attendance rates for horse racing were 13.1% for males and 10.5% for females.

Horse racing and harness racing attendances by age group differed from most other sports—instead of the highest attendance rate being for the 15–24 year age group, the 25–34 year age group was highest for horse racing and the 35–44 year age group reported a higher rate for harness racing.

Most racing spectators (65.0% of horse racing spectators, 65.1% of harness and 70.3% of dog racing spectators) attended only once or twice during the previous 12 months.

**SELECTED SPORTS** *continued*

**MOTOR SPORTS**

The third most popular sport was motor sports. This was attended by 1.6 million (10.6%) Australians aged 15 years and over.

Motor sports was the most popular sport attended by spectators in the Northern Territory—28,600 persons giving an attendance rate of 26.4%. The attendance rates for the other States and Territories spanned from 14.3% for South Australia down to 7.7% for New South Wales. The State which had the highest number of persons attending motor sports was Victoria with 434,300.

Nearly 1.1 million males attended motor sports making it the second most popular sport for males. The rate of attendance of males (14.7%) was higher than that of females (6.5%) by over 8 percentage points.

Nearly one-quarter (23.5%) of tradespersons, 17.5% of intermediate production and transport workers and 16.5% of labourers and related workers watched motor sports. The sport was less popular with professionals, of whom only 8.3% attended on one or more occasions in the year ending April 1999.

Over two-thirds (67.7% or 1.1 million) of motor sport spectators attended the sport once or twice during the 12 months ending April 1999 and 18.5% attended on between three and five occasions.

**RUGBY LEAGUE**

Just over 1.5 million persons, or 10.1% of the population 15 years of age and over, had been to at least one Rugby League match during the year.

Rugby League was the most popular sport attended by spectators in the Australian Capital Territory (47,800 persons or an attendance rate of 20.2%), Queensland (479,500 persons, 17.5%) and New South Wales (865,900 persons, 17.1%). The States which had the highest attendance rates for Australian Rules (Victoria, South Australia, Western Australia and Tasmania) had very low attendance rates at this sport, ranging from 0.4% to 1.7%.

Almost twice as many males as females went to Rugby League matches (969,800 males and 531,300 females). The attendance rates of employed persons (12.9% in total) varied from 15.2% for tradespersons down to 8.1% for advanced and service clerical workers.

About 651,600 (43.4%) of Rugby League attendees went only once or twice, and 428,400 (28.5%) went between three and five times. There were 421,100 persons (28.1%) who attended on six or more occasions.



**SELECTED SPORTS** *continued*

**CRICKET**

Cricket, the fifth most popular sport watched by Australians, was attended on one or more occasions by 942,500 persons during the 12 months to April 1999. They represented 6.3% of the population aged 15 years and over.

Cricket was attended by the greatest proportions of persons in Tasmania (9.2%) and Victoria (8.1%). The rates of attendance for the other States and Territories ranged from 7.3% for Western Australia down to 4.1% for Queensland.

Almost two and a half times as many males as females went to watch cricket—671,800 males and 270,800 females, equating to attendance rates of 9.2% and 3.6% respectively.

Over half (537,200) of cricket spectators attended once or twice during the reference period. One-fifth (188,200) had been on six or more occasions.

**SOCCER**

There were 4.2% of persons aged 15 years and over (621,200 persons) who attended at least one soccer match during the 12 months to April 1999.

Attendance rates for the States and Territories ranged from a high of 6.4% in Western Australia to a low of 2.3% in Tasmania.

Nearly twice as many males as females had attended soccer matches during the reference period (400,000 males and 221,200 females).

Over two-fifths (41.3% or 256,400 persons) attended soccer six or more times during the 12 months ending April 1999. A further 28.2% or 175,400 attended soccer three to five times.

**SELECTED SPORTS** *continued*

**BASKETBALL**

Some 526,000 persons attended at least one basketball match in the 12 months ending April 1999. This was 3.5% of the population aged 15 years and over.

Victoria had the highest number of basketball spectators (176,200 persons), which represented 4.7% of the Victorian population aged 15 years and over. Attendance rates varied from 2.0% in New South Wales to 6.5% in the Australian Capital Territory.

Similar numbers of males (278,200) and females (247,800) went to basketball matches.

Almost one-third of basketball spectators (31.7% or 166,500 persons) attended six times or more; 23.6% attended three to five times and 44.8% attended once or twice during the 12 months ending April 1999.

**RUGBY UNION**

There were 446,200 persons aged 15 years and over (3.0% of persons) who attended Rugby Union at least once during the 12 months ending April 1999.

Rugby Union was the second most popular sport attended by persons living in the Australian Capital Territory. The Australian Capital Territory had the highest rate of attendance at this sport (13.8%) which was nearly three times that of the next highest, New South Wales, at 4.8%. New South Wales had the highest number of attendees (244,400) followed by Queensland (103,200 attendees).

Other attendance rates were: 3.8% for Queensland, 3.6% for the Northern Territory and less than 2% for the other States.

More than twice as many males as females went to Rugby Union matches during the reference period—there were 299,800 males and 146,400 females, representing attendance rates of 4.1% and 1.9% respectively. Rugby Union attendances by age group differed from that of most other sports: the highest attendance rate for Rugby Union was for the 25–34 year age group (4.7%) compared with the 15–24 year age group (3.7%).

There were 200,600 (45.0%) Rugby Union spectators who only went to one or two matches in the 12 months ending April 1999. There were 118,100 (26.5%) who went on between three and five occasions while 127,500 (28.6%) went on six or more occasions.

**SELECTED SPORTS** *continued*

**TENNIS**

There were 444,000 persons who attended tennis matches at least once in the 12 months to April 1999, 3.0% of persons aged 15 years and over.

Tennis was the fifth most popular sport attended by Victorians. Victoria was the State with the highest rate of attendance at this sport (6.8%) which was more than twice that of the next highest, South Australia, at 2.7%. The attendance rates for other States and Territories ranged from 2.1% for Western Australia to 0.7% for Australian Capital Territory. Tennis had nearly three times more attendees in Victoria (256,300) than the more populous state of New South Wales (90,100 attendees).

Tennis was a sport which more than two-thirds (68.9%) of its spectators attended only once or twice during the 12 months to April 1999. Only 12.3% attended tennis matches six or more times.

**NETBALL**

During the 12 months prior to April 1999, netball was watched at least once by 248,700 persons or 1.7% of persons aged 15 years and over.

The highest rates of netball attendance were in Northern Territory (3.4%), South Australia (3.2%) and Tasmania (2.8%).

Of the sports listed in table 5, netball had the highest proportion of females to males attending with over three times as many females as males—190,500 females (an attendance rate of 2.5%) had been to netball matches compared with 58,200 males (0.8%). In every State, the rates of attendance of females at netball matches were higher than those of males.

Of the 12 main sports attended in Australia, netball was the only one having more than half of the spectators attending at least six times (54.8%) and had the lowest percentage watching only once or twice (22.7%) during the previous 12 months.

# 1

## CHARACTERISTICS OF PERSONS WHO HAVE ATTENDED SPORT

Characteristics	MALES.....		FEMALES.....		PERSONS.....	
	Number	Attendance	Number	Attendance	Number	Attendance
		rate		rate		rate
	'000	%	'000	%	'000	%
<b>Age group (years)</b>						
15-24	930.5	68.5	752.4	57.6	1 682.9	63.1
25-34	928.6	65.4	720.0	50.2	1 648.6	57.7
35-44	834.5	57.8	601.8	41.2	1 436.3	49.4
45-54	694.6	54.8	478.2	38.3	1 172.8	46.6
55-64	343.9	41.0	242.1	29.4	586.0	35.3
65 and over	282.0	27.9	222.3	17.1	504.3	21.8
<b>Region</b>						
Capital city	2 488.2	54.5	1 838.6	38.5	4 326.8	46.3
Rest of State	1 525.9	54.9	1 178.1	42.1	2 704.0	48.5
<b>Birthplace</b>						
Australia	3 202.2	60.1	2 536.7	45.7	5 738.9	52.8
Other main English-speaking countries	394.3	49.2	272.6	34.4	666.9	41.9
Other countries	417.6	34.4	207.4	16.8	625.0	25.5
<i>Total born outside Australia</i>	<i>811.9</i>	<i>40.3</i>	<i>480.0</i>	<i>23.7</i>	<i>1 291.9</i>	<i>32.0</i>
<b>Employment status</b>						
Full-time workers	2 744.4	62.7	1 125.2	53.4	3 869.6	59.7
Part-time workers	385.9	59.0	850.9	49.9	1 236.8	52.4
<i>Total employed</i>	<i>3 130.3</i>	<i>62.2</i>	<i>1 976.1</i>	<i>51.9</i>	<i>5 106.4</i>	<i>57.7</i>
Unemployed	193.8	52.4	123.4	41.9	317.3	47.8
Not in the labour force	690.0	35.6	917.1	26.4	1 607.1	29.7
<b>Total</b>	<b>4 014.1</b>	<b>54.7</b>	<b>3 016.7</b>	<b>39.8</b>	<b>7 030.8</b>	<b>47.1</b>

## PERSONS ATTENDING SPORT, By State or Territory of Usual Residence

Age group (years)	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
NUMBER ('000)									
<b>Males</b>									
15-24	285.3	241.4	175.8	71.6	105.0	24.7	8.0	18.8	930.5
25-34	303.1	254.3	159.2	75.3	93.2	21.9	9.0	12.6	928.6
35-44	249.7	235.9	144.5	70.4	91.1	21.4	8.8	12.7	834.5
45-54	198.8	205.4	110.4	68.4	75.1	18.9	6.3	11.3	694.6
55-64	116.4	93.5	47.7	35.8	33.1	9.4	2.4	5.5	343.9
65 and over	97.8	78.2	34.4	31.9	27.6	8.2	**0.6	3.4	282.0
<b>Total</b>	<b>1 251.1</b>	<b>1 108.7</b>	<b>672.0</b>	<b>353.4</b>	<b>425.2</b>	<b>104.5</b>	<b>35.0</b>	<b>64.2</b>	<b>4 014.1</b>
<b>Females</b>									
15-24	228.6	194.8	143.3	67.6	76.0	19.3	7.6	15.0	752.4
25-34	204.3	198.6	130.3	64.5	83.1	17.7	8.0	13.6	720.0
35-44	172.4	178.0	92.6	56.4	65.7	17.9	7.4	11.5	601.8
45-54	131.3	139.5	83.1	39.5	56.5	15.9	4.2	8.3	478.2
55-64	91.6	64.2	28.6	21.5	24.6	6.9	*0.9	3.7	242.1
65 and over	67.5	75.6	26.4	22.3	22.8	6.0	**0.2	*1.5	222.3
<b>Total</b>	<b>895.6</b>	<b>850.7</b>	<b>504.3</b>	<b>271.8</b>	<b>328.6</b>	<b>83.6</b>	<b>28.3</b>	<b>53.7</b>	<b>3 016.7</b>
<b>Persons</b>									
15-24	513.8	436.3	319.2	139.2	180.9	44.0	15.6	33.8	1 682.9
25-34	507.3	452.9	289.5	139.8	176.3	39.6	17.0	26.2	1 648.6
35-44	422.1	413.8	237.1	126.9	156.8	39.3	16.2	24.2	1 436.3
45-54	330.1	344.9	193.5	107.9	131.6	34.7	10.4	19.6	1 172.8
55-64	208.1	157.8	76.3	57.3	57.8	16.2	3.3	9.2	586.0
65 and over	165.3	153.7	60.8	54.2	50.4	14.2	*0.7	4.9	504.3
<b>Total</b>	<b>2 146.7</b>	<b>1 959.4</b>	<b>1 176.3</b>	<b>625.2</b>	<b>753.8</b>	<b>188.1</b>	<b>63.3</b>	<b>117.9</b>	<b>7 030.8</b>
ATTENDANCE RATE (%)									
<b>Males</b>									
15-24	63.7	71.3	67.9	70.0	74.4	75.4	71.5	74.4	68.5
25-34	63.6	70.2	60.8	70.0	64.3	70.7	65.2	55.0	65.4
35-44	50.8	66.2	54.6	62.5	61.9	60.3	67.0	57.6	57.8
45-54	46.5	66.6	46.1	67.7	58.6	59.3	59.0	52.2	54.8
55-64	40.4	44.9	30.7	52.6	41.6	42.7	46.5	45.8	41.0
65 and over	27.5	30.2	19.3	34.3	31.9	30.1	**21.4	31.1	27.9
<b>Total</b>	<b>50.3</b>	<b>60.5</b>	<b>49.5</b>	<b>60.5</b>	<b>58.4</b>	<b>57.9</b>	<b>62.0</b>	<b>56.0</b>	<b>54.7</b>
<b>Females</b>									
15-24	52.8	59.9	57.3	69.1	56.6	60.9	72.2	62.4	57.6
25-34	42.1	54.0	49.2	60.9	58.8	54.6	58.5	55.0	50.2
35-44	34.9	49.0	34.4	49.3	44.8	48.9	59.8	46.6	41.2
45-54	31.4	44.8	35.8	38.6	46.3	50.0	47.0	36.8	38.3
55-64	32.2	30.8	19.3	31.0	32.4	31.3	*27.6	31.7	29.4
65 and over	14.7	22.4	12.1	18.4	21.0	16.9	**6.1	*11.0	17.1
<b>Total</b>	<b>34.8</b>	<b>44.5</b>	<b>36.5</b>	<b>44.5</b>	<b>45.1</b>	<b>44.1</b>	<b>54.9</b>	<b>44.1</b>	<b>39.8</b>
<b>Persons</b>									
15-24	58.3	65.7	62.7	69.6	65.7	68.3	71.9	68.6	63.1
25-34	52.8	62.0	54.9	65.5	61.6	62.5	61.9	55.0	57.7
35-44	42.8	57.5	44.4	55.8	53.4	54.5	63.6	51.8	49.4
45-54	39.1	55.7	41.1	53.0	52.6	54.7	53.5	44.3	46.6
55-64	36.3	37.8	25.2	41.7	37.1	37.0	39.2	38.8	35.3
65 and over	20.3	25.8	15.3	25.3	25.9	22.6	*13.5	19.8	21.8
<b>Total</b>	<b>42.4</b>	<b>52.3</b>	<b>42.9</b>	<b>52.3</b>	<b>51.8</b>	<b>50.8</b>	<b>58.6</b>	<b>49.9</b>	<b>47.1</b>

(a) Includes predominantly urban areas only—see paragraph 3 of the Explanatory Notes.

# 3

## PERSONS ATTENDING SPORT, By Occupation—Attendance rates

<i>Occupation</i>	<i>Males</i>	<i>Females</i>	<i>Persons</i>
	%	%	%
Managers and administrators	65.1	51.5	62.0
Professionals	60.7	52.8	56.7
Associate professionals	64.9	57.3	62.4
Tradespersons	63.0	41.1	61.0
Advanced and service clerical workers	70.8	54.3	56.6
Intermediate clerical sales and service workers	68.5	51.6	56.5
Intermediate production and transport workers	55.3	46.5	54.2
Elementary clerical sales and service workers	62.5	57.6	59.2
Labourers and related workers	60.5	40.5	53.2
<b>Total employed</b>	<b>62.2</b>	<b>51.9</b>	<b>57.7</b>

# 4

## PERSONS ATTENDING SPORT, By Educational Attainment—Attendance rates(a)

	<i>Males</i>	<i>Females</i>	<i>Persons</i>
	%	%	%
Higher degree	52.1	37.1	45.9
Postgraduate diploma	65.3	51.0	56.3
Bachelor degree	62.6	48.0	54.8
Undergraduate diploma	56.6	42.1	47.8
Associate diploma	69.2	46.3	57.2
Skilled vocational qualification	61.3	48.1	59.8
Basic vocational qualification	60.3	49.3	53.0
No qualification	56.6	42.1	48.9
Still at school	66.1	56.9	61.6

(a) Excludes persons aged 65 years and over.

# 5

## PERSONS ATTENDING SELECTED SPORTS

	MALES.....		FEMALES.....		PERSONS.....	
	Number	Attendance rate	Number	Attendance rate	Number	Attendance rate
	'000	%	'000	%	'000	%
Australian Rules	1 497.4	20.4	1 011.9	13.4	2 509.2	16.8
Horse racing	959.9	13.1	796.6	10.5	1 756.4	11.8
Motor sports	1 082.6	14.7	491.7	6.5	1 574.3	10.6
Rugby League	969.8	13.2	531.3	7.0	1 501.1	10.1
Cricket	671.8	9.2	270.8	3.6	942.5	6.3
Soccer	400.0	5.4	221.2	2.9	621.2	4.2
Harness racing	300.0	4.1	234.7	3.1	534.8	3.6
Basketball	278.2	3.8	247.8	3.3	526.0	3.5
Rugby Union	299.8	4.1	146.4	1.9	446.2	3.0
Tennis	215.3	2.9	228.7	3.0	444.0	3.0
Dog racing	177.8	2.4	98.6	1.3	276.4	1.9
Netball	58.2	0.8	190.5	2.5	248.7	1.7
Golf	91.0	1.2	36.1	0.5	127.2	0.9
Hockey-outdoor	53.1	0.7	56.1	0.7	109.2	0.7
Bowls	43.8	0.6	40.2	0.5	83.9	0.6
Baseball	25.9	0.4	35.6	0.5	61.5	0.4
Softball	25.8	0.4	30.0	0.4	55.8	0.4
Swimming	27.6	0.4	22.9	0.3	50.6	0.3
Horse riding, equestrian events	14.7	0.2	35.7	0.5	50.4	0.3
Touch football	19.0	0.3	31.3	0.4	50.3	0.3
Athletics, track and field, running	21.7	0.3	20.3	0.3	42.0	0.3
Volleyball	21.5	0.3	17.1	0.2	38.7	0.3
Surf sports	22.1	0.3	15.3	0.2	37.4	0.3
Cycling	25.0	0.3	*12.2	*0.2	37.2	0.2
Martial arts	13.9	0.2	20.5	0.3	34.3	0.2
Surf lifesaving	*9.7	*0.1	13.1	0.2	22.8	0.2
Cricket-indoor	*12.6	*0.2	*9.1	*0.1	21.7	0.1
Squash	13.7	0.2	*6.0	*0.1	19.6	0.1
Boxing	12.8	0.2	*4.9	*0.1	17.8	0.1
Sailing	*6.5	*0.1	*10.6	*0.1	17.1	0.1
Triathlon	*8.4	*0.1	*8.3	*0.1	16.7	0.1
Rodeo	*6.0	*0.1	*10.0	*0.1	16.0	0.1
Water-skiing, powerboating	*9.9	*0.1	*4.6	*0.1	14.5	0.1
Rowing	*6.7	*0.1	*7.8	*0.1	14.5	0.1
Gymnastics	*3.4	*—	*10.8	*0.1	14.2	0.1
Roller sports	*11.2	*0.2	**1.8	**—	13.0	0.1

## PERSONS ATTENDING MAIN SPORTS, By State or Territory of Usual Residence

	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
MALES ('000)									
Australian Rules	117.3	768.8	77.0	237.5	210.3	60.1	14.4	11.9	1 497.4
Horse racing	333.0	256.6	176.2	62.9	87.2	22.2	10.0	11.6	959.9
Motor sports	260.1	311.0	186.2	118.6	142.2	34.8	16.7	13.1	1 082.6
Rugby League	566.9	47.0	301.3	8.1	10.1	**0.7	7.1	28.6	969.8
Cricket	203.6	216.4	80.8	59.3	72.6	26.5	3.1	9.4	671.8
Soccer	172.7	73.4	50.7	38.2	53.2	4.5	*2.1	5.2	400.0
Harness racing	90.7	91.1	26.7	21.3	56.4	11.2	*0.8	*1.7	300.0
Basketball	52.5	97.8	42.2	32.4	35.8	8.0	*1.9	7.6	278.2
Rugby Union	164.0	19.9	72.6	*2.3	18.0	*2.2	*2.0	18.9	299.8
Tennis	45.0	124.7	*11.2	14.5	15.9	*1.9	*1.2	**0.8	215.3
Dog racing	64.1	36.9	24.6	13.3	28.9	8.0	*0.9	*1.1	177.8
Netball	*11.7	13.1	17.8	7.7	*4.1	*2.0	*1.3	**0.5	58.2
FEMALES ('000)									
Australian Rules	100.5	500.2	43.1	165.1	145.9	40.0	9.5	7.5	1 011.9
Horse racing	259.1	232.2	140.1	57.8	68.7	18.5	7.6	12.6	796.6
Motor sports	129.4	123.3	90.0	52.5	61.8	16.9	11.9	5.9	491.7
Rugby League	298.9	15.4	178.2	*5.4	9.2	**0.7	4.2	19.2	531.3
Cricket	78.8	85.7	32.4	27.0	33.9	7.6	*1.8	3.5	270.8
Soccer	79.1	31.2	39.2	18.4	39.5	4.1	*2.1	7.6	221.2
Harness racing	61.6	72.6	17.9	19.6	52.8	8.3	**0.5	*1.6	234.7
Basketball	49.2	78.4	34.6	31.1	34.9	9.4	2.3	7.8	247.8
Rugby Union	80.4	*10.1	30.6	**1.6	7.2	*0.9	*1.9	13.7	146.4
Tennis	45.1	131.6	14.3	18.3	14.7	3.3	**0.6	**0.8	228.7
Dog racing	30.8	20.6	*9.3	*6.1	26.8	*2.7	*1.4	**0.8	98.6
Netball	48.0	52.4	29.3	30.1	18.2	8.3	2.4	*1.9	190.5
PERSONS ('000)									
Australian Rules	217.8	1 269.0	120.1	402.6	356.3	100.1	23.8	19.4	2 509.2
Horse racing	592.1	488.8	316.3	120.7	155.9	40.7	17.6	24.2	1 756.4
Motor sports	389.5	434.3	276.2	171.0	204.0	51.7	28.6	19.0	1 574.3
Rugby League	865.9	62.5	479.5	13.5	19.3	*1.4	11.3	47.8	1 501.1
Cricket	282.4	302.2	113.3	86.3	106.5	34.1	5.0	12.9	942.5
Soccer	251.8	104.6	89.9	56.6	92.7	8.6	4.2	12.8	621.2
Harness racing	152.3	163.8	44.6	40.9	109.2	19.5	*1.3	3.3	534.8
Basketball	101.7	176.2	76.8	63.5	70.7	17.4	4.2	15.5	526.0
Rugby Union	244.4	30.0	103.2	*3.9	25.2	3.1	3.9	32.5	446.2
Tennis	90.1	256.3	25.5	32.8	30.6	5.2	*1.8	*1.6	444.0
Dog racing	95.0	57.5	33.9	19.5	55.7	10.7	2.3	*1.9	276.4
Netball	59.6	65.5	47.1	37.8	22.3	10.3	3.7	*2.4	248.7

(a) Includes predominantly urban areas only—see paragraph 3 of the Explanatory Notes.



	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
MALES (attendance rate %)									
Australian Rules	4.7	41.9	5.7	40.6	28.9	33.3	25.4	10.4	20.4
Horse racing	13.4	14.0	13.0	10.8	12.0	12.3	17.7	10.1	13.1
Motor sports	10.5	17.0	13.7	20.3	19.5	19.3	29.5	11.4	14.7
Rugby League	22.8	2.6	22.2	1.4	1.4	**0.4	12.6	25.0	13.2
Cricket	8.2	11.8	6.0	10.1	10.0	14.7	5.6	8.2	9.2
Soccer	6.9	4.0	3.7	6.5	7.3	2.5	*3.7	4.5	5.4
Harness racing	3.6	5.0	2.0	3.6	7.8	6.2	*1.4	*1.5	4.1
Basketball	2.1	5.3	3.1	5.5	4.9	4.5	*3.3	6.7	3.8
Rugby Union	6.6	1.1	5.3	*0.4	2.5	*1.2	*3.6	16.5	4.1
Tennis	1.8	6.8	*0.8	2.5	2.2	*1.1	*2.2	**0.7	2.9
Dog racing	2.6	2.0	1.8	2.3	4.0	4.4	*1.6	*0.9	2.4
Netball	*0.5	0.7	1.3	1.3	*0.6	*1.1	*2.3	**0.4	0.8
FEMALES (attendance rate %)									
Australian Rules	3.9	26.1	3.1	27.0	20.0	21.1	18.4	6.1	13.4
Horse racing	10.1	12.1	10.1	9.5	9.4	9.7	14.8	10.4	10.5
Motor sports	5.0	6.4	6.5	8.6	8.5	8.9	23.1	4.9	6.5
Rugby League	11.6	0.8	12.9	*0.9	1.3	**0.4	8.1	15.7	7.0
Cricket	3.1	4.5	2.3	4.4	4.6	4.0	*3.5	2.9	3.6
Soccer	3.1	1.6	2.8	3.0	5.4	2.2	*4.1	6.3	2.9
Harness racing	2.4	3.8	1.3	3.2	7.2	4.4	**0.9	*1.3	3.1
Basketball	1.9	4.1	2.5	5.1	4.8	4.9	4.5	6.4	3.3
Rugby Union	3.1	*0.5	2.2	**0.3	1.0	*0.5	*3.7	11.2	1.9
Tennis	1.8	6.9	1.0	3.0	2.0	1.7	**1.2	**0.7	3.0
Dog racing	1.2	1.1	*0.7	*1.0	3.7	*1.4	*2.8	**0.7	1.3
Netball	1.9	2.7	2.1	4.9	2.5	4.4	4.7	*1.5	2.5
PERSONS (attendance rate %)									
Australian Rules	4.3	33.9	4.4	33.7	24.5	27.1	22.1	8.2	16.8
Horse racing	11.7	13.0	11.5	10.1	10.7	11.0	16.3	10.3	11.8
Motor sports	7.7	11.6	10.1	14.3	14.0	14.0	26.4	8.0	10.6
Rugby League	17.1	1.7	17.5	1.1	1.3	*0.4	10.5	20.2	10.1
Cricket	5.6	8.1	4.1	7.2	7.3	9.2	4.6	5.4	6.3
Soccer	5.0	2.8	3.3	4.7	6.4	2.3	3.9	5.4	4.2
Harness racing	3.0	4.4	1.6	3.4	7.5	5.3	*1.2	1.4	3.6
Basketball	2.0	4.7	2.8	5.3	4.9	4.7	3.9	6.5	3.5
Rugby Union	4.8	0.8	3.8	*0.3	1.7	0.8	3.6	13.8	3.0
Tennis	1.8	6.8	0.9	2.7	2.1	1.4	*1.7	*0.7	3.0
Dog racing	1.9	1.5	1.2	1.6	3.8	2.9	2.1	*0.8	1.9
Netball	1.2	1.7	1.7	3.2	1.5	2.8	3.4	*1.0	1.7

(a) Includes predominantly urban areas only—see paragraph 3 of the Explanatory Notes.

# 7

## PERSONS ATTENDING MAIN SPORTS, By Age and Sex

AGE GROUP (YEARS).....

	15-24	25-34	35-44	45-54	55-64	65 and over	Total
MALES ('000)							
Australian Rules	329.9	364.6	328.5	273.2	114.4	86.8	1 497.4
Horse racing	164.4	264.0	198.0	159.1	101.3	73.0	959.9
Motor sports	345.8	288.9	219.5	156.2	51.4	20.8	1 082.6
Rugby League	266.0	247.0	194.4	149.3	65.6	47.6	969.8
Cricket	171.2	177.7	130.1	103.7	57.4	31.6	671.8
Soccer	113.5	97.3	70.2	62.2	31.0	25.7	400.0
Harness racing	48.0	71.3	74.8	48.5	30.1	27.2	300.0
Basketball	114.4	49.8	60.4	33.6	*11.2	*8.8	278.2
Rugby Union	65.9	84.0	69.8	49.7	23.3	*7.1	299.8
Tennis	56.4	47.5	38.8	49.8	*9.6	13.3	215.3
Dog racing	40.3	49.1	35.4	31.4	12.5	*9.1	177.8
Netball	16.6	15.7	14.0	*10.2	**0.8	**0.8	58.2
FEMALES ('000)							
Australian Rules	260.0	252.4	209.1	158.7	70.2	61.5	1 011.9
Horse racing	144.1	202.6	167.3	126.4	84.0	72.2	796.6
Motor sports	183.6	124.1	96.9	63.0	14.6	*9.7	491.7
Rugby League	164.2	154.9	100.5	58.7	30.4	22.6	531.3
Cricket	71.8	64.9	52.5	43.0	24.4	14.1	270.8
Soccer	86.7	43.0	39.2	30.3	16.5	*5.5	221.2
Harness racing	37.4	50.6	59.0	43.2	21.6	22.9	234.7
Basketball	83.1	59.7	58.0	34.7	*7.9	*4.4	247.8
Rugby Union	33.4	49.3	28.2	24.8	*6.2	*4.5	146.4
Tennis	54.2	51.7	37.2	49.0	18.7	17.9	228.7
Dog racing	27.9	22.5	19.9	15.9	*7.1	*5.4	98.6
Netball	76.5	34.1	44.2	22.2	*6.9	*6.6	190.5
PERSONS ('000)							
Australian Rules	589.9	617.0	537.6	431.9	184.6	148.3	2 509.2
Horse racing	308.5	466.6	365.3	285.5	185.3	145.2	1 756.4
Motor sports	529.3	412.9	316.4	219.1	66.0	30.5	1 574.3
Rugby League	430.1	401.9	294.9	208.0	96.0	70.2	1 501.1
Cricket	243.1	242.6	182.6	146.8	81.8	45.7	942.5
Soccer	200.3	140.3	109.4	92.5	47.5	31.2	621.2
Harness racing	85.4	122.0	133.8	91.7	51.7	50.1	534.8
Basketball	197.5	109.5	118.4	68.2	19.1	13.2	526.0
Rugby Union	99.3	133.3	98.0	74.6	29.4	*11.6	446.2
Tennis	110.6	99.1	75.9	98.8	28.3	31.2	444.0
Dog racing	68.2	71.5	55.3	47.2	19.5	14.6	276.4
Netball	93.2	49.8	58.2	32.4	*7.7	*7.3	248.7

## AGE GROUP (YEARS).....

	15-24	25-34	35-44	45-54	55-64	65 and over	Total
MALES (attendance rate %)							
Australian Rules	24.3	25.7	22.8	21.5	13.6	8.6	20.4
Horse racing	12.1	18.6	13.7	12.5	12.1	7.2	13.1
Motor sports	25.5	20.3	15.2	12.3	6.1	2.1	14.7
Rugby League	19.6	17.4	13.5	11.8	7.8	4.7	13.2
Cricket	12.6	12.5	9.0	8.2	6.8	3.1	9.2
Soccer	8.4	6.9	4.9	4.9	3.7	2.5	5.4
Harness racing	3.5	5.0	5.2	3.8	3.6	2.7	4.1
Basketball	8.4	3.5	4.2	2.6	*1.3	*0.9	3.8
Rugby Union	4.8	5.9	4.8	3.9	2.8	*0.7	4.1
Tennis	4.2	3.3	2.7	3.9	*1.1	1.3	2.9
Dog racing	3.0	3.5	2.5	2.5	1.5	*0.9	2.4
Netball	1.2	1.1	1.0	*0.8	**0.1	**0.1	0.8
FEMALES (attendance rate %)							
Australian Rules	19.9	17.6	14.3	12.7	8.5	4.7	13.4
Horse racing	11.0	14.1	11.4	10.1	10.2	5.6	10.5
Motor sports	14.0	8.6	6.6	5.0	1.8	*0.7	6.5
Rugby League	12.6	10.8	6.9	4.7	3.7	1.7	7.0
Cricket	5.5	4.5	3.6	3.4	3.0	1.1	3.6
Soccer	6.6	3.0	2.7	2.4	2.0	*0.4	2.9
Harness racing	2.9	3.5	4.0	3.5	2.6	1.8	3.1
Basketball	6.4	4.2	4.0	2.8	*1.0	*0.3	3.3
Rugby Union	2.6	3.4	1.9	2.0	*0.7	*0.3	1.9
Tennis	4.1	3.6	2.5	3.9	2.3	1.4	3.0
Dog racing	2.1	1.6	1.4	1.3	*0.9	*0.4	1.3
Netball	5.9	2.4	3.0	1.8	*0.8	*0.5	2.5
PERSONS (attendance rate %)							
Australian Rules	22.1	21.6	18.5	17.2	11.1	6.4	16.8
Horse racing	11.6	16.3	12.6	11.3	11.1	6.3	11.8
Motor sports	19.9	14.5	10.9	8.7	4.0	1.3	10.6
Rugby League	16.1	14.1	10.2	8.3	5.8	3.0	10.1
Cricket	9.1	8.5	6.3	5.8	4.9	2.0	6.3
Soccer	7.5	4.9	3.8	3.7	2.9	1.3	4.2
Harness racing	3.2	4.3	4.6	3.6	3.1	2.2	3.6
Basketball	7.4	3.8	4.1	2.7	1.1	0.6	3.5
Rugby Union	3.7	4.7	3.4	3.0	1.8	*0.5	3.0
Tennis	4.1	3.5	2.6	3.9	1.7	1.4	3.0
Dog racing	2.6	2.5	1.9	1.9	1.2	0.6	1.9
Netball	3.5	1.7	2.0	1.3	*0.5	*0.3	1.7

## 8

## PERSONS ATTENDING MAIN SPORTS, By Occupation—Attendance rates

	<i>Managers and administrators</i>	<i>Professionals</i>	<i>Associate professionals</i>	<i>Tradespersons</i>	<i>Advanced and service clerical workers</i>	<i>Intermediate clerical sales and service workers</i>	<i>Intermediate production and transport workers</i>	<i>Elementary clerical sales and service workers</i>	<i>Labourers and related workers</i>	<i>Total employed</i>
	%	%	%	%	%	%	%	%	%	%
Australian Rules	26.4	23.0	25.2	21.2	21.0	21.0	17.8	20.5	15.7	21.5
Horse racing	19.6	14.9	17.1	15.1	17.6	15.6	10.8	12.8	10.6	14.7
Motor sports	13.8	8.3	14.7	23.5	11.5	12.1	17.5	13.1	16.5	14.2
Rugby League	12.5	11.0	13.3	15.2	8.1	13.4	13.5	14.0	12.8	12.9
Cricket	10.3	11.1	11.3	7.5	4.8	7.5	5.4	7.2	6.1	8.2
Soccer	3.8	4.5	4.7	4.7	6.3	5.4	5.4	6.6	4.2	5.0
Harness racing	5.2	3.7	4.6	4.6	*2.7	4.9	4.4	3.3	4.2	4.2
Basketball	3.5	5.4	4.6	3.1	6.3	5.0	3.4	6.3	3.0	4.5
Rugby Union	7.7	6.5	5.2	2.5	4.5	4.1	2.1	2.1	2.2	4.2
Tennis	5.2	5.4	5.6	1.9	4.6	4.2	2.1	3.1	1.8	3.8
Dog racing	2.3	1.3	3.0	2.6	*1.4	1.7	3.3	2.5	2.0	2.2
Netball	*1.9	2.0	1.8	*0.7	*2.8	3.5	*1.0	3.4	*1.6	2.1

## 9

## PERSONS ATTENDING MAIN SPORTS, By Educational Attainment—Attendance rates(a)

	<i>Higher degree</i>	<i>Postgraduate diploma</i>	<i>Bachelor degree</i>	<i>Undergraduate diploma</i>	<i>Associate diploma</i>	<i>Skilled vocational qualification</i>	<i>Basic vocational qualification</i>	<i>No qualification</i>	<i>Still at school</i>
	%	%	%	%	%	%	%	%	%
Australian Rules	17.8	21.9	23.3	18.2	19.1	20.2	17.1	17.5	22.3
Horse racing	11.7	15.2	15.6	12.8	13.4	15.6	14.0	12.1	6.0
Motor sports	*4.8	8.8	8.3	7.6	14.8	19.9	11.6	11.5	18.3
Rugby League	*7.1	10.8	10.4	9.1	14.1	14.3	11.6	10.7	15.0
Cricket	12.6	13.1	10.1	8.3	9.1	8.1	4.5	6.1	9.0
Soccer	*3.9	6.4	4.7	4.8	4.0	5.2	3.7	4.6	7.0
Harness racing	*2.0	*4.3	2.8	2.9	*3.5	5.1	4.5	3.8	3.2
Basketball	*3.6	*3.7	5.0	3.7	5.5	2.7	5.0	3.8	7.2
Rugby Union	10.0	*5.1	7.9	4.0	4.3	2.7	2.8	2.6	2.8
Tennis	*5.2	7.0	6.2	3.1	5.1	1.5	3.2	2.8	4.6
Dog racing	**1.4	**0.6	1.2	*1.4	*1.5	2.4	2.7	2.2	*1.4
Netball	**0.2	**1.1	2.0	*1.7	*1.9	*0.7	2.5	2.1	3.5

(a) Excludes persons aged 65 years and over.

	1-2 times.....		3-5 times.....		6 times or more..		Total.....	
	'000	%	'000	%	'000	%	'000	%
MALES								
Australian Rules	500.8	33.4	381.9	25.5	614.6	41.0	1 497.4	100.0
Horse racing	580.4	60.5	224.2	23.4	155.2	16.2	959.9	100.0
Motor sports	712.2	65.8	208.5	19.3	161.8	14.9	1 082.6	100.0
Rugby League	406.8	41.9	282.9	29.2	280.2	28.9	969.8	100.0
Cricket	385.0	57.3	156.1	23.2	130.7	19.5	671.8	100.0
Soccer	111.7	27.9	112.2	28.1	176.1	44.0	400.0	100.0
Harness racing	193.8	64.6	51.9	17.3	54.4	18.1	300.0	100.0
Basketball	128.7	46.3	64.8	23.3	84.7	30.5	278.2	100.0
Rugby Union	135.4	45.2	77.0	25.7	87.4	29.1	299.8	100.0
Tennis	155.8	72.4	33.2	15.4	26.3	12.2	215.3	100.0
Dog racing	120.7	67.9	30.0	16.9	27.1	15.2	177.8	100.0
Netball	14.2	24.5	14.0	24.0	30.0	51.5	58.2	100.0
FEMALES								
Australian Rules	425.1	42.0	238.1	23.5	348.7	34.5	1 011.9	100.0
Horse racing	560.9	70.4	152.5	19.1	83.2	10.4	796.6	100.0
Motor sports	353.2	71.8	82.4	16.8	56.2	11.4	491.7	100.0
Rugby League	244.8	46.1	145.5	27.4	140.9	26.5	531.3	100.0
Cricket	152.2	56.2	61.0	22.5	57.5	21.3	270.8	100.0
Soccer	77.7	35.1	63.2	28.6	80.3	36.3	221.2	100.0
Harness racing	154.1	65.7	37.9	16.1	42.7	18.2	234.7	100.0
Basketball	106.7	43.1	59.3	23.9	81.8	33.0	247.8	100.0
Rugby Union	65.2	44.5	41.1	28.1	40.1	27.4	146.4	100.0
Tennis	150.0	65.6	50.3	22.0	28.4	12.4	228.7	100.0
Dog racing	73.5	74.6	*10.2	*10.3	14.9	15.1	98.6	100.0
Netball	42.3	22.2	41.8	22.0	106.3	55.8	190.5	100.0
PERSONS								
Australian Rules	925.8	36.9	620.0	24.7	963.4	38.4	2 509.2	100.0
Horse racing	1 141.3	65.0	376.7	21.4	238.4	13.6	1 756.4	100.0
Motor sports	1 065.4	67.7	290.9	18.5	218.0	13.8	1 574.3	100.0
Rugby League	651.6	43.4	428.4	28.5	421.1	28.1	1 501.1	100.0
Cricket	537.2	57.0	217.1	23.0	188.2	20.0	942.5	100.0
Soccer	189.3	30.5	175.4	28.2	256.4	41.3	621.2	100.0
Harness racing	347.9	65.1	89.7	16.8	97.1	18.2	534.8	100.0
Basketball	235.4	44.8	124.0	23.6	166.5	31.7	526.0	100.0
Rugby Union	200.6	45.0	118.1	26.5	127.5	28.6	446.2	100.0
Tennis	305.8	68.9	83.5	18.8	54.7	12.3	444.0	100.0
Dog racing	194.3	70.3	40.1	14.5	42.0	15.2	276.4	100.0
Netball	56.5	22.7	55.8	22.4	136.3	54.8	248.7	100.0

	PERSONS.....		ATTENDANCE RATE.....	
	1995	1999	1995	1999
	'000	'000	%	%
<b>Australian Rules</b>				
New South Wales	87.3	217.8	1.8	4.3
Victoria	1 007.0	1 269.0	28.4	33.9
Queensland	71.0	120.1	2.8	4.4
South Australia	313.7	402.6	26.8	33.7
Western Australia	278.2	356.3	20.9	24.5
Tasmania	83.5	100.1	22.8	27.1
Northern Territory(b)	18.0	23.8	14.9	22.1
Australian Capital Territory	15.3	19.4	6.7	8.2
<b>Australia</b>	<b>1 874.2</b>	<b>2 509.2</b>	<b>13.3</b>	<b>16.8</b>
<b>Horse racing</b>				
New South Wales	551.4	592.1	11.5	11.7
Victoria	468.6	488.8	13.2	13.0
Queensland	316.1	316.3	12.5	11.5
South Australia	123.4	120.7	10.5	10.1
Western Australia	150.6	155.9	11.3	10.7
Tasmania	43.9	40.7	12.0	11.0
Northern Territory(b)	17.9	17.6	14.8	16.3
Australian Capital Territory	29.2	24.2	12.7	10.3
<b>Australia</b>	<b>1 701.1</b>	<b>1 756.4</b>	<b>12.1</b>	<b>11.8</b>
<b>Motor sports(c)</b>				
New South Wales	125.5	389.5	2.6	7.7
Victoria	113.6	434.3	3.2	11.6
Queensland	79.7	276.2	3.2	10.1
South Australia	55.0	171.0	4.7	14.3
Western Australia	46.2	204.0	3.5	14.0
Tasmania	16.9	51.7	4.6	14.0
Northern Territory(b)	6.0	28.6	5.0	26.4
Australian Capital Territory	8.5	19.0	3.7	8.0
<b>Australia</b>	<b>451.5</b>	<b>1 574.3</b>	<b>3.2</b>	<b>10.6</b>
<b>Rugby League</b>				
New South Wales	819.6	865.9	17.1	17.1
Victoria	55.4	62.5	1.6	1.7
Queensland	447.6	479.5	17.7	17.5
South Australia	16.8	13.5	1.4	1.1
Western Australia	40.1	19.3	3.0	1.3
Tasmania	3.1	*1.4	0.8	*0.4
Northern Territory(b)	14.6	11.3	12.1	10.5
Australian Capital Territory	64.8	47.8	28.3	20.2
<b>Australia</b>	<b>1 462.1</b>	<b>1 501.1</b>	<b>10.4</b>	<b>10.1</b>
<b>Cricket</b>				
New South Wales	320.8	282.4	6.7	5.6
Victoria	398.8	302.2	11.3	8.1
Queensland	137.2	113.3	5.4	4.1
South Australia	126.2	86.3	10.8	7.2
Western Australia	117.6	106.5	8.8	7.3
Tasmania	40.1	34.1	10.9	9.2
Northern Territory(b)	6.4	5.0	5.3	4.6
Australian Capital Territory	18.7	12.9	8.2	5.4
<b>Australia</b>	<b>1 165.9</b>	<b>942.5</b>	<b>8.3</b>	<b>6.3</b>

(a) Care should be taken in interpreting the data presented in this table as most of the changes between 1995 and 1999 are not statistically significant. See paragraphs 6 to 9 of the Technical Note for more details.

(b) Includes predominantly urban areas only—see paragraph 3 of the Explanatory Notes.

(c) The increase in motor sports attendances needs to be treated with caution because much of the difference may be attributed to changes in the way the question was asked (see paragraph 14 of the Explanatory Notes).

	PERSONS.....		ATTENDANCE RATE.....	
	1995	1999	1995	1999
	'000	'000	%	%
<b>Soccer</b>				
New South Wales	209.6	251.8	4.4	5.0
Victoria	140.8	104.6	4.0	2.8
Queensland	92.9	89.9	3.7	3.3
South Australia	52.8	56.6	4.5	4.7
Western Australia	40.8	92.7	3.1	6.4
Tasmania	5.7	8.6	1.6	2.3
Northern Territory(b)	6.8	4.2	5.7	3.9
Australian Capital Territory	9.5	12.8	4.1	5.4
<b>Australia</b>	<b>558.8</b>	<b>621.2</b>	<b>4.0</b>	<b>4.2</b>
<b>Harness racing</b>				
New South Wales	153.2	152.3	3.2	3.0
Victoria	179.5	163.8	5.1	4.4
Queensland	64.4	44.6	2.6	1.6
South Australia	61.1	40.9	5.2	3.4
Western Australia	116.9	109.2	8.8	7.5
Tasmania	17.2	19.5	4.7	5.3
Northern Territory(b)	*2.2	*1.3	*1.8	*1.2
Australian Capital Territory	5.2	3.3	2.3	1.4
<b>Australia</b>	<b>599.7</b>	<b>534.8</b>	<b>4.3</b>	<b>3.6</b>
<b>Basketball</b>				
New South Wales	172.8	101.7	3.6	2.0
Victoria	207.3	176.2	5.9	4.7
Queensland	96.0	76.8	3.8	2.8
South Australia	80.0	63.5	6.8	5.3
Western Australia	85.1	70.7	6.4	4.9
Tasmania	24.0	17.4	6.5	4.7
Northern Territory(b)	8.1	4.2	6.7	3.9
Australian Capital Territory	18.4	15.5	8.0	6.5
<b>Australia</b>	<b>691.6</b>	<b>526.0</b>	<b>4.9</b>	<b>3.5</b>
<b>Rugby Union</b>				
New South Wales	168.7	244.4	3.5	4.8
Victoria	19.7	30.0	0.6	0.8
Queensland	119.1	103.2	4.7	3.8
South Australia	8.6	*3.9	0.7	*0.3
Western Australia	21.8	25.2	1.6	1.7
Tasmania	*3.0	3.1	*0.8	0.8
Northern Territory(b)	8.3	3.9	6.9	3.6
Australian Capital Territory	9.1	32.5	4.0	13.8
<b>Australia</b>	<b>358.4</b>	<b>446.2</b>	<b>2.5</b>	<b>3.0</b>
<b>Tennis</b>				
New South Wales	93.3	90.1	2.0	1.8
Victoria	222.8	256.3	6.3	6.8
Queensland	27.0	25.5	1.1	0.9
South Australia	47.4	32.8	4.0	2.7
Western Australia	31.4	30.6	2.4	2.1
Tasmania	5.2	5.2	1.4	1.4
Northern Territory(b)	*1.5	*1.8	*1.2	*1.7
Australian Capital Territory	3.1	*1.6	1.3	*0.7
<b>Australia</b>	<b>431.7</b>	<b>444.0</b>	<b>3.1</b>	<b>3.0</b>

(a) Care should be taken in interpreting the data presented in this table as most of the changes between 1995 and 1999 are not statistically significant. See paragraphs 6 to 9 of the Technical Note for more details.

(b) Includes predominantly urban areas only—see paragraph 3 of the Explanatory Notes.

	PERSONS.....		ATTENDANCE RATE.....	
	1995	1999	1995	1999
	'000	'000	%	%
<b>Dog racing</b>				
New South Wales	98.9	95.0	2.1	1.9
Victoria	65.3	57.5	1.8	1.5
Queensland	50.7	33.9	2.0	1.2
South Australia	15.4	19.5	1.3	1.6
Western Australia	54.9	55.7	4.1	3.8
Tasmania	10.2	10.7	2.8	2.9
Northern Territory(b)	*2.7	2.3	*2.3	2.1
Australian Capital Territory	3.5	*1.9	1.5	*0.8
<b>Australia</b>	<b>301.7</b>	<b>276.4</b>	<b>2.1</b>	<b>1.9</b>
<b>Netball</b>				
New South Wales	76.0	59.6	1.6	1.2
Victoria	70.8	65.5	2.0	1.7
Queensland	59.8	47.1	2.4	1.7
South Australia	60.6	37.8	5.2	3.2
Western Australia	27.8	22.3	2.1	1.5
Tasmania	10.3	10.3	2.8	2.8
Northern Territory(b)	*2.7	3.7	*2.3	3.4
Australian Capital Territory	4.3	*2.4	1.9	*1.0
<b>Australia</b>	<b>312.3</b>	<b>248.7</b>	<b>2.2</b>	<b>1.7</b>
<b>Total sports(d)</b>				
New South Wales	1 886.0	2 146.7	39.4	42.4
Victoria	1 727.2	1 959.4	48.7	52.3
Queensland	1 070.0	1 176.3	42.4	42.9
South Australia	573.9	625.2	49.1	52.3
Western Australia	634.5	753.8	47.6	51.8
Tasmania	172.6	188.1	47.0	50.8
Northern Territory(b)	60.9	63.3	50.4	58.6
Australian Capital Territory	112.7	117.9	49.1	49.9
<b>Australia</b>	<b>6 237.8</b>	<b>7 030.8</b>	<b>44.3</b>	<b>47.1</b>
<b>Total sports (excluding motor sports(c)(d))</b>				
New South Wales	1 829.7	1 970.7	38.3	38.9
Victoria	1 692.9	1 824.2	47.8	48.7
Queensland	1 041.9	1 050.6	41.3	38.3
South Australia	556.9	575.0	47.6	48.1
Western Australia	617.5	678.0	46.3	46.6
Tasmania	164.7	166.2	44.9	44.9
Northern Territory(b)	59.0	53.4	48.9	49.4
Australian Capital Territory	110.7	112.5	48.3	47.6
<b>Australia</b>	<b>6 073.4</b>	<b>6 430.6</b>	<b>43.2</b>	<b>43.1</b>

(a) Care should be taken in interpreting the data presented in this table as most of the changes between 1995 and 1999 are not statistically significant. See paragraphs 6 to 9 of the Technical Note for more details.

(b) Includes predominantly urban areas only—see paragraph 3 of the Explanatory Notes.

(c) The increase in motor sports attendances needs to be treated with caution because much of the difference may be attributed to changes in the way the question was asked (see paragraph 14 of the Explanatory Notes).

(d) Includes attendance at all sports, not just those listed above.



Age group (years)	PERSONS.....		ATTENDANCE RATE.....	
	1995	1999	1995	1999
	'000	'000	%	%
<b>Australian rules</b>				
15-24	474.5	589.9	17.6	22.1
25-34	457.5	617.0	16.3	21.6
35-44	400.7	537.6	14.7	18.5
45-54	284.8	431.9	12.9	17.2
55-64	133.9	184.6	8.9	11.1
65 and over	122.8	148.3	5.7	6.4
<b>Total</b>	<b>1 874.2</b>	<b>2 509.2</b>	<b>13.3</b>	<b>16.8</b>
<b>Horse racing</b>				
15-24	353.4	308.5	13.1	11.6
25-34	439.0	466.6	15.6	16.3
35-44	353.2	365.3	13.0	12.6
45-54	259.9	285.5	11.8	11.3
55-64	150.9	185.3	10.1	11.1
65 and over	144.6	145.2	6.8	6.3
<b>Total</b>	<b>1 701.1</b>	<b>1 756.4</b>	<b>12.1</b>	<b>11.8</b>
<b>Motor sports(b)</b>				
15-24	152.2	529.3	5.6	19.9
25-34	121.2	412.9	4.3	14.5
35-44	94.4	316.4	3.5	10.9
45-54	63.5	219.1	2.9	8.7
55-64	18.0	66.0	1.2	4.0
65 and over	*2.3	30.5	*0.1	1.3
<b>Total</b>	<b>451.5</b>	<b>1 574.3</b>	<b>3.2</b>	<b>10.6</b>
<b>Rugby League</b>				
15-24	451.0	430.1	16.7	16.1
25-34	376.2	401.9	13.4	14.1
35-44	279.6	294.9	10.3	10.2
45-54	207.0	208.0	9.4	8.3
55-64	97.1	96.0	6.5	5.8
65 and over	51.2	70.2	2.4	3.0
<b>Total</b>	<b>1 462.1</b>	<b>1 501.1</b>	<b>10.4</b>	<b>10.1</b>
<b>Cricket</b>				
15-24	359.3	243.1	13.3	9.1
25-34	279.2	242.6	9.9	8.5
35-44	238.4	182.6	8.8	6.3
45-54	157.6	146.8	7.1	5.8
55-64	71.2	81.8	4.7	4.9
65 and over	60.0	45.7	2.8	2.0
<b>Total</b>	<b>1 165.9</b>	<b>942.5</b>	<b>8.3</b>	<b>6.3</b>

(a) Care should be taken in interpreting the data presented in this table as most of the changes between 1995 and 1999 are not statistically significant. See paragraphs 6 to 9 of the Technical Note for more details.

(b) The increase in motor sports attendances needs to be treated with caution because much of the difference may be attributed to changes in the way the question was asked (see paragraph 14 of the Explanatory Notes).

Age group (years)	PERSONS.....		ATTENDANCE RATE.....	
	1995	1999	1995	1999
	'000	'000	%	%
<b>Soccer</b>				
15-24	177.6	200.3	6.6	7.5
25-34	131.1	140.3	4.7	4.9
35-44	110.9	109.4	4.1	3.8
45-54	84.8	92.5	3.8	3.7
55-64	38.2	47.5	2.5	2.9
65 and over	16.2	31.2	0.8	1.3
<b>Total</b>	<b>558.8</b>	<b>621.2</b>	<b>4.0</b>	<b>4.2</b>
<b>Harness racing</b>				
15-24	132.4	85.4	4.9	3.2
25-34	125.8	122.0	4.5	4.3
35-44	148.0	133.8	5.4	4.6
45-54	98.8	91.7	4.5	3.6
55-64	52.4	51.7	3.5	3.1
65 and over	42.3	50.1	2.0	2.2
<b>Total</b>	<b>599.7</b>	<b>534.8</b>	<b>4.3</b>	<b>3.6</b>
<b>Basketball</b>				
15-24	281.8	197.5	10.4	7.4
25-34	153.0	109.5	5.4	3.8
35-44	157.7	118.4	5.8	4.1
45-54	69.3	68.2	3.1	2.7
55-64	17.9	19.1	1.2	1.1
65 and over	12.0	13.2	0.6	0.6
<b>Total</b>	<b>691.6</b>	<b>526.0</b>	<b>4.9</b>	<b>3.5</b>
<b>Rugby Union</b>				
15-24	102.7	99.3	3.8	3.7
25-34	96.1	133.3	3.4	4.7
35-44	68.4	98.0	2.5	3.4
45-54	58.0	74.6	2.6	3.0
55-64	20.8	29.4	1.4	1.8
65 and over	12.3	*11.6	0.6	*0.5
<b>Total</b>	<b>358.4</b>	<b>446.2</b>	<b>2.5</b>	<b>3.0</b>
<b>Tennis</b>				
15-24	122.2	110.6	4.5	4.1
25-34	93.1	99.1	3.3	3.5
35-44	86.0	75.9	3.2	2.6
45-54	75.2	98.8	3.4	3.9
55-64	30.1	28.3	2.0	1.7
65 and over	25.0	31.2	1.2	1.4
<b>Total</b>	<b>431.7</b>	<b>444.0</b>	<b>3.1</b>	<b>3.0</b>

(a) Care should be taken in interpreting the data presented in this table as most of the changes between 1995 and 1999 are not statistically significant. See paragraphs 6 to 9 of the Technical Note for more details.

Age group (years)	PERSONS.....		ATTENDANCE RATE.....	
	1995	1999	1995	1999
	'000	'000	%	%
<b>Dog racing</b>				
15-24	86.0	68.2	3.2	2.6
25-34	66.9	71.5	2.4	2.5
35-44	52.0	55.3	1.9	1.9
45-54	52.1	47.2	2.4	1.9
55-64	25.8	19.5	1.7	1.2
65 and over	18.9	14.6	0.9	0.6
<b>Total</b>	<b>301.7</b>	<b>276.4</b>	<b>2.1</b>	<b>1.9</b>
<b>Netball</b>				
15-24	115.5	93.2	4.3	3.5
25-34	73.9	49.8	2.6	1.7
35-44	69.9	58.2	2.6	2.0
45-54	38.8	32.4	1.8	1.3
55-64	*7.9	*7.7	*0.5	*0.5
65 and over	*6.3	*7.3	*0.3	*0.3
<b>Total</b>	<b>312.3</b>	<b>248.7</b>	<b>2.2</b>	<b>1.7</b>
<b>Total sports(c)</b>				
15-24	1 595.3	1 682.9	59.1	63.1
25-34	1 418.8	1 648.6	50.5	57.7
35-44	1 295.0	1 436.3	47.7	49.4
45-54	970.3	1 172.8	44.0	46.6
55-64	513.7	586.0	34.2	35.3
65 and over	444.8	504.3	20.8	21.8
<b>Total</b>	<b>6 237.8</b>	<b>7 030.8</b>	<b>44.3</b>	<b>47.1</b>
<b>Total sports excluding motor sports(b)(c)</b>				
15-24	1 552.0	1 505.7	57.5	56.5
25-34	1 379.0	1 496.7	49.1	52.4
35-44	1 254.7	1 311.5	46.2	45.2
45-54	941.3	1 079.6	42.7	42.9
55-64	501.9	550.0	33.5	33.1
65 and over	444.5	487.1	20.8	21.1
<b>Total</b>	<b>6 073.4</b>	<b>6 430.6</b>	<b>43.2</b>	<b>43.1</b>

(a) Care should be taken in interpreting the data presented in this table as most of the changes between 1995 and 1999 are not statistically significant. See paragraphs 6 to 9 of the Technical Note for more details.

(b) The increase in motor sports attendances needs to be treated with caution because much of the difference may be attributed to changes in the way the question was asked (see paragraph 14 of the Explanatory Notes).

(c) Includes attendance at all sports, not just those listed above.

# EXPLANATORY NOTES

---

## INTRODUCTION

**1** This publication presents results from the Survey of Sports Attendance, a supplementary survey to the April 1999 Monthly Population Survey.

## SCOPE

### Geographical areas

**2** The survey was conducted in both rural and urban areas in all States and Territories.

### Dwellings

**3** It excluded some 175,000 persons living in remote and sparsely settled parts of Australia. The exclusion of these persons will have only a minor impact on any aggregate estimates that are produced for individual States and Territories, with the exception of the Northern Territory where such persons account for over 20% of the population.

**4** The survey covered both private and non-private dwellings. Private dwellings are houses, flats, home units and any structures used as places of residence at the time of the survey. Non-private dwellings are hotels, motels, hostels, boarding houses, hospitals and homes, educational and religious institutions, construction camps, caravan parks etc.

### Persons

**5** The survey included all persons aged 15 years and over except:

- members of the Australian permanent defence forces;
- certain diplomatic personnel of overseas governments, customarily excluded from census and estimated populations;
- overseas residents in Australia;
- members of non-Australian defence forces (and their dependants) stationed in Australia; and
- boarding school pupils not resident in households, some patients in hospitals and sanatoria and inmates of reformatories and gaols.

## COVERAGE

**6** In the population survey, coverage rules are applied which aim to ensure that each person is associated with only one dwelling, and hence has only one chance of selection. See *The Labour Force, Australia* (Cat. no. 6203.0) for more details.

## DATA COLLECTION METHODOLOGY

**7** The survey was conducted using a sub-sample of the monthly population survey sample. The monthly population survey, which is described in *The Labour Force, Australia* (Cat. no. 6203.0), comprises the monthly labour force and supplementary topics. The household sample was selected using multi-stage sampling techniques and included approximately 30,000 dwellings. One randomly selected respondent per household from seven-eighths of the households selected in the Labour Force Survey was asked additional questions (i.e. approximately 25,200 persons were interviewed) by trained interviewers relating to attendance at sporting events. About 80% of the interviews were conducted by telephone with the remainder being face-to-face interviews.

## EXPLANATORY NOTES *continued*

---

### RELIABILITY OF THE ESTIMATES

#### Sampling error

**8** The estimates provided in this publication are subject to two types of error.

**9** Sampling error occurs because a sample rather than the entire population is surveyed. One measure of the likely difference resulting from not including all dwellings in the survey is given by the standard error. Further information together with details of the sampling error in respect of different levels of estimate is given in the Technical Note.

#### Non-sampling error

**10** Non-sampling error arises from inaccuracies in collecting, recording and processing data. Three major sources of non-sampling error are listed below.

- Inability to obtain comprehensive data from all persons included in the sample. The errors arise because of differences which exist between the characteristics of respondents and non-respondents.
- Errors in reporting on the part of both the respondent and the interviewer. These errors may arise due to the inappropriate wording of questions, misunderstanding of what data is required, answers that were based on memory and inability or unwillingness to provide accurate information. As this survey was conducted in April 1999, respondents were required to recall attendance at summer sports over a shorter recall period than winter sports.
- Errors arising during the processing of the survey data. These processing errors may arise through mistakes in coding and data recording.

**11** Every effort is made to minimise these types of errors. In particular, the effects of reporting and processing errors described above were minimised by careful questionnaire design, intensive training and supervision of interviewers and extensive editing and quality control checking at all stages of data processing.

### DATA INTERPRETATION

**12** It should be noted that this publication presents details of persons who attended a sporting match or competition at least once during the 12 months to April 1999. Given that tables provide number of attendees together with attendance rates, it is possible to calculate details of non-attendees.

**13** The data presented cannot be compared with any administrative data held by sporting bodies of total admissions, since details in relation to spectators under 15 years of age were not part of the survey. In addition, the survey provides information about attendances rather than total admissions.

**14** Tables 11 and 12 provide comparisons with data collected in the 1995 Survey of Sports Attendance. Comparison of the data on attendance at motor sports between the 1995 survey and alternative data sources indicated that there was some under-reporting in the 1995 collection. The methodology used in the 1995 survey was to ask the respondent to indicate which sporting matches or competitions he/she had attended. It is likely that some respondents did not realise that motor racing etc. was classified as a sport. To resolve this problem, a specific question on motor sports attendance was asked in 1999.

## EXPLANATORY NOTES *continued*

---

### DATA INTERPRETATION *continued*

**15** The methodology used in the March 1995 Survey differed from that used in this survey. In particular:

- the data about randomly selected persons was collected from any responsible adult in the household in the 1999 Survey whereas in the 1995 Survey, the information was obtained by personal interview with the randomly selected person. Pilot tests conducted for the 1999 Survey showed that this had only a minimal impact on the accuracy of the responses.
- In the 1999 Survey, most of the interviews were conducted by telephone, whereas in the 1995 Survey, all of the interviews were conducted face-to-face. This change in methodology necessitated some wording changes to the questions in the 1999 Survey as prompt cards could not be used. This may also have had a slight impact on the results.

### ACKNOWLEDGMENT

**16** Australian Bureau of Statistics (ABS) publications draw extensively on information provided freely by individuals, businesses, governments and other organisations. Their continued cooperation is very much appreciated: without it, the wide range of statistics published by the ABS would not be available. Information received by the ABS is treated in strict confidence as required by the *Census and Statistics Act 1905*.

### RELATED PUBLICATIONS

**17** Other ABS publications with sport and recreation information include:

#### Spectators

*Sports Attendance, Australia, March 1995* (Cat. no. 4174.0)

#### Participation

*How Australians Use Their Time, 1997* (Cat. no. 4153.0)

*Involvement in Sport, Australia, 1997* (Cat. no. 6285.0)

*Leisure Participation, Victoria, October 1996* (Cat. no. 4176.2)

*Participation in Sport and Physical Activities, Australia, 1998–99*  
(Cat. no. 4177.0)

*Participation in Sporting and Physical Recreation Activities, Queensland, October 1993* (Cat. no. 4110.3)

*Participation in Sporting and Physical Recreation Activities, South Australia, October 1995* (Cat. no. 4175.4)

*Participation in Sporting and Physical Recreation Activities, Tasmania, October 1994* (Cat. no. 4175.6)

*Population Survey Monitor, Australia, Quarterly, August 1993 to August 1999*  
(Cat. no. 4103.0)

*Sport and Recreation, Urban Northern Territory, October 1991*  
(Cat. no. 4108.7)

*Time Use on Culture/Leisure Activities, Australia, 1997* (Cat. no. 4173.0)

#### Industry

*Business Sponsorship, Australia, 1996–97* (Cat. no. 4144.0)

*Casinos, Australia, 1997–98* (Cat. no. 8683.0)

*Gambling Industries, Australia, 1997–98* (Cat. no. 8684.0)

*Recreation Services, Australia, 1994–95* (Cat. no. 8688.0)

*Sports Industries, Australia, 1994–95* (Cat. no. 8686.0)

## EXPLANATORY NOTES *continued*

---

### RELATED PUBLICATIONS *continued*

Summary

*Cultural Trends in Australia: A Statistical Overview, 1997* (Cat. no. 4172.0)

*Sport and Recreation: A Statistical Overview, Australia, 1997*

(Cat. no. 4156.0)

# TECHNICAL NOTE SAMPLING VARIABILITY

## STANDARD ERRORS

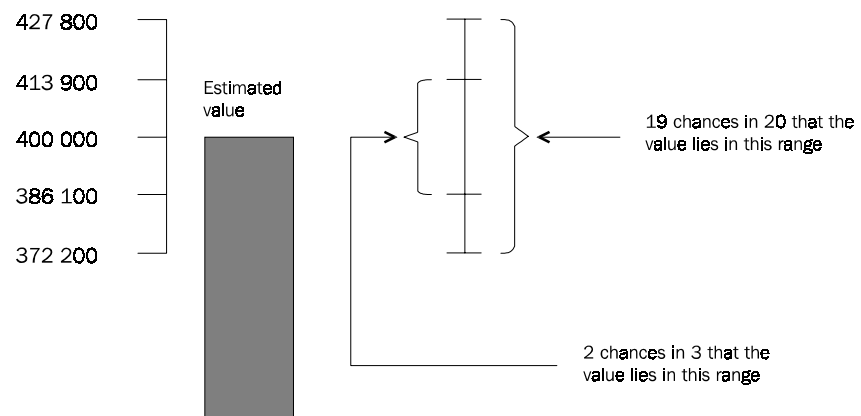
**1** Since the estimates in this publication are based on information obtained from occupants of a sample of dwellings, they are subject to sampling variability, that is, they may differ from those that would have been produced if all dwellings had been included in the survey. One measure of the likely difference is given by the standard error (SE), which estimates the extent to which an estimate might have varied by chance because only a sample of dwellings was included. There are about 2 chances in 3 (67%) that a sample estimate will vary by less than one SE from the number that would have been obtained if all dwellings had been included, and about 19 chances in 20 (95%) that the difference will be less than two SEs.

## RELATIVE STANDARD ERRORS

**2** Another measure of the likely difference is the relative standard error (RSE), which is obtained by expressing the SE as a percentage of the estimate. The RSE is a useful measure in that it provides an indication of the percentage errors likely to have occurred due to sampling.

**3** An example of the calculation and the use of SEs in relation to estimates of persons is as follows:

From table 5 an estimated 400,000 males reported having been to watch soccer during the 12 months ending April 1999. Referring to the table of SEs, an estimate of 400,000 has a SE of approximately 13,900 males. There are about 2 chances in 3 that the number that would have been produced if all dwellings had been included in the survey was between 386,100 and 413,900 (i.e. 400,000 plus or minus 13,900). There are about 19 chances in 20 that the number lies between 372,200 and 427,800 (i.e. 400,000 plus or minus 27,800). This example is illustrated below.



**4** Proportions and percentages formed from the ratio of two estimates are also subject to sampling errors. The size of the error depends on the accuracy of both the numerator and the denominator. A formula to approximate the RSE of a proportion is given below:

$$RSE(x/y) = \sqrt{[RSE(x)]^2 + [RSE(y)]^2}$$



RELATIVE STANDARD ERRORS *continued*

**5** From table 6, of the 2,741,500 persons aged 15 years or more resident in Queensland, 120,100 (4.4%) had been to watch Australian Rules during the 12 months ending April 1999. The SE of 120,100 for Queensland is about 6,990, so the RSE is  $6,990/120,100 = 5.8\%$ . The RSE of 2,741,500 is approximately  $15,430/2,741,500 \times 100 = 0.6\%$ . Applying the above formula, the RSE of the proportion is  $\sqrt{(5.8)^2 - (0.6)^2}$  or 5.8%. This then gives a SE of the proportion (4.4%) of  $5.8/100 \times 4.4 = 0.3\%$ . Therefore, there are about 2 chances in 3 that the proportion of Queenslanders attending Australian Rules matches was between 4.1% and 4.7% and approximately 19 chances in 20 that the proportion was in the range 3.8% to 5.0%.

COMPARISONS OF ESTIMATES

**6** Particular care should be taken when comparing figures. It is not correct to assume that an apparent difference between figures is actually significant. Such an estimate is subject to sampling error. An approximate SE of the difference between two estimates (x-y) may be calculated by the following formula:

$$SE(x-y) = \sqrt{[SE(x)]^2 + [SE(y)]^2}$$

**7** While this formula will only be exact for differences between separate and uncorrelated characteristics of sub-populations it is expected to provide a good approximation for all differences likely to be of interest in this publication.

**8** SEs have been calculated for the differences between the 1995 and 1999 estimates shown in tables 11 and 12. Contact Susan Jones on (08) 8237 7465 for more information.

STANDARD ERRORS TABLE

**9** As the SEs in the following table show, the size of the SE increases with the size of the estimate. However, the smaller the estimate the higher is the RSE. Thus, large estimates will be relatively more reliable than smaller estimates. Very small estimates are subject to such high SEs (relative to the size of the estimate) as to detract seriously from their value for most reasonable uses. In the tables in this publication, only estimates with RSEs of 25% or less and percentages based on such estimates are considered sufficiently reliable for most purposes. However, estimates and percentages with larger RSEs have been included and are preceded by an asterisk (e.g. \*2.8) to indicate that they should be treated with caution and viewed as being merely indicative of the magnitude involved.

# TECHNICAL NOTE SAMPLING VARIABILITY *continued*

## STANDARD ERRORS OF ESTIMATES, 1999 Survey

AUST.....

Size of estimate persons	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Relative standard error	
	no.	no.	no.	no.	no.	no.	no.	no.	no.	%
100	—	—	—	—	—	—	—	—	—	—
200	—	—	—	—	—	220	210	200	—	—
300	—	—	—	—	370	260	240	250	—	—
500	—	—	570	510	480	340	300	320	520	104.0
700	820	710	690	590	580	390	350	380	650	92.9
1 000	990	860	840	700	700	460	410	450	800	80.0
1 500	1 210	1 080	1 050	840	850	540	490	550	1 010	67.3
2 000	1 390	1 260	1 230	950	990	610	540	620	1 200	60.0
2 500	1 560	1 420	1 370	1 050	1 100	670	600	680	1 340	53.6
3 000	1 710	1 560	1 500	1 140	1 200	720	640	740	1 490	49.7
4 000	1 970	1 800	1 740	1 290	1 370	810	730	830	1 740	43.5
5 000	2 180	2 000	1 940	1 420	1 520	880	790	900	1 960	39.2
7 000	2 560	2 360	2 270	1 630	1 760	990	910	1 030	2 340	33.4
10 000	3 020	2 790	2 670	1 880	2 060	1 130	1 050	1 170	2 810	28.1
15 000	3 620	3 340	3 190	2 220	2 450	1 290	1 230	1 340	3 440	22.9
20 000	4 110	3 790	3 600	2 480	2 750	1 430	1 390	1 480	3 950	19.8
30 000	4 900	4 500	4 240	2 900	3 230	1 620	1 610	1 670	4 780	15.9
50 000	6 070	5 520	5 160	3 500	3 910	1 880	1 970	1 940	6 020	12.0
70 000	6 980	6 270	5 830	3 960	4 420	2 080	2 240	2 120	6 980	10.0
100 000	8 050	7 150	6 610	4 490	5 010	2 280	2 550	2 320	8 120	8.1
150 000	9 440	8 240	7 550	5 160	5 730	2 540	2 980	2 550	9 600	6.4
200 000	10 540	9 080	8 260	5 680	6 280	2 720	3 310	2 710	10 770	5.4
300 000	12 270	10 340	9 310	6 480	7 120	2 990	—	2 940	12 600	4.2
500 000	14 760	12 060	10 730	7 620	8 250	3 340	—	3 210	15 210	3.0
1 000 000	18 770	14 590	12 730	9 390	9 920	—	—	—	19 350	1.9
5 000 000	31 290	20 940	17 390	—	—	—	—	—	31 640	0.6
10 000 000	38 200	—	—	—	—	—	—	—	37 970	0.4

## GLOSSARY

---

<b>Associate diploma</b>	The entry requirement is usually the completion of Year 12 or the completion of Year 10 and a prerequisite certificate course. The duration of study ranges from one to two years full-time study or its equivalent. Courses provide individuals with the knowledge and skill necessary to give support to professionals, and for positions in advanced trade, technical or associate professional occupations.
<b>Attendance</b>	Attendance at a sporting event, match or competition as a spectator by persons aged 15 years and over, irrespective of the payment of an admission fee.
<b>Attendance rate</b>	For any group, the number of persons who attended a sporting match or competition at least once during the year, expressed as a percentage of the civilian population of that group.  For example, table 2 reports an attendance rate of 63.7% for males in New South Wales aged 15–24 years. This represents the number of New South Wales males aged 15–24 years who attended sport (285,300) divided by the total number of males aged 15–24 years in the population of New South Wales (447,800).
<b>Bachelor degree</b>	The entry requirement is the satisfactory completion of Year 12 or its equivalent. The duration of study ranges from three to six years full-time study or its equivalent. Courses are designed to provide students with a systematic and coherent introduction to a broad body of knowledge. The emphasis is on the underlying principles and concepts of that body of knowledge. Examples are BA in English; Bachelor of Education; BSC in Maths and Statistics.
<b>Basic vocational qualification</b>	Often requires Year 10 completion, however many courses have no formal entry requirements. The duration of study ranges from one semester to one year of full-time study or equivalent. Courses provide individuals with the practical skills and background knowledge necessary for employment at the operative level in many different fields. Examples include: Pre-apprenticeship in Plumbing; Certificate in Shorthand and Keyboarding; Pre-vocational Certificate in Automotive Mechanics.
<b>Birthplace</b>	Classified according to the <i>Australian Standard Classification of Countries for Social Statistics (ASCCSS)</i> (Cat. no. 1269.0).
<b>Capital cities</b>	The areas determining the six State capital cities are the Statistical Divisions for those capital cities defined in the <i>Statistical Geography: Volume 1– Australian Standard Geographical Classification (ASGC)</i> (Cat. no. 1216.0).
<b>Certificate or diploma</b>	Completion of an approved certificate or diploma in secretarial or business studies, administration, teaching etc.
<b>Cricket</b>	Excludes indoor cricket.
<b>Educational attainment</b>	Highest level of qualification completed. Questions asking educational attainment were not asked in this survey. However, the topic was included as a supplementary to the May 1999 Monthly Population Survey and for those respondents common to both surveys, educational attainment was matched with data on attendance at sport.



**Employed** Persons aged 15 and over who, during the reference week:

- worked for one hour or more for pay, profit, commission or payment in kind in a job or business, or on a farm (comprising employees, employers and own account workers); or
- worked for one hour or more without pay in a family business or on a farm (i.e. contributing family workers); or
- were employees who had a job but were not at work and were: on paid leave; on leave without pay for less than four weeks up to the end of the reference week; stood down without pay because of bad weather or plant breakdown at their place of employment for less than four weeks up to the end of the reference week; on strike or locked out; on workers' compensation and expected to be returning to their job; or receiving wages or salary while undertaking full-time study; or
- were employers, own account workers or contributing family workers who had a job, business or farm, but were not at work.

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

**Harness racing** Includes trotting.

**Higher degree** Includes doctorates and masters degrees. The minimum entry requirements are usually a masters degree or first class honours for a doctorate and first class honours for a masters degree. The duration of study is a minimum of two to four years for a doctorate and two years full-time or equivalent for a masters degree. Courses at this level involve in-depth study in a particular field, and build on the knowledge and skills gained in previous study in the same area. There is usually emphasis on original research. Examples include: Doctorate in Astronomy; Masters in Financial Management.

**Horse racing** Excludes harness racing and other equestrian sports such as trials, show jumping etc.

**Main English-speaking countries** The group comprises the United Kingdom, Ireland, South Africa, Canada, the United States of America and New Zealand.

**Not in the labour force** Persons who were not in the categories employed or unemployed, as defined. They include persons who were keeping house (unpaid), retired, voluntarily inactive, permanently unable to work, persons in institutions (hospitals, gaols, sanatoriums etc.), trainee teachers, members of contemplative religious orders, and persons whose only activity during the reference week was jury service or unpaid voluntary work for a charitable organisation.

**Occupation** Classified according to the *Australian Standard Classification of Occupations, Second Edition 1996* (Cat. no. 1222.0). Employed persons were not asked their occupation in this survey. However, the matching of records for those respondents common to this survey and the February and/or May 1999 Monthly Labour Force Surveys, when occupation data were collected, allowed for the cross-classification of attendance at sporting matches or competitions by occupation.

**Other qualification** Completion of other types of education, eg. adult education, preparatory/bridging course or non-vocational course.





<b>Part-time workers</b>	Employed persons who usually worked less than 35 hours a week and who did so during the reference week.
<b>Postgraduate diploma</b>	Includes Graduate Certificates. The entry requirement is usually the successful completion of a bachelor degree or an undergraduate diploma. The duration of study ranges from six months (for a Graduate Certificate) to one year full-time study or equivalent. Courses usually build on undergraduate studies, and are designed to broaden or develop professional knowledge and skills in a related or new area of study. Examples include: Graduate Diploma in Chemistry; Diploma of Education in Special Education; Graduate Certificate in Business.
<b>Rest of State</b>	Incorporates persons usually resident in areas outside of the six State capital city Statistical Divisions, including all residents of the Northern Territory and the Australian Capital Territory.
<b>Skilled vocational qualification</b>	The entry requirement is usually the completion of Year 10 or its equivalent. In addition, some courses may require a student to be concurrently employed in that specific field. The duration of study is two to four years and typically involves some on-the-job training. Courses provide individuals with the knowledge and skills necessary to work in a specific vocation or a recognised trade or craft, that requires a high degree of skill in a range of related activities. Examples are a Trade Certificate in Vehicle Building or Carpentry, an Apprenticeship in Electrical Fitting and a Certificate in Landscape Design.
<b>Soccer</b>	Excludes indoor soccer.
<b>Sport</b>	Whether an activity was regarded as a sport was left to the opinion of the respondent. Attendance at junior sport (that involving competition for children less than 17 years as well as all primary and secondary school competitions) was excluded.
<b>Still at school</b>	Persons aged 15–20 years still attending school.
<b>Surf sports</b>	Includes surfing, surf lifesaving and ironman/ironwoman competitions.
<b>Trade qualification/apprenticeship</b>	Completion of an approved trade/technical apprenticeship in fitting and turning, hairdressing, plumbing, carpentry etc.
<b>Undergraduate diploma</b>	The entry requirement is usually the successful completion of Year 12 or its equivalent. The duration of study is three years full-time study or its equivalent. Courses are designed to provide individuals with the knowledge and skills necessary for practice in a professional or associate professional occupation. Examples include: Diploma of Applied Science in Nursing; Diploma of Applied Arts in Graphic Design; Diploma of Teaching.



**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 and;
- were available for work in the reference week, or would have been available except for temporary illness (i.e. lasting for less than four weeks to the end of the reference week); or
- were waiting to start a new job within four weeks from the end of the reference week and would have started in the reference week if the job had been available then; or
- were waiting to be called back to a full-time or part-time job from which they had been stood down without pay for less than four weeks up to the end of the reference week (including the whole of the reference week) for reasons other than bad weather or plant breakdown.



## SELF-HELP ACCESS TO STATISTICS

- CPI INFOLINE* For current and historical Consumer Price Index data, call 1902 981 074 (call cost 75c per minute).
- DIAL-A-STATISTIC* For the latest figures for National Accounts, Balance of Payments, Labour Force, Average Weekly Earnings, Estimated Resident Population and the Consumer Price Index call 1900 986 400 (call cost 75c per minute).
- INTERNET* [www.abs.gov.au](http://www.abs.gov.au)
- LIBRARY* A range of ABS publications is available from public and tertiary libraries Australia-wide. Contact your nearest library to determine whether it has the ABS statistics you require.

## WHY NOT SUBSCRIBE?

- PHONE* +61 1300 366 323
- FAX* +61 03 9615 7848

## CONSULTANCY SERVICES

ABS offers consultancy services on a user pays basis to help you access published and unpublished data. Data that is already published and can be provided within 5 minutes is free of charge. Statistical methodological services are also available. Please contact:

<i>INQUIRIES</i>	<i>City</i>	<i>By phone</i>	<i>By fax</i>
	Canberra	02 6252 6627	02 6207 0282
	Sydney	02 9268 4611	02 9268 4668
	Melbourne	03 9615 7755	03 9615 7798
	Brisbane	07 3222 6351	07 3222 6283
	Perth	08 9360 5140	08 9360 5955
	Adelaide	08 8237 7400	08 8237 7566
	Hobart	03 6222 5800	03 6222 5995
	Darwin	08 8943 2111	08 8981 1218

*POST* Client Services, ABS, PO Box 10, Belconnen ACT 2616

*EMAIL* [client.services@abs.gov.au](mailto:client.services@abs.gov.au)



2417400004992  
ISBN 0 642 27484 3

RRP \$18.50