

# CARRATHOOL LGA

## DATABOOK

MPHN HEALTH NEEDS ASSESSMENT  
2022-2025



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Murrumbidgee Primary Health Network acknowledges the Traditional Custodians of the land in the Murrumbidgee region. We pay respect to past and present Elders of this land: the Wiradjuri, Yorta Yorta, Baraba Baraba, Wemba Wemba and Nari Nari peoples.

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firsthealth Limited trading as Murrumbidgee Primary Health Network (ABN 15 111 520 168).

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# HEALTH NEEDS ASSESSMENT PROCESS

The Murrumbidgee Health Needs Assessment, in line with the firstHealth Board endorsed framework, with governance provided by Clinical Councils, the Community Advisory Committee and the Planning and Integration sub-committee, uses a population approach to needs assessment using person centred planning with a strong commitment to community input.

Murrumbidgee Primary Health Network (MPHN) analyses data from robust gold standard comparable sources such as the Australian Bureau of Statistics and Australian Institute of Health and Welfare in the first instance supplemented by other sources. A decision-making tool is used at MPHN which identifies and prioritises needs based on variables that score local impact relative to national data, where MPHN is in the lowest third of the nation. Further, a Data Prioritisation Tool (refer page 23 for details) is used at a Local Government Area (LGA) level to identify areas where issues/needs are higher in comparison to the New South Wales (NSW) and Murrumbidgee averages. This highlights the LGAs in the lower half of the Murrumbidgee region and is summarised separately in the region profiles on MPHN's website. The matrix scoring is described at the end of this document in more detail. Throughout this document variables scoring three or greater using the matrix are denoted by their respective colour coding, these variables are likely to have higher impact within this LGA.

The use of an LGA approach ensures we are working in alignment with the Murrumbidgee Local Health District (MLHD) health clusters. This allows a more considered co-ordinated approach to services and reduces on duplication of service delivery.

Inequity in healthcare remains a significant issue for many areas in the Murrumbidgee region. Comprehensive socio-economic profiling allows identification of areas where this may affect uptake of healthcare services and consequent poorer health outcomes for those living in these areas. MPHN emphasises in identification of priorities for the region the particular local government areas where efforts should be concentrated in order to address the inequity.

Monitoring of emerging health conditions remains a priority for MPHN with ongoing consultations aimed at identification of emerging issues and subsequent interventions.

MPHN undertakes consultation with key partners, health professionals and community members. Multiple formats are used to undertake these consultations including:

## CONVERSATIONS ON THE COUCH

A community consultation approach to capture the needs of people who would not normally engage through a formal process. Community members are invited to meet in a neutral location with high thoroughfare to allow people to chat MPHN staff in a face-to-face environment to discuss health matters important to them. There is no set agenda or questions and is simply an opportunity for people to let MPHN know about health matters important to them and their community. Information gathered during these conversations is collected and used to help MPHN better understand the health needs of our communities.

## YARNS ON THE COUCH

Yarns on the Couch is an extension of our Conversations on the Couch with a focus on Aboriginal health. Data collected at both activities is used to help guide the Health Needs Assessment.

## HNA COMMUNITY FEEDBACK

There are two options for survey feedback, one short form survey called HNA Mini, and one longer form survey of 17 questions called HNA Community Feedback. Both these survey mechanisms have also been modified to target Aboriginal and Torres Strait Islander people, or those who care for this population group. All these surveys are available year-round and aim to gather information about emerging health needs.

## OTHER FEEDBACK MECHANISMS

There are several other opportunities for MPHN to capture feedback from our stakeholders. This includes, but not limited to:

- Incidental feedback from community and health care practitioners to MPHN staff during the normal course of business operations.
- An audit annually of general practice and health care providers to inform workforce capacity.
- MPHN co-design and formal consultation with specific population groups as part of commissioned project work.
- Engagement with MPHN's partners in our various consortium, alliance and steering committee groups. These groups cover various issues relating to Aboriginal health; older people and aged care; mental health, alcohol and other drug, and suicide prevention and aftercare; chronic disease; and emergency response.
- Engagement and feedback with Local Health Advisory Committees (LHACS) which are situated in 33 locations throughout the Murrumbidgee region.
- Feedback from MPHN's governance members, including Board Directors, and members the Community Advisory Committee and four Clinical Councils.
- Review of data collected by its commissioned services throughout the year and other internal data sources to confirm service provision and identify service gaps that may exist.
- Media and social media monitoring for local emerging health needs and issues.

Once all information is gathered and analysed by MPHN, data is provided back to communities and health providers for validation of the developed priorities from the data.

## DATA DISCLAIMER

This report is presented for the purpose of disseminating information for the benefit of people living in Murrumbidgee communities. The report includes data freely available on public websites such as the Australian Institute of Health and Welfare and the Australian Bureau of Statistics.

Data in this report remain confidential and primarily for MPHN's internal use. This report may be shared externally with express permission at the discretion of MPHN's CEO. If the latter is the case data may be used by an external organisation for planning purposes but should not be shared outside that organisation.

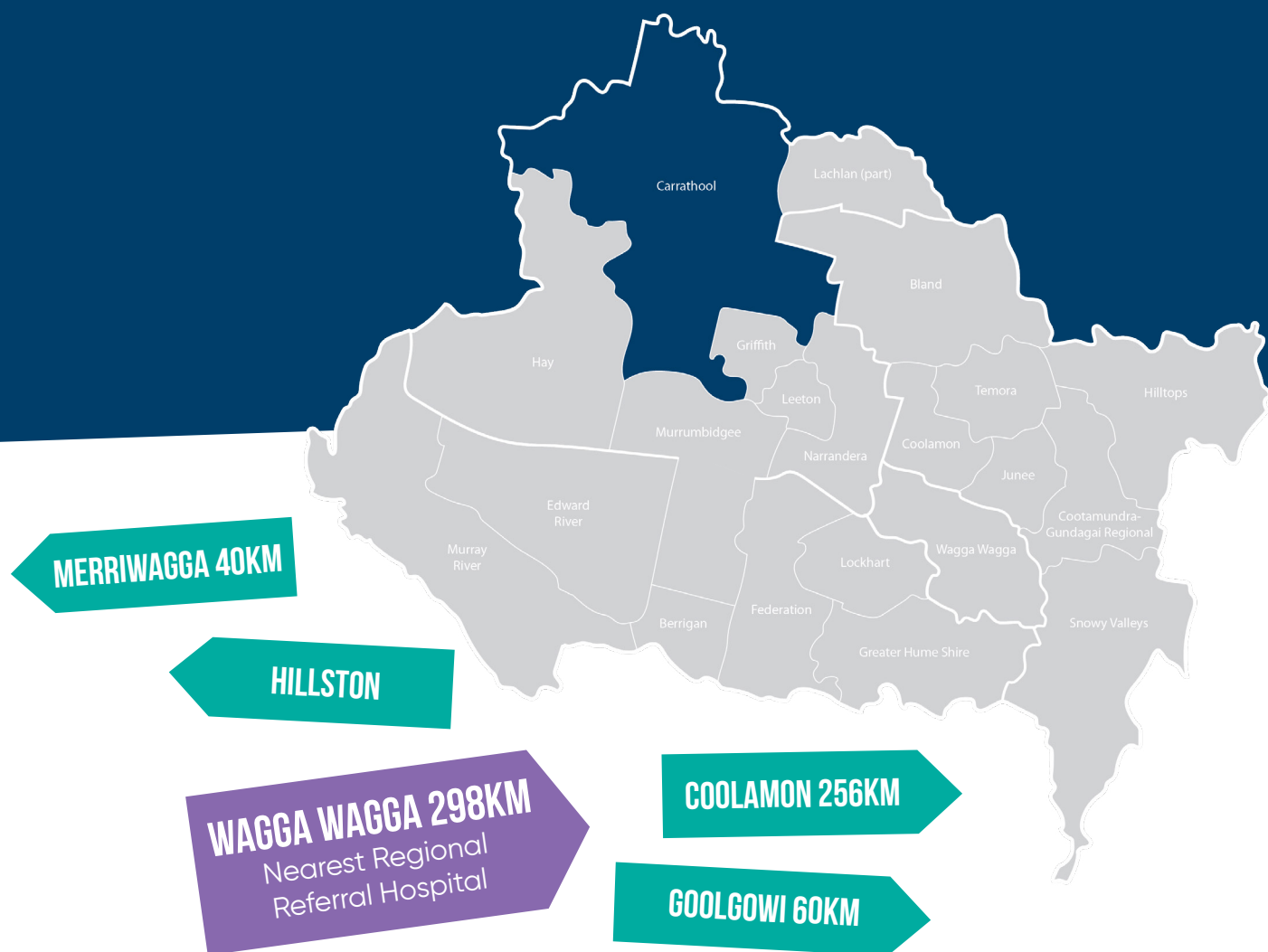
Data from Commonwealth secure confidential websites have not been included in this report. Data have not been interpreted.

MPHN has taken all steps to ensure the information in this report is as accurate as possible and correct at time of report. Data may vary to other publically available sources due to differing sources accessed.

MPHN does not guarantee, and accepts no legal liability whatsoever arising from, or connected to, the use of any material contained in this report. MPHN recommends users exercise their own skill and care with respect to use of this report.

Contact for data queries: [hna@mphn.org.au](mailto:hna@mphn.org.au)

# CARRATHOOL LGA



POSTCODE	TOWNS
2665	Binya (borders with Narrandera)
2652	Boorga, Goolgowi, Merriwagga, Tabbita
2711	Carrathool
2669	Erigolia, Melbergen, Rankin Springs
2675	Hillston, Lake Brewster, Monia Gap, Lake Brewster, Roto, Wallanthery, White Top



# EXECUTIVE SUMMARY

Carrathool Local Government Area (LGA) is ranked 20th out of 21 LGAs in population size within the Murrumbidgee Primary Health Network (MPHN) (population = 2,866). The Carrathool LGA has a land area of 18,932 square kilometres (largest in MPHN) with a population density of 0.1 people per square kilometre (lowest density in MPHN). Between 2021 to 2041, across age groups, the total population of Carrathool LGA is expected to slightly decrease by -7.3 per cent. However, during the next 20 years, in the Carrathool LGA proportion of those aged 65 years and over will increase by 30 per cent.

The median age of Carrathool LGA is lower than the MPHN average. However, across towns in this LGA, the median age ranges considerably from the highest in Merriwagga (49 years), to the lowest in Hilltson (36 years). Compared to MPHN's average, Carrathool LGA has a lower socioeconomic index. In contrast to the NSW and MPHN average, Carrathool LGA has a lower percentage of those aged 65 years and over. The proportion of Carrathool LGA population who identify as Aboriginal and Torres Strait Islander (10.8 per cent) is double the MPHN average (5.8 per cent). The Carrathool LGA has a higher total fertility rate than the MPHN average. This LGA has a higher percentage of males aged two to 17 who are classified as either overweight or obese.

The median age of death for both females and males in the Carrathool LGA is similar to the NSW and MPHN average. However, the rate of premature death among males and females aged zero to 74 years is higher, compared to MPHN's average. Causes of premature death in the Carrathool LGA include a higher than NSW and MPHN rate from deaths from all cancers, respiratory system diseases, and circulatory system diseases. Carrathool LGA has a high incidence of prostate cancer, lung cancer, and melanoma. Bowel screening for people aged 50-74 years is lower than the MPHN and NSW average.

Prevalent risk factors in Carrathool LGA include a higher than the NSW and MPHN average males and females aged 18 years and over who are obese, and report low to very low or no exercise in the previous week. In addition, in comparison to the MPHN and NSW averages, Carrathool LGA has a higher proportion of males and females aged 18 years and over who report risky alcohol consumption (i.e. two or more standard drinks per day) and who are current smokers.



## POPULATION AND GEOGRAPHY

ESTIMATED RESIDENT POPULATION	POPULATION CHANGE BETWEEN 2021-2041	LGA AREA KM <sup>2</sup>	POPULATION DENSITY PERSONS/KM <sup>2</sup>
2021 – ABS			
N=246,073 2,866	-73 (-7.3%)	18,932	0.2

ESTIMATED POPULATION CHANGE 2021-2041			
2021 – NSW PLANNING & ENVIRONMENT			
UNDER 19 YEARS	20-64 YEARS	65+ YEARS	TOTAL YEARS
2021 N=749 2041 N=813 64 (8.6%)	2021 N=1,572 2041 N=1,295 -277 (-17.6%)	2021 N=450 2041 N=590 140 (31.0%)	2021 N=2,771 2041 N=2,698 -73 (-7.3%)

## TOWN BASED POPULATIONS AND DEMOGRAPHY

	POPULATION	MEDIAN AGE	NUMBER PRIVATE DWELLINGS	AVERAGE PEOPLE PER HOUSEHOLD	NUMBER OF FAMILIES	AVERAGE CHILDREN PER FAMILY
2021 – ABS						
Carrathool	200	42	106	2.6	64	2.0
Goolgowi	416	38	177	2.5	102	1.8
Hillston	1,547	36	711	2.4	345	1.9
Merriwagga	124	49	61	2.2	27	1.7

	MEDIAN WEEKLY HOUSEHOLD INCOME	MEDIAN MONTHLY MORTGAGE REPAYMENT	MEDIAN WEEKLY RENT
2021 – ABS			
Carrathool	\$1,531	\$700	\$180
Goolgowi	\$1,197	\$836	\$150
Hillston	\$1,486	\$901	\$220
Merriwagga	\$1,062	\$340	\$101

POPULATION OTHER TOWNS	
2021 – ABS	
Boorga	27
Erigolia	29
Lake Brewster	12
Melbergen	19
Monia Gap	22
Roto	33
Wallanthery	50

## DEMOGRAPHY

SEIFA			
2016 – ABS			
	INDEX SCORE (BASED ON AUSTRALIAN SCORE OF 1000)	MINIMUM SCORE FOR SA1S IN AREA	MAXIMUM SCORE FOR SA1S IN AREA
NSW	1,001.7	323	1184
MPHN	969.9	478	1144
<b>Carrathool LGA</b>	<b>969</b>	<b>895</b>	<b>1041</b>
Carrathool	994		
Goolgowi	926		
Hillston	956		
Merriwagga	1,009		

AGE GROUPS								
2020 – ERP								
	PERSONS 0-14 YEARS	PERSONS 15-24 YEARS	PERSONS 25-44 YEARS	PERSONS 45-64 YEARS	PERSONS 65+ YEARS	PERSONS 70+ YEARS	PERSONS 75+ YEARS	PERSONS 85+ YEARS
NSW	18.5%	12.8%	28.0%	24.6%	15.7%	10.7%	7.0%	2.2%
MPHN	19.6%	12.0%	22.6%	25.7%	18.9%	13.3%	8.7%	2.7%
<b>Carrathool</b>	<b>603 (21.6%)</b>	<b>276 (9.9%)</b>	<b>716 (25.6%)</b>	<b>775 (27.7%)</b>	<b>426 (15.2%)</b>	<b>204 (9.9%)</b>	<b>193 (6.6%)</b>	<b>74 (2.6%)</b>



GENDER				
2021 – ABS				
	MALES		FEMALES	
	N	%	N	%
NSW	3,984,166	49.4	4,087,995	50.6
MPHN	125,500	50.3	126,798	49.7
Carrathool	1,527	53.2	1,343	50.6

EDUCATION				
2020 – ABS				
	PEOPLE WHO LEFT SCHOOL AT YEAR 10 OR BELOW, OR DID NOT GO TO SCHOOL	FULL-TIME PARTICIPATION IN SECONDARY SCHOOL EDUCATION AT AGE 16	PARTICIPATION IN VOCATIONAL EDUCATION AND TRAINING - NON-INDIGENOUS POPULATION	SCHOOL LEAVER PARTICIPATION IN HIGHER EDUCATION
NSW	33.0 per 100	84.1%	17.8 per 100	28.3%
MPHN	42.0 per 100	74.2%	18.6 per 100	10.9%
Carrathool	45.5 per 100	71.9%	10.2 per 100	NR

EMPLOYMENT		
2020 – ABS		
	LEARNING OR EARNING AT AGES 15 TO 19	UNEMPLOYMENT
NSW	85.0%	4.9%
MPHN	81.7	4.8%
Carrathool	260 (83.1%)	53 (3.2%)

WEEKLY INCOME		
2021 – ABS		
	LESS THAN \$650 TOTAL HOUSEHOLD WEEKLY INCOME	MORE THAN \$3,000 TOTAL HOUSEHOLD WEEKLY INCOME
NSW	16.3%	26.9%
MPHN	22.3%	13.9%
Carrathool	18.5%	16.3%

INCOME SUPPORT				
2020 – ABS				
	AGE PENSIONERS	DISABILITY SUPPORT PENSIONERS	FEMALE SOLE PARENT PENSIONERS	
NSW	59.0%	4.6%	3.1%	
MPHN	60.3%	6.3%	5.4%	
Carrathool	202 (47.4%)	72 (4.2%)	46 (6.9%)	
	PEOPLE RECEIVING AN UNEMPLOYMENT BENEFIT	PEOPLE RECEIVING AN UNEMPLOYMENT BENEFIT LONG-TERM	YOUNG PEOPLE AGED 16 TO 24 RECEIVING AN UNEMPLOYMENT BENEFIT	
NSW	6.2%	5.6%	5.0%	
MPHN	7.1%	6.4%	6.1%	
Carrathool	92 (5.3%)	84 (4.8%)	11 (5.3%)	
	LOW INCOME, WELFARE-DEPENDENT FAMILIES (WITH CHILDREN)	HEALTH CARE CARD HOLDERS	PENSIONER CONCESSION CARD HOLDERS	SENIORS HEALTH CARD HOLDERS
NSW	4.6%	6.7%	21.1%	10.9%
MPHN	5.4%	7.3%	27.3%	10.3%
Carrathool	33 (4.8%)	131 (5.5%)	398 (18.1%)	31 (7.3%)

HOUSEHOLDS		
2020 – ABS		
	HOUSEHOLDS IN DWELLINGS RECEIVING RENT ASSISTANCE FROM THE AUSTRALIAN GOVERNMENT	DWELLINGS RENTED FROM THE GOVERNMENT HOUSING AUTHORITY
NSW	18.3%	4.7%
MPHN	17.9%	3.4%
Carrathool	101 (11.5%)	19 (1.9%)

HOUSEHOLDS		
2020 – ABS		
	*MORTGAGE STRESS	*RENTAL STRESS
NSW	9.6%	27.9%
MPHN	8.2%	25.7%
Carrathool	16 (8.6%)	257 (9.7%)

\*Low income households (households in bottom 40% of income distribution)

FAMILIES			
2018 – ABS			
	SINGLE PARENT FAMILIES WITH CHILDREN AGED LESS THAN 15 YEARS	JOBLESS FAMILIES WITH CHILDREN AGED LESS THAN 15 YEARS	*CHILDREN IN FAMILIES WHERE THE MOTHER HAS LOW EDUCATIONAL ATTAINMENT
NSW	19.9%	12.0%	19.6%
MPHN	23.5%	13.2 %	25.0%
Carrathool	42 (16.7%)	19 (7.4%)	104 (20.0%)

\*Children aged less than 15 years living in families where the female parent's highest level of schooling was year 10 or below/ female parent did not attend school

ETHNICITY			
2018 – ABS			
	AUSTRALIAN-BORN POPULATION	PEOPLE BORN (OVERSEAS) IN PREDOMINANTLY ENGLISH SPEAKING COUNTRIES	PEOPLE BORN IN PREDOMINANTLY NON- ENGLISH SPEAKING COUNTRIES
NSW	65.5%	6.7%	21.1%
MPHN	82.2%	3.2%	5.4%
<b>Carrathool</b>	<b>2,178 (80.0%)</b>	<b>101 (2.4%)</b>	<b>161 (5.9%)</b>

ETHNICITY			
2018 – ABS			
	PEOPLE BORN IN A PREDOMINANTLY NON-ENGLISH SPEAKING (NES) COUNTRY RESIDENT IN AUSTRALIA FOR FIVE YEARS OR MORE	PEOPLE BORN IN A PREDOMINANTLY NON-ENGLISH SPEAKING (NES) COUNTRY RESIDENT IN AUSTRALIA FOR LESS THAN FIVE YEARS	PEOPLE BORN OVERSEAS REPORTING POOR PROFICIENCY IN ENGLISH
NSW	16.1%	4.1%	3.4%
MPHN	3.6%	1.4%	0.9%
<b>Carrathool</b>	<b>74 (2.7%)</b>	<b>59 (2.2%)</b>	<b>30 (1.2%)</b>

ETHNICITY			
2020 – ABS			
COUNTRY	CARRATHOOL	NSW	MPHN
China	4 (>0.1%)	(3.1%)	(0.2%)
India	38 (1.4%)	(1.9%)	(0.9%)
Italy	9 (0.3%)	(0.7%)	(0.6%)
Vietnam	0	(1.1%)	(0.1%)
Philippines	14 (0.5%)	(1.2%)	(0.5%)
Malaysia	0	(0.4%)	(0.1%)
Germany	4 (>0.1%)	(0.4%)	(0.2%)
Greece	0	(0.4%)	(0.0%)
Sri Lanka	0	(0.4%)	(0.1%)

DWELLINGS WITH NO MOTOR VEHICLE	
2016 – ABS	
NSW	9.2%
MPHN	5.4%
<b>Carrathool</b>	<b>41 (4.2%)</b>

# ABORIGINAL AND TORRES STRAIT ISLANDER PEOPLE

INDIGENOUS STATUS		
2020 – ERP		
ABORIGINAL POPULATION AS PROPORTION OF TOTAL POPULATION		
	NUMBER	%
NSW	288,565	3.5
MPHN	15,408	5.8
Carrathool	312	10.8

INDIGENOUS STATUS								
2020 – ERP (NON-ABS)								
	0-4 YEARS		5-9 YEARS		10-14 YEARS		15-19 YEARS	
	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%
NSW	35,878	12.4	32,475	11.3	30,562	10.6	27,034	9.4
MPHN	2,036	13.2	1,809	11.7	1,754	11.4	1,421	9.2
Carrathool	43	13.6	33	10.7	31	10.0	24	7.8
	20-24 YEARS		25-29 YEARS		30-34 YEARS		35-39 YEARS	
	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%
NSW	25,822	8.9	23,468	8.1	18,297	6.3	15,880	5.5
MPHN	1,330	8.6	1,127	7.3	981	6.4	852	5.5
Carrathool	30	9.6	26	8.3	17	5.5	19	6.0
	40-44 YEARS		45-49 YEARS		50-54 YEARS		55-59 YEARS	
	NUMBER	%	NUMBER	%	NUMBER	%	NUMBER	%
NSW	13,315	4.6	14,480	5.0	13,599	4.7	11,881	4.1
MPHN	679	4.4	678	4.4	708	4.6	662	4.3
Carrathool	16	5.1	17	5.4	18	5.6	13	4.1
	60-64 YEARS			65+ YEARS				
	NUMBER		%	NUMBER		%		
NSW	9,585		3.3	16,290		5.6		
MPHN	486		3.2	885		5.7		
Carrathool	8		2.7	18		5.6		

VOCATIONAL EDUCATION		
2020 – ABS		
PARTICIPATION IN VOCATIONAL EDUCATION AND TRAINING - ABORIGINAL POPULATION		
	NUMBER	ASR PER 1,000
NSW	50,250	17.8
MPHN	2,715	18.6
Carrathool	55	18.6



# MOTHERS, BABIES AND CHILDREN

TOTAL FERTILITY RATE		
2020 – ABS		
	BIRTHS	TOTAL FERTILITY RATE
NSW	95,459	1.73
MPHN	2,949	2.26
Carrathool	51	3.06

MOTHERS AND BABIES		
2017 TO 2019 – ABS		
	SMOKING DURING PREGNANCY	
	SMOKING DURING PREGNANCY	% SMOKING DURING PREGNANCY
NSW	25,876	9.0
MPHN	1,488	17.1
Carrathool	15	15.0

IMMUNISATION						
2018 – ABS						
	CHILDREN FULLY IMMUNISED AT 1 YEAR OF AGE		CHILDREN FULLY IMMUNISED AT 2 YEARS OF AGE		CHILDREN FULLY IMMUNISED AT 5 YEARS OF AGE	
	NUMBER	%	NUMBER	%	NUMBER	%
NSW	90,965	94.0	90,512	90.2	97,477	94.6
MPHN	2,770	95.2	2,777	93.2	2,696	96.0
Carrathool	24	96.5	34	93.8	30	96.7

CHILD CARE				
2016 – ABS				
	UNPAID CHILD CARE TO OWN CHILD/ CHILDREN		UNPAID CHILD CARE TO OTHER CHILD/ CHILDREN	
	NUMBER	%	NUMBER	%
NSW	1,194,612	19.6	423,262	6.9
MPHN	34,939	18.3	14,389	7.5
Carrathool	423	19.4	140	6.4

RISK FACTORS CHILDREN								
2020 – ABS								
	ESTIMATED NUMBER OF MALES AGED 2-17 YEARS WHO WERE OVERWEIGHT (BUT NOT OBESE) (MODELLED ESTIMATES)*		ESTIMATED NUMBER OF MALES AGED 2-17 YEARS WHO WERE OBESE (MODELLED ESTIMATES)*		ESTIMATED NUMBER OF FEMALES AGED 2-17 YEARS WHO WERE OVERWEIGHT (BUT NOT OBESE) (MODELLED ESTIMATES)*		ESTIMATED NUMBER OF FEMALES AGED 2-17 YEARS WHO WERE OBESE (MODELLED ESTIMATES)*	
	NUMBER	ASR PER 100	NUMBER	ASR PER 100	NUMBER	ASR PER 100	NUMBER	ASR PER 100
NSW	137,863	17.4	59,650	7.5	125,141	16.6	54,849	7.3
MPHN	4,889	18.8	2,866	11.1	4,423	17.7	2,668	10.7
Carrathool	57	20.2	35	12.8	51	17.5	32	10.9

VULNERABLE CHILDREN						
2021 – AEDC						
	DEVELOPMENTALLY VULNERABLE ON ONE OR MORE DOMAINS			DEVELOPMENTALLY VULNERABLE ON TWO OR MORE DOMAINS		
	NUMBER		%	NUMBER		%
NSW	19,067		21.2	9,510		10.5
MPHN	647		23.5	336		12.2
Carrathool	7		18.9	4		10.8

	PHYSICAL HEALTH AND WELLBEING - DEVELOPMENTALLY VULNERABLE		PHYSICAL HEALTH AND WELLBEING - DEVELOPMENTALLY AT RISK		PHYSICAL HEALTH AND WELLBEING - DEVELOPMENTALLY ON TRACK	
	NUMBER	%	NUMBER	%	NUMBER	%
NSW	8,513	9.4	11,246	12.4	70,671	78.1
MPHN	278	10.1	314	11.4	2,168	78.5
Carrathool	3	8.1	4	10.8	30	81.1

	SOCIAL COMPETENCE - DEVELOPMENTALLY VULNERABLE		SOCIAL COMPETENCE - DEVELOPMENTALLY AT RISK		SOCIAL COMPETENCE - DEVELOPMENTALLY ON TRACK	
	NUMBER	%	NUMBER	%	NUMBER	%
NSW	8,458	9.4	13,175	14.6	68,789	76.1
MPHN	293	10.6	396	14.4	2,070	75.0
Carrathool	5	13.5	1	2.7	31	83.8

	EMOTIONAL MATURITY - DEVELOPMENTALLY VULNERABLE		EMOTIONAL MATURITY - DEVELOPMENTALLY AT RISK		EMOTIONAL MATURITY - DEVELOPMENTALLY ON TRACK	
	NUMBER	%	NUMBER	%	NUMBER	%
NSW	6,550	7.3	12,300	13.7	71,203	79.1
MPHN	235	8.5	424	15.4	2,093	76.1
Carrathool	3	8.1	4	10.8	30	81.1

VULNERABLE CHILDREN				
2021 – AEDC				
	LANGUAGE AND COGNITIVE SKILLS (SCHOOLS-BASED) - DEVELOPMENTALLY AT RISK		LANGUAGE AND COGNITIVE SKILLS (SCHOOLS-BASED) - DEVELOPMENTALLY ON TRACK	
	NUMBER	%	NUMBER	%
NSW	8,092	9.0	76,676	84.9
MPHN	271	9.8	2,256	81.8
Carrathool	3	8.1	32	86.5

	COMMUNICATION SKILLS AND GENERAL KNOWLEDGE - DEVELOPMENTALLY AT RISK		CHILDREN DEVELOPMENTALLY ON TRACK IN COMMUNICATION DOMAIN	
	NUMBER	%	NUMBER	%
NSW	14,068	15.6	68,741	76.0
MPHN	377	13.6	2,148	77.8
Carrathool	6	16.2	30	81.1

HPV				
2021				
	HPV VACCINE COVERAGE: FEMALES AGED 12-13 YEARS IN MID- 2013, WHO RECEIVED DOSE 3 BY 2016		HPV VACCINE COVERAGE: MALES AGED 12-13 YEARS IN MID- 2013, WHO RECEIVED DOSE 3 BY 2016	
	NUMBER	%	NUMBER	%
NSW	36127	83.0	35834	78.2
MPHN	1342	87.4	1313	86.2
Carrathool	16	91.8	17	98.1

# OLDER PEOPLE

OLDER PERSONS				
2016 – ABS				
	LIVING ALONE, 65+ YEARS		LIVING ALONE; WITH DISABILITY; LOW INCOME, 65+ YEARS	
	NUMBER	%	NUMBER	%
NSW	275,196	24.4	29,883	2.6
MPHN	11,625	25.0	1,088	2.3
Carrathool	103	26.1	12	3.0

	LIVING ALONE, 85+ YEARS		LIVING ALONE; WITH DISABILITY; LOW INCOME, 85+ YEARS	
	NUMBER	%	NUMBER	%
NSW	52,065	41.8	3,677	2.9
MPHN	11,625	33.2	85	1.3
Carrathool	103	48.6	0	0.0

OLDER PERSONS				
2016 – ABS				
	PEOPLE WITH A PROFOUND OR SEVERE DISABILITY AND LIVING IN THE COMMUNITY, 65+ YEARS		MODELLED ESTIMATES OF PERSONS WITH ONE OR MORE ACTIVITIES FOR WHICH ASSISTANCE IS NEEDED, 65+ YEARS	
	NUMBER	%	NUMBER	ASR PER 100
NSW	170,636	14.9	414,338	36.7
MPHN	5,293	12.3	15,435	35.4
Carrathool	48	12.3	80	29.5

OLDER PERSONS				
2018 – ABS				
	PEOPLE WITH MODERATE OR MILD CORE ACTIVITY LIMITATION, 65+ YEARS - MODELLED ESTIMATES		PEOPLE WITH SEVERE CORE ACTIVITY LIMITATION, 65+ YEARS – MODELLED ESTIMATES	
	NUMBER	%	NUMBER	ASR PER 100
NSW	234,212	29.5	98,912	11.8
MPHN	15,650	33.6	6,101	13.0
Carrathool	138	35.4	55	14.1



# POPULATION HEALTH

## MORTALITY

MEDIAN AGE OF DEATH				
2016 TO 2020 – ABS				
	MALES		FEMALES	
	NUMBER OF DEATHS	MEDIAN AGE (YEARS)	NUMBER OF DEATHS	MEDIAN AGE (YEARS)
NSW	138,921	79.0	129,720	85.0
MPHN	5,976	78.0	5,161	84.0
Carrathool	73	78.0	48	84.5

'Premature mortality' refers to deaths that occur at an age earlier than a selected cut-off. For this analysis, deaths among people aged under 75 are considered premature.

PREMATURE DEATHS				
2016 TO 2020 – ABS				
	MALES		FEMALES	
	NUMBER OF DEATHS	ASR PER 100,000	NUMBER OF DEATHS	ASR PER 100,000
NSW	54,579	292.0	33,272	178.1
MPHN	2,426	370.3	1,291	205.8
Carrathool	31	552.3	11	233.6

PREMATURE DEATHS BY CAUSE						
2016 TO 2020 – ABS						
	DEATHS FROM CANCER, 0 TO 74 YEARS		DEATHS FROM LUNG CANCER, 0 TO 74 YEARS		DEATHS FROM BREAST CANCER (FEMALES), 0 TO 74 YEARS	
	NUMBER OF DEATHS	ASR PER 100,000	NUMBER OF DEATHS	ASR PER 100,000	NUMBER OF DEATHS	ASR PER 100,000
NSW	36,591	97.7	7,425	19.8	2,757	14.8
MPHN	1,451	110.1	265	19.8	104	16.7
Carrathool	15	145.7	0	–	0	–

	DEATHS FROM CIRCULATORY SYSTEM DISEASES, 0 TO 74 YEARS		DEATHS FROM ISCHAEMIC HEART DISEASE, 0 TO 74 YEARS		DEATHS FROM RESPIRATORY SYSTEM DISEASES, 0 TO 74 YEARS		DEATHS FROM EXTERNAL CAUSES, 0 TO 74 YEARS	
	NUMBER OF DEATHS	ASR PER 100,000	NUMBER OF DEATHS	ASR PER 100,000	NUMBER OF DEATHS	ASR PER 100,000	NUMBER OF DEATHS	ASR PER 100,000
NSW	15,586	41.7	7,338	19.6	6,259	16.7	10,092	27.2
MPHN	680	52.0	340	26.1	305	22.7	451	41.1
Carrathool	6	58.5	0	–	8	80.6	0	–

AVOIDABLE DEATHS BY CAUSE								
2016 TO 2020 – ABS								
	DEATHS FROM SELECTED EXTERNAL CAUSES OF MORTALITY (FALLS; FIRES, BURNS; SUICIDE AND SELF-INFLICTED INJURIES; ETC.) AGED 0 TO 74 YEARS		DEATHS FROM SUICIDE AND SELF-INFLICTED INJURIES AGED 0 TO 74 YEARS		DEATHS FROM OTHER EXTERNAL CAUSES OF MORTALITY (TRANSPORT ACCIDENTS; ACCIDENTAL DROWNING AND SUBMERSION; ETC.) AGED 0 TO 74 YEARS		DEATHS FROM TRANSPORT ACCIDENTS AGED 0 TO 74 YEARS	
	NUMBER OF DEATHS	ASR PER 100,000	NUMBER OF DEATHS	ASR PER 100,000	NUMBER OF DEATHS	ASR PER 100,000	NUMBER OF DEATHS	ASR PER 100,000
NSW	4,738	12.8	4,115	11.1	5,354	14.5	1,678	4.5
MPHN	215	19.4	192	17.9	236	21.7	115	10.5
Carrathool	0	–	0	–	0	–	0	–

\*NW = number withheld due to small sample size causing issues with identification/anonymity.

	DEATHS FROM CANCER, 0 TO 74 YEARS		DEATHS FROM COLORECTAL CANCER, 0 TO 74 YEARS		DEATHS FROM BREAST CANCER (FEMALES), 0 TO 74 YEARS	
	NUMBER OF DEATHS	ASR PER 100,000	NUMBER OF DEATHS	ASR PER 100,000	NUMBER OF DEATHS	ASR PER 100,000
NSW	10,601	28.3	3,878	10.4	2,757	14.8
MPHN	458	35.1	163	12.5	104	16.7
Carrathool	8	77.5	0	–	0	–

	DEATHS FROM DIABETES, 0 TO 74 YEARS		DEATHS FROM CIRCULATORY SYSTEM DISEASES, 0 TO 74 YEARS		DEATHS FROM ISCHAEMIC HEART DISEASE, 0 TO 74 YEARS		DEATHS FROM CEREBROVASCULAR DISEASES, 0 TO 74 YEARS	
	NUMBER OF DEATHS	ASR PER 100,000	NUMBER OF DEATHS	ASR PER 100,000	NUMBER OF DEATHS	ASR PER 100,000	NUMBER OF DEATHS	ASR PER 100,000
NSW	2,638	7.0	12,557	33.6	7,338	19.6	3,044	8.1
MPHN	118	9.0	557	42.4	340	26.1	110	8.3
Carrathool	0	–	0	–	0	–	0	–

Potentially avoidable deaths, a subset of all premature mortality (deaths under 75 years), and include deaths considered to be potentially preventable (those amenable to screening and primary prevention) and potentially treatable (those amenable to therapeutic interventions).

AVOIDABLE DEATHS BY CAUSE				
2016 TO 2020 – ABS				
	DEATHS FROM RESPIRATORY SYSTEM DISEASES, 0 TO 74 YEARS		DEATHS FROM CHRONIC OBSTRUCTIVE PULMONARY DISEASE, 0 TO 74 YEARS	
	NUMBER OF DEATHS	ASR PER 100,000	NUMBER OF DEATHS	ASR PER 100,000
NSW	4,128	11.0	3,833	10.2
MPHN	217	16.0	195	14.2
Carrathool	7	70.6	5	50.7

## HEALTH CONDITIONS

HEALTH CONDITIONS								
2017 TO 2018 – ABS								
	ESTIMATED NUMBER OF PEOPLE WITH RESPIRATORY SYSTEM DISEASES		ESTIMATED NUMBER OF PEOPLE WITH ASTHMA		ESTIMATED NUMBER OF PEOPLE WITH CHRONIC OBSTRUCTIVE PULMONARY DISEASE		ESTIMATED NUMBER OF PEOPLE WITH MENTAL AND BEHAVIOURAL PROBLEMS	
	NUMBER	ASR PER 100	NUMBER	ASR PER 100	NUMBER	ASR PER 100	NUMBER	ASR PER 100
NSW	1,465,620	18.8	827,910	10.6	175,425	2.2	813,094	20.9
MPHN	47,533	20.0	31,355	13.0	6,690	2.5	25,718	21.8
Carrathool	489	17.8	354	12.8	67	2.4	247	19.3

	ESTIMATED NUMBER OF PEOPLE WITH HEART, STROKE AND VASCULAR DISEASE		ESTIMATED NUMBER OF PEOPLE WITH ARTHRITIS		ESTIMATED NUMBER OF PEOPLE WITH OSTEOPOROSIS	
	NUMBER	ASR PER 100	NUMBER	ASR PER 100	NUMBER	ASR PER 100
NSW	385,093	4.9	1,216,498	15.5	334,562	4.2
MPHN	15,044	5.3	52,723	19.2	10,262	3.6
Carrathool	141	5.1	570	20.3	71	2.5

CANCER INCIDENCE					
2014 TO 2018 – NSW CANCER REGISTRY					
	PROSTATE CANCER DSER PER 100,000	BREAST CANCER DSER PER 100,000	BOWEL CANCER DSER PER 100,000	LUNG CANCER DSER PER 100,000	MELANOMA DSER PER 100,000
NSW	70.8	63.3	37.6	43.1	52.9
MPHN	79.4	65.9	38.8	46.0	56.0
Carrathool	220.2	32.1	29.9	114.6	66.9

MENTAL HEALTH PREVALENCE				
2021 – ABS				
	PEOPLE AGED 15 YEARS AND OVER WHO REPORTED THEY HAD A MENTAL HEALTH CONDITION (INCLUDING DEPRESSION OR ANXIETY)		PEOPLE AGED 0-14 YEARS WHO REPORTED THEY HAD A MENTAL HEALTH CONDITION (INCLUDING DEPRESSION OR ANXIETY)	
	NUMBER	ASR PER 100	NUMBER	ASR PER 100
NSW	617,947	9.4	28,463	1.9
MPHN	21,873	11.0	1,140	2.4
Carrathool	173	7.4	5	0.9

2017 TO 2018 – AIHW				
	ESTIMATED NUMBER OF MALES AGED 18 YEARS AND OVER WITH HIGH OR VERY HIGH PSYCHOLOGICAL DISTRESS, BASED ON THE KESSLER 10 SCALE (K10) (MODELLED ESTIMATES)		ESTIMATED NUMBER OF FEMALES AGED 18 YEARS AND OVER WITH HIGH OR VERY HIGH PSYCHOLOGICAL DISTRESS, BASED ON THE KESSLER 10 SCALE (K10) (MODELLED ESTIMATES)	
	NUMBER	ASR PER 100	NUMBER	ASR PER 100
NSW	321,815	10.8	427,731	14.0
MPHN	9,217	10.3	11,852	13.1
Carrathool	97	8.6	107	10.8

	EMERGENCY DEPARTMENT PRESENTATIONS: TOTAL PRESENTATIONS FOR MENTAL AND BEHAVIOURAL DISORDERS		ADMISSIONS FOR MENTAL HEALTH RELATED CONDITIONS, PERSONS - ALL HOSPITALS	
	NUMBER	ASR PER 100	NUMBER	ASR PER 100
NSW	103,101	1,283.8	2,601	1,077.9
MPHN	12,626	5,428.7	89	1,002.2
Carrathool	29	1,096.1	38	885.3

DISABILITY						
2016 – ABS						
	UNPAID ASSISTANCE TO PERSONS WITH A DISABILITY		PEOPLE WITH A PROFOUND OR SEVERE DISABILITY (INCLUDES PEOPLE IN LONG-TERM ACCOMMODATION), ALL AGES		PEOPLE WITH A PROFOUND OR SEVERE DISABILITY AND LIVING IN THE COMMUNITY, ALL AGES	
	NUMBER	%	NUMBER	%	NUMBER	%
NSW	709,415	11.6	398,746	5.6	346,451	4.9
MPHN	22,985	12.0	12,717	5.7	10,906	4.9
Carrathool	235	10.8	102	4.1	91	3.6

SELF ASSESSED HEALTH		
2017 TO 2018 – ABS		
ESTIMATED NUMBER OF PEOPLE AGED 15 YEARS AND OVER WITH FAIR OR POOR SELF-ASSESSED HEALTH		
	NUMBER	ASR PER 100
NSW	897,768	14.1
MPHN	31,578	15.3
Carrathool	300	13.3



CANCER SCREENING						
2015 TO 2016 – NSW CANCER COUNCIL						
	BREAST SCREENING RATE WOMEN 50 - 69 YEARS		CERVICAL SCREENING WOMEN 20 - 69 YEARS		BOWEL SCREENING PEOPLE 50 - 74 YEARS	
	NUMBER	%	NUMBER	%	NUMBER	%
NSW	491,605	42.9	2,153,768	44.1	512,013	38.3
MPHN	18,913	53.8	63,082	52.3	28,837	40.7
Carrathool	180	47.2	682	50.5	191	26.7

## HEALTH BEHAVIOURS

RISK FACTORS						
2017 TO 2018 – ABS						
	ESTIMATED POPULATION, AGED 18 YEARS AND OVER, WHO UNDERTOOK LOW, VERY LOW OR NO EXERCISE IN THE PREVIOUS WEEK (MODELLED ESTIMATES)		ESTIMATED NUMBER OF PEOPLE AGED 18 YEARS AND OVER WITH ADEQUATE FRUIT INTAKE (MODELLED ESTIMATES)		ESTIMATED NUMBER OF PEOPLE AGED 18 YEARS AND OVER WHO HAD HIGH BLOOD PRESSURE	
	NUMBER	ASR PER 100	NUMBER	ASR PER 100	NUMBER	ASR PER 100
NSW	900,743	65.3	2,204,749	55.3	1,400,529	23.1
MPHN	30,300	70.2	63,082	52.3	47,297	23.6
Carrathool	1,497	70.5	1,069	50.4	493	22.7

	ESTIMATED NUMBER OF MALES AGED 18 YEARS AND OVER WHO WERE OVERWEIGHT (BUT NOT OBESE)		ESTIMATED NUMBER OF MALES AGED 18 YEARS AND OVER WHO WERE OBESE		ESTIMATED NUMBER OF FEMALES AGED 18 YEARS AND OVER WHO WERE OVERWEIGHT (BUT NOT OBESE)		ESTIMATED NUMBER OF FEMALES AGED 18 YEARS AND OVER WHO WERE OBESE	
	NUMBER	ASR PER 100	NUMBER	ASR PER 100	NUMBER	ASR PER 100	NUMBER	ASR PER 100
NSW	1,226,016	41.1	952,093	32.1	890,104	29.0	917,643	29.9
MPHN	38,354	42.5	34,877	37.4	27,538	29.6	33,267	34.9
Carrathool	445	39.6	437	38.1	284	28.8	365	36.5

	ESTIMATED NUMBER OF MALES AGED 18 YEARS AND OVER WHO WERE CURRENT SMOKERS (MODELLED ESTIMATES)		ESTIMATED NUMBER OF FEMALES AGED 18 YEARS AND OVER WHO WERE CURRENT SMOKERS (MODELLED ESTIMATES)	
	NUMBER	ASR PER 100	NUMBER	ASR PER 100
NSW	511,157	17.2	355,337	11.7
MPHN	18,807	21.9	12,499	14.1
Carrathool	257	23.0	149	14.9

	ESTIMATED NUMBER OF MALES AGED 18 YEARS AND OVER WHO CONSUMED MORE THAN TWO STANDARD ALCOHOLIC DRINKS PER DAY ON AVERAGE (MODELLED ESTIMATES)		ESTIMATED NUMBER OF FEMALES AGED 18 YEARS AND OVER WHO CONSUMED MORE THAN TWO STANDARD ALCOHOLIC DRINKS PER DAY ON AVERAGE (MODELLED ESTIMATES)	
	NUMBER	ASR PER 100	NUMBER	ASR PER 100
NSW	676,575	22.7	258,306	8.5
MPHN	27,133	29.7	10,222	11.1
Carrathool	367	32.1	130	13.2

CRIME STATISTICS			
2021 – BOSCAR			
	SEXUAL ASSAULT ASR PER 100,000	DOMESTIC ASSAULT ASR PER 100,000	LIQUOR OFFENCES ASR PER 100,000
NSW	81.1	382.1	106.9
MPHN	100.8	429.2	197.1
Carrathool	NR	NR	NR

CRIME STATISTICS					
2021 – BOSCAR					
USE/POSSESS					
	COCAINE ASR PER 100,000	AMPHETAMINES ASR PER 100,000	ECSTASY ASR PER 100,000	CANNABIS ASR PER 100,000	NARCOTICS ASR PER 100,000
NSW	279	92.2	25.2	217.7	14.2
MPHN	16.0	96.7	17.2	257.5	2.3
Carrathool	NR	NR	NR	NR	NR

# TECHNICAL NOTES

## MPHN LGA DATA PRIORITISATION TOOL

MPHN's Data Prioritisation Tool applies a score based on the LGA result in relation to the state average and Murrumbidgee average results.

A score of zero to four is applied based on the difference between the LGA proportion or Age Standardised Rate (ASR) (see page 24 for explanation) result compared to the NSW average score.

Within the list of LGA scores, a score of one is given to the LGAs with either a higher or lower score than the average for the Murrumbidgee region.

The two scores are summed to give a total score.

To highlight the impacts, colour coding is applied to the range of 0 – 5 totals of both the NSW and Murrumbidgee averages combined.

MPHN's LGA Data Prioritisation Tool is also applied to socio-demographic variables such as age, gender etc.

MATRIX SCORING SYSTEM COMPARED TO THE NSW AVERAGE			
PROPORTION	ASR (TWO DIGIT RESPONSE)	ASR (THREE DIGIT RESPONSE)	SCORE
Less than 0 or negative score	Less than 0 or negative score	Less than 0 or negative score	0
0 and 10%	0 – 10	0 – 100	1
10.1% – 29.9%	11 – 30	101–300	2
30% – 49.9%	31 – 50	301 – 500	3
>50%	51 +	501 +	4
Higher or lower than Murrumbidgee average dependent on orientation of response (positive or negative)			
all values above/below average			1

IMPACT SCORE	
0	LOW impact
1	
2	
3	
4	
5	HIGH impact

The following notes provide a definition for terms used in this report that may not be familiar to readers.

## SOCIO-ECONOMIC INDEXES FOR AREAS (SEIFA)

The SEIFA score in this report is an index score that allows geographical ranking in Australia. The score measures socio-economic advantage and disadvantage, information is obtained from the five-yearly Australian Census.

SEIFA is a group of four indexes, which are used to rank areas broadly by their level of advantage or disadvantage. It consists of four measures:

- Index of Relative Socio-Economic Advantage-Disadvantage
- Index of Relative Socio-Economic Disadvantage
- Index of Education and Occupation
- Index of Economic Resources

Some examples of variables that are measured and form the indexes are (this is limited, there are more variables that are considered):

- Percentage of low-income households
- Unemployment rate
- Percentage of low-skilled occupations and people without qualifications
- Percentage of households without a car
- Percentage of people living overcrowded dwellings
- Percentage of people under 70 with a disability
- Percentage of children with jobless parents
- Percentage of people with poor English proficiency

SEIFA scores are expressed on a scale where lower numbers always mean more disadvantage and less advantage, while higher numbers mean less disadvantage and more advantage. They are standardised so that the average for Australia is always close to 1,000.

## AGE STANDARDISED RATE (ASR)

A method of adjusting the crude rate to eliminate the effect of differences in population age structures when comparing crude rates for different periods of time, different geographic areas and/or different population sub-groups (e.g. between one year and the next and/or States and Territories, Indigenous and non-Indigenous populations).

Adjustments are usually undertaken for each of the comparison populations against a standard population (rather than adjusting one comparison population to resemble another). Sometimes a comparison population is referred to as a study population.

ASRs are usually used for valid comparisons of rates in different populations, such as incidence rates, prevalence rates, mortality rates and health service utilisation rates.

An example of why they are used is because the numbers of deaths per 100,000 population are influenced by the age distribution of the population. Two populations with the same age-specific mortality rates for a cause of death will have different overall death rates if the age distributions of their populations are different. Age standardized mortality rates adjust for differences in population age distribution by applying the observed age-specific mortality rates for each population to a standard population. The age-standardised mortality rate is a weighted average of the age-specific mortality rates per 100,000 persons, where the weights are the proportions of persons in the corresponding age groups of the standard population.



