



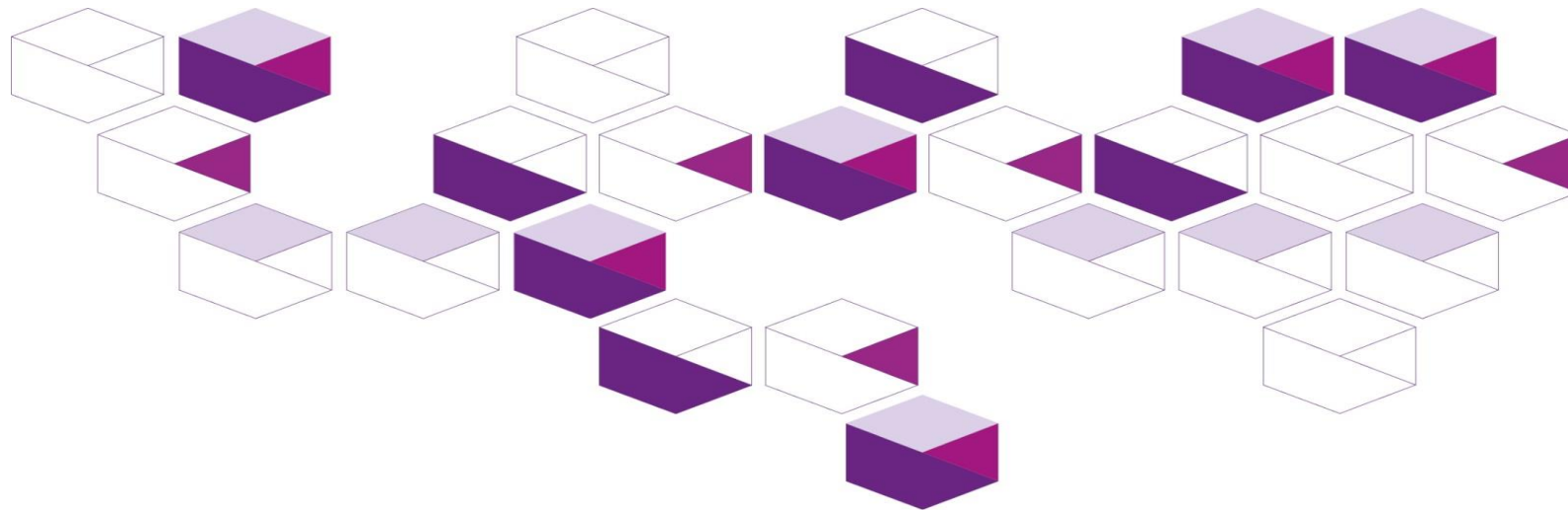
Government of **Western Australia**
South Metropolitan Health Service

Shire of Murray Injury and poisoning data

April 2020

South Metropolitan Health Service

Health Promotion



Acknowledgement

The South Metropolitan Health Service respectfully acknowledges the Aboriginal Noongar people both past and present, the traditional owners of the land on which we work.

Notes

In this report:

The terms 'Shire of Murray' and 'Murray LGA' are used interchangeably.

Within Western Australia, the term Aboriginal is used in preference to Aboriginal and Torres Strait Islander, in recognition that Aboriginal people are the original inhabitants of Western Australia. No disrespect is intended to our Torres Strait Islander colleagues and community.

Important disclaimer

All information and content in this material is provided in good faith by the WA Department of Health, and is based on sources believed to be reliable and accurate at the time of development. The State of Western Australia, the WA Department of Health and their respective officers, employees and agents, do not accept legal liability or responsibility for the material, or any consequences arising from its use.

Abbreviations

ASR	Age-standardised rate
CI	Confidence interval
DoH	Department of Health, Western Australia
LGA	Local government area
WA	Western Australia
ICD 10	International Classification of Diseases, 10th revision
ED	Emergency Department

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Purpose

The health-specific data contained in this document is provided by South Metropolitan Health Service, Health Promotion to the Shire of Murray to support local government public health planning

Health datasets

All data provided is sourced from within the Epidemiology Branch, Public Health Division, Department of Health, Western Australia.

Data sources and data period

- WA Hospital Morbidity Data System (2014-2018)
- WA Health Emergency Department Data Collection (2014-2018)
- WA Death Data (2013-2017).

Inclusion criteria

- WA residents only.
- Hospitalisations due to injury and poisoning are identified by principal diagnosis codes (ICD-10-AM) ranging from S00 to T98 inclusive.
- Emergency department presentations due to injury and poisoning are identified by the following major diagnostic blocks (ICD-10-AM): (1) Poisoning, (1C) Drug reaction, (2A) Injury, multiple sites, (2B) Injury, single site, major, and (2BA) = Injury, single site, minor.
- Death due to injury and poisoning are identified by Minor10_ec.

Methods and definitions

ASR	Age-standardised rate per 100,000 persons per year, standardised using indirect method against the 2001 Australian population. ASRs are only provided where case counts > 20, as otherwise they are unreliable.
ASR LCI and ASR UCI	Lower and upper limits of 95 per cent confidence intervals for ASR. Statistically we are 95 per cent confident that the true rate (ASR) falls between the lower and upper confidence interval values. Two rates are considered significantly different (at the 0.05 level) if their confidence intervals do not overlap. Otherwise, if their confidence intervals overlap, the two rates are not significantly different.

Limitations of the data

It is important to be cautious when comparing the data in this document to that of previous data and not to overstate any perceived differences between results. Changes could be due to a change in the demographic mix of the population, particularly as there have been some minor revisions to LGA boundaries over time.

Results are also not comparable between LGAs because, for each LGA, the minimum number of years necessary to make up a sufficient sample has been used. This means that the time period for other LGAs may differ.

Notes

- All rates are per 100,000 persons per year.
- ASR = Age-standardised rate ; ASR LCI=95 per cent lower confidence limit for ASR; ASR UCI=95 per cent upper confidence limit for ASR
- Counts less than 5 have been suppressed in this report to protect privacy and data confidentiality.
- Age standardised rates are not provided when the total event numbers for the population being studied are less than 20 due to unreliable rates that are derived.
- Standardised rate ratios are not provided when the total event numbers for the population being studied are less than 5 due to unreliable rate ratios that are derived.

Hospitalisations

Table 1: Number and rates of hospitalisations due to injury and poisoning by injury category and age groups, Murray local government area, WA, 2014 - 2018 (combined).

Injury category	Numbers by age group					Total	Age group specific rates					ASR	ASR LCI	ASR UCI
	0-14	15-24	25-44	45-64	65+		0-14	15-24	25-44	45-64	65+			
Transport accidents	37	78	99	49	45	308	208.6	840	464.2	211.3	244.6	383.4	339	427.8
Accidental falls	97	26	53	129	426	731	546.9	280	248.5	556.2	2316	677.8	626.7	728.8
Exposure to mechanical forces	88	78	119	121	72	478	496.2	840	558	521.7	391.4	561.8	509.3	614.2
Accidental drowning, submersion, threats to breathing	6	N/A	0	0	N/A	10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Exposure to electricity, radiation, extreme temperature/pressure	0	0	N/A	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Exposure to smoke, fire, flames, hot substances	7	N/A	6	8	8	33	39.5	43.1	28.1	34.5	43.5	38.4	24.7	52.1
Exposure to venomous plants, animals, forces of nature	10	N/A	9	7	N/A	31	56.4	21.5	42.2	30.2	16.3	36.6	23.3	49.8
Accidental poisoning	11	N/A	6	8	6	33	62	21.5	28.1	34.5	32.6	37.8	24.4	51.2
Other external causes of accidental injury	19	67	99	93	56	334	107.1	721.5	464.2	401	304.4	389.7	346.1	433.3
Intentional self-harm	N/A	14	17	11	N/A	47	5.6	150.8	79.7	47.4	21.7	60.8	42.7	78.9
Assault & other injury caused by other person(s)	N/A	12	19	17	N/A	52	11.3	129.2	89.1	73.3	10.9	68.7	49.5	87.9
Event of undetermined intent	0	N/A	N/A	5	0	7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Adverse effects due to drugs & other substances	7	5	6	5	12	35	39.5	53.8	28.1	21.6	65.2	36.3	23.5	49
Medical misadventure	N/A	0	N/A	10	5	18	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Abnormal reaction following procedure	25	20	102	188	301	636	141	215.4	478.3	810.6	1636	606.6	557	656.2
Total	307	300	535	651	931	2753	1714	3317	2508	2742	5083	2898	2566	3229

* All rates are per 100,000 persons per year

ASR = Age-standardised rate; ASR LCI=95 per cent lower confidence limit for ASR; ASR UCI=95 per cent upper confidence limit for ASR.

Note 1: Counts less than 5 have been suppressed to protect privacy and data confidentiality.

Note 2: Age standardised rates are not provided when the total event numbers for the population being studied are less than 20 due to unreliable rates that are derived.

Table 2: Length of stay of hospitalisation (number of bed days) due to injury and poisoning by injury category, gender, age group and Aboriginal status, Murray local government area, 2018.

Injury category	Gender		Age group					Aboriginal status	
	Male	Female	0-14 years	15-24 years	25-44 years	45-64 years	65+ years	Non-Aboriginal	Aboriginal
Transport accidents	121	197	10	66	24	28	190	314	<5
Accidental falls	259	492	20	7	7	118	599	750	<5
Exposure to mechanical forces	114	26	18	11	25	31	55	138	<5
Accidental drowning, submersion, threats to breathing	0	<5	<5	0	0	0	<5	<5	0
Exposure to electricity, radiation, extreme temperature / pressure	<5	0	0	0	<5	0	0	<5	0
Exposure to smoke, fire, flames, hot substances	11	<5	0	0	<5	6	5	14	0
Exposure to venomous plants, animals, forces of nature	14	<5	<5	<5	8	<5	<5	17	0
Accidental poisoning	10	5	<5	0	6	6	<5	15	0
Other external causes of accidental injury	91	79	7	14	27	67	55	169	<5
Intentional self-harm	8	27	0	<5	<5	<5	28	35	0
Assault & other injury caused by other person(s)	24	<5	<5	<5	13	5	<5	24	<5
Event of undetermined intent	0	<5	0	0	0	<5	0	<5	0
Adverse effects due to drugs & other substances	5	<5	<5	<5	0	<5	<5	8	0
Medical misadventure	<5	30	<5	0	0	20	11	33	0
Abnormal reaction following procedure	235	273	<5	15	51	141	297	508	0
Total	896	1144	69	122	166	433	1250	2031	9

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Note 2: Age standardised rates are not provided when the total event numbers for the population being studied are less than 20 due to unreliable rates that are derived.

Costs

Table 3: Cost of hospitalisation (\$) due to injury and poisoning by injury category, Murray local government area, WA, 2018.

Injury category	Total Cost
Transport accidents	\$ 685,008.26
Accidental falls	\$ 1,299,659.97
Exposure to mechanical forces	\$ 427,961.06
Accidental drowning, submersion, threats to breathing	\$ 9,589.90
Exposure to electricity, radiation, extreme temperature/pressure	\$ 2,083.24
Exposure to smoke, fire, flames, hot substances	\$ 55,193.49
Exposure to venomous plants, animals, forces of nature	\$ 24,146.07
Accidental poisoning	\$ 39,864.40
Other external causes of accidental injury	\$ 619,481.45
Intentional self-harm	\$ 137,673.89
Assault & other injury caused by other person(s)	\$ 135,777.88
Event of undetermined intent	\$ 7,209.23
Adverse effects due to drugs & other substances	\$ 23,227.41
Medical misadventure	\$ 93,918.22
Abnormal reaction following procedure	\$ 1,496,909.85
Total	\$ 5,057,704.32

Emergency Department presentations

Table 4: Number and rates of ED presentations due to injury and poisoning by age groups, Murray local government area, WA, 2014 - 2018 (combined).

Numbers by age group					Total	Age group specific rates					ASR	ASR LCI	ASR UCI
0-14	15-24	25-44	45-64	65+		0-14	15-24	25-44	45-64	65+			
2342	1375	1689	1306	1322	8034	13206	14807	7919	5631	7187	9518	9303	9734

* All rates are per 100,000 population

ASR = Age-standardised rate ; ASR LCI=95 per cent lower confidence limit for ASR; ASR UCI=95 per cent upper confidence limit for ASR

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Fatalities

Table 5: Number and rates of death due to injury and poisoning by injury category, Murray local government area, WA, 2013 - 2017 (combined).

Injury category (Cause of death by ICD-10 code)	Total	ASR	ASR LCI	ASR UCI
Transport accidents (V00-V06,V09-V99,Y85)	11	N/A	N/A	N/A
Accidental falls (W00-W19)	14	N/A	N/A	N/A
Accidental drowning, submersion and threats to breathing (W65-W70,W73-W81,W83-W84)	N/A	N/A	N/A	N/A
Accidental poisoning (X40-X49)	12	N/A	N/A	N/A
Accidental exposure to other and unspecified factors (X50-X54,X57-X59)	N/A	N/A	N/A	N/A
Intentional self-harm (X60-X84,Y87.0)	21	27.8	15.5	40.1
Assault (X85-X99,Y00-Y09,Y35-Y36,Y87.1)	N/A	N/A	N/A	N/A
Event of undetermined intent (Y10-Y34,Y87.2)	N/A	N/A	N/A	N/A
Abnormal reaction following procedure (Y83-Y84,Y88.3)	N/A	N/A	N/A	N/A
Total	58	27.8	15.5	40.1

* All rates are per 100,000 population

ASR = Age-standardised rate ; ASR LCI=95 per cent lower confidence limit for ASR; ASR UCI=95 per cent upper confidence limit for ASR

Note 1: Counts less than 5 have been suppressed in this report to protect privacy and data confidentiality.

Note 2: Age standardised rates are not provided when the total event numbers for the population being studied are less than 20 due to unreliable rates that are derived.

This document can be made available in alternative formats on request.

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