



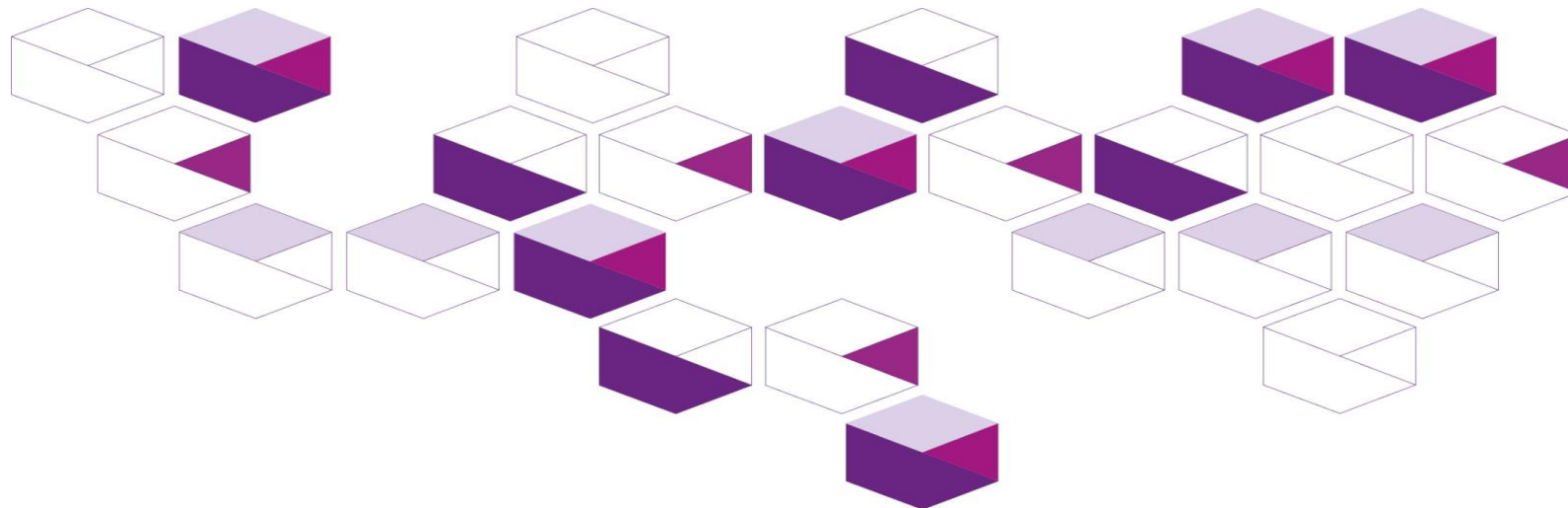
Government of **Western Australia**
South Metropolitan Health Service

City of Rockingham 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 'City of Rockingham and 'Rockingham 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, 10 th 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 City of Rockingham 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 (2004-2018)
- 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.

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.

Hospitalisations

Table 1: Number and rates of hospitalisations due to injury and poisoning by injury category and age groups, Rockingham LGA, 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	139	303	496	270	148	1,356	92.1	327.4	250.1	176.5	188.1	204.0	193.1	214.9
Accidental falls	623	208	408	642	2,389	4,270	412.7	224.8	205.7	419.8	3,036.0	664.7	644.6	684.7
Exposure to mechanical forces	518	384	715	442	233	2,292	343.2	415.0	360.5	289.0	296.1	338.2	324.3	352.2
Accidental drowning, submersion, threats to breathing	32	<5	<5	<5	5	44	21.2	N/A	N/A	N/A	6.4	6.0	4.2	7.8
Exposure to electricity, radiation, extreme temperature/pressure	0	<5	13	8	<5	24	0	N/A	6.6	5.2	N/A	3.7	2.2	5.1
Exposure to smoke, fire, flames, hot substances	50	18	41	74	10	193	33.1	19.5	20.7	48.4	12.7	28.5	24.4	32.5
Exposure to venomous plants, animals, forces of nature	20	<5	43	27	20	114	13.3	N/A	21.7	17.7	25.4	17.1	13.9	20.2
Accidental poisoning	89	33	83	69	50	324	59	35.7	41.8	45.1	63.5	47.3	42.1	52.5
Other external causes of accidental injury	124	384	838	556	224	2,126	82.2	415.0	422.5	363.6	284.7	320.2	306.5	333.8
Intentional self-harm	18	134	183	76	35	446	11.9	144.8	92.3	49.7	44.5	67.6	61.3	73.9
Assault & other injury caused by other person(s)	26	129	192	89	23	459	17.2	139.4	96.8	58.2	29.2	68.9	62.6	75.2
Event of undetermined intent	9	14	28	17	<5	72	6.0	15.1	14.1	11.1	N/A	10.8	8.3	13.3
Adverse effects due to drugs & other substances	49	27	49	40	42	207	32.5	29.2	24.7	26.2	53.4	30.9	26.7	35.1
Medical misadventure	<5	7	29	40	51	130	N/A	7.6	14.6	26.2	64.8	20.5	17.0	24.1
Abnormal reaction following procedure	183	193	847	1,245	1,248	3,716	121.2	208.6	427.1	814.1	1,586	571.1	552.7	589.6
Sequelae of external causes of morbidity & mortality	<5	<5	<5	<5	<5	6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

* 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 days) due to injury and poisoning by injury category, gender, age group and Aboriginal status, Rockingham LGA, 2018.

Injury category	Gender		Age group					Aboriginal status		Total
	Male	Female	0-14 years	15-24 years	25-44 years	45-64 years	65+ years	Non-Aboriginal	Aboriginal	
Transport accidents	721	254	52	180	364	215	164	970	5	975
Accidental falls	1,729	2,286	157	83	163	424	3,188	3,996	19	4,015
Exposure to mechanical forces	444	285	129	99	203	136	162	711	18	729
Accidental drowning, submersion, threats to breathing	9	<5	8	5	0	0	0	13	0	13
Exposure to electricity, radiation, extreme temperature / pressure	<5	0	0	0	<5	0	0	<5	0	<5
Exposure to smoke, fire, flames, hot substances	86	49	56	21	34	17	7	127	8	135
Exposure to venomous plants, animals, forces of nature	27	6	<5	<5	19	<5	7	33	0	33
Accidental poisoning	100	32	17	5	34	30	46	127	5	132
Other external causes of accidental injury	405	431	29	105	209	198	295	824	12	836
Intentional self-harm	138	114	<5	64	82	65	37	244	8	252
Assault & other injury caused by other person(s)	106	39	15	26	65	35	<5	135	10	145
Event of undetermined intent	10	14	<5	<5	<5	<5	9	24	0	24
Adverse effects due to drugs & other substances	31	41	10	6	9	31	16	70	<5	72
Medical misadventure	7	59	<5	<5	7	21	36	65	<5	66
Abnormal reaction following procedure	1,435	1,358	109	68	381	825	1,410	2,771	22	2,793
Sequelae of external causes of morbidity & mortality	<5	0	<5	<5	0	0	0	<5	<5	<5
Total	5,252	4,972	594	669	1,576	2,004	5,381	10,114	110	10,224

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

Costs

Table 3: Cost of hospitalisation (\$) due to injury and poisoning by injury category, Rockingham LGA, WA, 2018.

Injury category	Total Cost
Transport accidents	\$ 2,673,514
Accidental falls	\$ 7,632,007
Exposure to mechanical forces	\$ 2,439,498
Accidental drowning, submersion, threats to breathing	\$ 22,560
Exposure to electricity, radiation, extreme temperature/pressure	\$ 5,795
Exposure to smoke, fire, flames, hot substances	\$ 480,777
Exposure to venomous plants, animals, forces of nature	\$ 70,499
Accidental poisoning	\$ 322,351
Other external causes of accidental injury	\$ 3,155,467
Intentional self-harm	\$ 576,932
Assault & other injury caused by other person(s)	\$ 517,383
Event of undetermined intent	\$ 76,937
Adverse effects due to drugs & other substances	\$ 205,484
Medical misadventure	\$ 201,827
Abnormal reaction following procedure	\$ 7,855,542
Sequelae of external causes of morbidity & mortality	\$ 25,478
Total	\$ 26,262,049

Emergency Department presentations

Table 4: Number and rates of ED presentations due to injury and poisoning by age groups, Rockingham LGA, 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+			
21,906	11,825	16,037	9,768	7,093	66,629	14,513	12,778	8,086	6,387	9,014	9,814	9,739	9,889

* 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, Rockingham LGA, WA, 2013 – 2017 (combined).

Injury category	Male	Female	ARS	ASR LCI	ASR UCI
Transport accidents	38	5	6.9	4.8	8.9
Accidental falls	38	36	12.4	9.6	15.2
Exposure to mechanical forces	N/A	N/A	N/A	N/A	N/A
Accidental drowning, submersion, threats to breathing	7	N/A	N/A	N/A	N/A
Exposure to smoke, fire and flames; heat and hot substances	N/A	N/A	N/A	N/A	N/A
Accidental poisoning	28	17	7.1	5	9.2
Accidental exposure to other and unspecified factors	5	7	N/A	N/A	N/A
Intentional self-harm	93	23	18.4	15.1	21.7
Assault	N/A	N/A	N/A	N/A	N/A
Event of undetermined intent	N/A	N/A	N/A	N/A	N/A
Adverse effects due to drugs & other substances	N/A	N/A	N/A	N/A	N/A
Sequelae of other accidents	N/A	N/A	N/A	N/A	N/A
Total	218	94	44.8	34.5	55.1

* 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 in 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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