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Australian Institute of Health and Welfare:

Response to Questions on Notice from the Senate Standing
References Committee on Legal and Constitutional Affairs
regarding the Inquiry into Missing and Murdered First Nations
Women and Children

Public Hearing
Wednesday 5 October 2022

Question 1: Rates of homicides by remoteness and socio-economic factors

Dr Al-Yaman, you mentioned that some of the differential in the rates of homicides can be explained by socioeconomic and remoteness factors. Could you, if possible, provide us some analysis of that and differentiate between First Nations and non-First Nations peoples in remote communities?

Response

Intentional violence against another person is classified as assault (injury) or homicide (death). Analysis provided below, shows that the rate of homicide deaths among Indigenous females was higher than for non-Indigenous females across all remoteness areas and socioeconomic groups. This analysis is based on the AIHW National Mortality Database where the cause of death is recorded as assault (see 'Data information').

To supplement this analysis, the AIHW has also analysed data for hospitalisations due to assault. This analysis is based on the AIHW National Hospital Morbidity Database (NHMD) (see 'Data information').

Assault deaths by remoteness areas and socioeconomic groups

Due to small numbers occurring in any one year, mortality data have been combined in a 5-year period, 2016 to 2020 (based on calendar years).

Analysis of mortality data shows that among Aboriginal and Torres Strait Islander females, the rate of homicide deaths were higher in remote than non-remote areas. Over the 5-year period 2016 to 2020:

- there was a total of 54 Indigenous female homicide deaths¹. Of these, 23 homicide deaths were among Indigenous females living in *Remote and very remote* areas (33%, excluding deaths where remoteness of usual residence was unknown), 17 living in *Major cities* (23%), and 12 (44%) living in *Inner and outer regional* areas.
- the rate of homicide deaths among Indigenous females living in *Remote and very remote* areas was 2.8 times as high as for those in *Major cities* (6.0 compared 2.2 per 100,000 population), and 4.6 times as high as for those living in *Inner and outer regional* areas (6.0 compared with 1.3 per 100,000 population respectively) (see Figure 1, Table A1).
- for non-Indigenous females, the data shows no differences in the rate of homicide death by remoteness. The rate of homicide deaths was the same (after rounding) across all 3 remoteness categories (0.5 per 100,000 population).

Indigenous females accounted for 85% of total female homicide deaths in *Remote and very remote* areas (23 of 27 homicide deaths), 13% in *Inner and outer regional* areas (12 of 93 deaths), and 7% in *Major cities* (17 of 248 deaths) (excluding deaths where Indigenous status was unknown).

In *Remote and very remote* areas, the rate of homicide deaths among Indigenous females was 11 times as high as for non-Indigenous females; in *Major cities* the rate was 4.2 times as high, and in *Inner and outer regional* areas, it was 2.5 times as high (based on crude rates²).

¹ Includes data for all state/territories – this differs to the approach used in other reporting – see Table A1, footnote (c) for details.

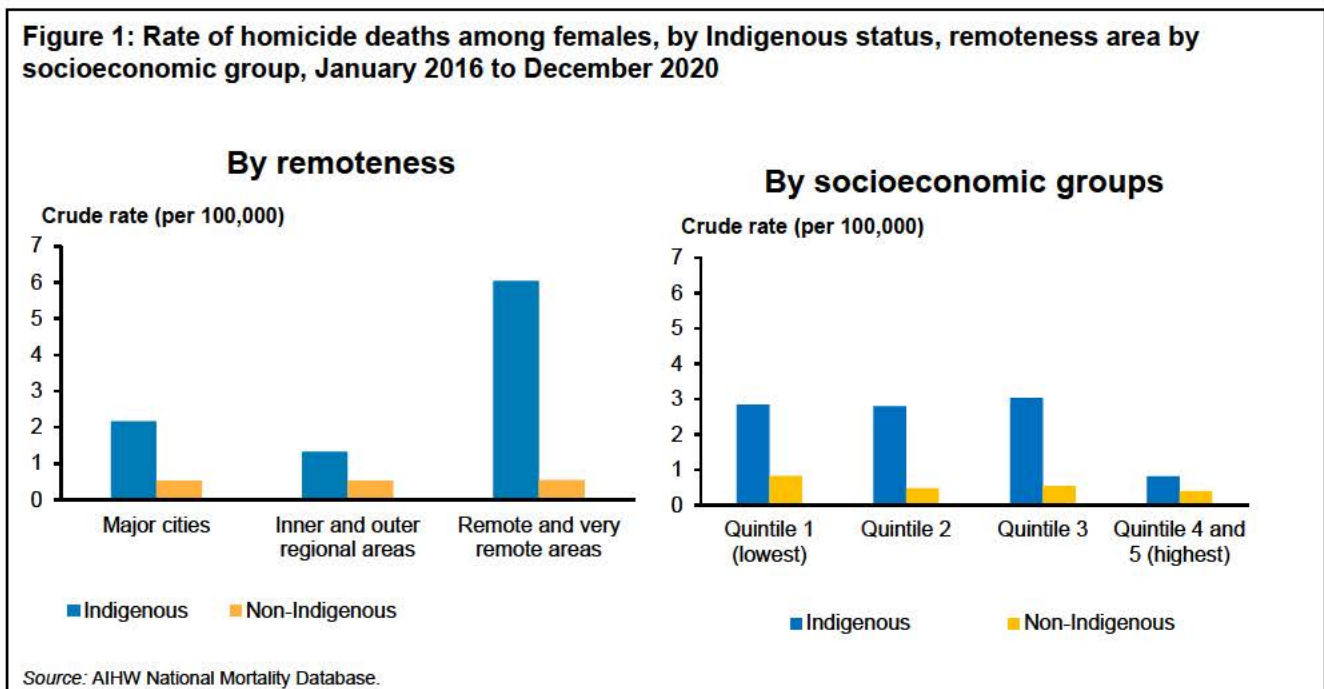
² Age-standardisation was not possible for all remoteness categories due to small numbers of deaths, but AIHW analysis shows that the use of crude rates is adequate when looking at homicide deaths by Indigenous status.

Looking at rates of homicide deaths across socioeconomic groups, the rate of deaths due to homicide was lower among those living in the highest socioeconomic areas, for both Indigenous and non-Indigenous females. Over the period 2016 to 2020:

- of the 54 homicide deaths among Indigenous females, 25 were among Indigenous females living in the lowest socioeconomic quintile (48%, excluding deaths where socioeconomic status was unknown), 14 were among those living in second lowest socioeconomic quintile (27%), 10 among those in the middle socioeconomic quintile (19%), and 3 were among those living in the two highest socioeconomic quintiles combined (6%).
- for Indigenous females, the rate of homicide deaths among those living in the 3 lower socioeconomic quintiles was between 3.4 and 3.7 times that of the 2 highest socioeconomic quintiles combined (2.8-3.0 compared with 0.8 per 100,000 population) (see Figure 1, Table A2).
- for non-Indigenous females, the rate of homicide deaths among those living in the 2 highest socioeconomic quintiles combined was 0.4 per 100,000 (101 deaths), compared with 0.5 per 100,000 in both the middle and second lowest socioeconomic quintile (66 deaths and 56 deaths, respectively), and 0.8 per 100,000 in the lowest socioeconomic quintile (94 deaths) (see Figure 1, Table A2).

Indigenous females accounted for 3% of total female homicide deaths among those living in the 2 highest socioeconomic quintiles combined (3 of 104 deaths), 13% of homicide deaths those living in the middle socioeconomic quintile (10 of 76 deaths) and 20% of homicide deaths the second lowest socio-economic quintile (14 of 70 deaths in the second lowest quintile) and 21% of homicide deaths in the lowest (25 of 119).

The rate of homicide deaths among Indigenous females ranged between 2.0 and 5.9 times as high as for non-Indigenous females across socioeconomic groups (Table A2).



Assault hospitalisations by remoteness areas and socioeconomic groups

Hospitalisations data in this section are presented for the two-year period July 2019 to June 2021 combined (based on financial years). Hospitalisations³ due to assault are defined as hospitalisations where the principal diagnosis was recorded as injury and poisoning (ICD-10-AM S00–T98), and the first reported external cause was assault (X85–Y09).

Among Aboriginal and Torres Strait Islander females, both the number and rate of hospitalisations due to assault were higher in remote than non-remote areas. Over the period July 2019 to June 2021:

- of the 8,235 hospitalisations due to assault among Indigenous females, 4,648 (56%) were among those living in *Remote and very remote* areas, 2,026 (25%) among those living in *Inner and outer regional* areas, and 1,345 (16%) among those living in *Major cities*.
- the rate of hospitalisations for assault among Indigenous females living in *Remote and very remote* areas was 7.4 times as high as for those in *Major cities* (30.3 compared with 4.1 per 1,000 population), and 5.7 times as high as for those living in *Inner and outer regional* areas (30.3 compared with 5.3 per 1,000 population respectively) (Figure 1, Table A3).
- for non-Indigenous females, the differences across remoteness areas were smaller than those observed for Indigenous females. The rate of assault hospitalisation was higher for those living *Remote and very remote* (0.6 per 1,000 population) than in *Inner and outer regional* areas or *Major cities* (0.3 and 0.4 per 1,000 population respectively).

Between July 2019 to June 2021, Indigenous females accounted for 96% of total female assault hospitalisations in *Remote and very remote* areas, 48% in *Inner and outer regional* areas, and 17% in *Major cities* (excluding hospitalisations where Indigenous status was unknown).

In *Remote and very remote* areas, the rate of hospitalisations due to assault among Indigenous females was 48 times as high as for non-Indigenous females (30.3 compared with 0.6 per 1,000 population); in *Inner and outer regional* areas, the rate was 16 times as high (5.3 compared with 0.3 per 1,000), and in *Major cities* the rate was 11 times as high (4.1 compared with 0.4 per 1,000) (based on crude rates⁴).

Looking at rates of assault hospitalisations across socioeconomic groups, the rate of hospitalisations due to assault was lower among those living in the highest socioeconomic areas, for both Indigenous and non-Indigenous females. Over the period July 2019 to June 2021:

- of the 8,235 hospitalisations due to assault among Indigenous females, 4,699 (59%) were for those living in the lowest socioeconomic quintile, 1,062 were for those in the second lowest quintile (13%), 1,451 were for those in the middle quintile (18%), and the 806 hospitalisations were for those in the 2 highest socioeconomic quintiles (10%) (percentages exclude hospitalisations where socioeconomic status was unknown).
- the rate of hospitalisations due to assault among Indigenous females living in the lowest socioeconomic group was 3.6 times as high as for those living in the highest socioeconomic group (14.2 compared with 4.0 hospitalisations per 1,000 population) and between 1.5 to 2.8 times higher than those living in the middle 3 socioeconomic groups (14.2 compared with 5.1 and 9.6 hospitalisations per 1,000 respectively).
- for non-Indigenous females, the rate of assault hospitalisations was 0.2 per 1,000 among those living in the highest socioeconomic group, compared with between 0.3 and 0.4 per 1,000 in the middle 3 socioeconomic groups, and 0.6 per 1,000 in the lowest socioeconomic group (Figure 2, Table A4).

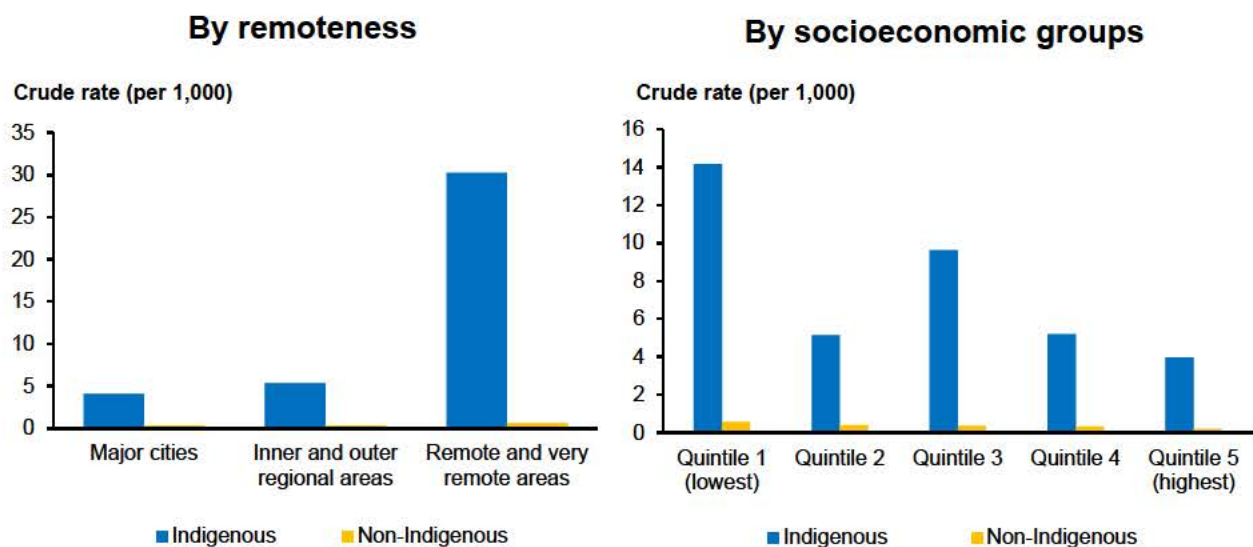
³ A hospitalisation is an episode of admitted patient care, which can be a total hospital stay (from admission to discharge, transfer or death) or a portion of a hospital stay beginning or ending in a change of type of care (e.g., from acute care to rehabilitation). Also referred to as a 'separation'.

⁴ Rate ratios based age-standardised rates are similar to those based on crude rates; see Table A3.

Indigenous females accounted for 23% of total assault hospitalisations among females living in the 2 highest socioeconomic quintiles (507 of 2,183 hospitalisations in the second highest quintile, and 299 of 1,323 in the highest quintile). In comparison, Indigenous females accounted for 43% of assault hospitalisations for females living in the middle socioeconomic quintile (1,451 of 3,384 deaths), 36% for those living in the second lowest socioeconomic quintile (1,062 of 2,928 deaths), and 66% among those living in the lowest socio-economic group (4,699 of 7,094 deaths).

The rate of assault hospitalisations among Indigenous females ranged between 13 and 27 times as high as for non-Indigenous females across socioeconomic groups (Table A2).

Figure 2: Rate of hospitalisations due to assault among females, by Indigenous status, remoteness area and by socioeconomic group, July 2019 to June 2021



Note: When comparing these graphs, note that the scale of the two graphs differ.

Source: AIHW National Hospital Morbidity Database.

About the data

To answer this question, we have analysed mortality data from the AIHW National Mortality Database (NMD) and hospitalisations data from the National Hospital Morbidity Database (NHMD).

National Mortality Database

The AIHW National Mortality Database (NMD) holds records for deaths in Australia from 1964. The database comprises information about causes of death and other characteristics of the person, such as sex, age at death, area of usual residence and Indigenous status.

Cause of Death Unit Record File data are provided to the AIHW by the Registries of Births, Deaths and Marriages and the National Coronial Information System (managed by the Victorian Department of Justice) and include cause of death coded by the Australian Bureau of Statistics (ABS).

Cause of death information is based on underlying cause of death and classified according to the International Classification of Diseases and Related Health Problems (ICD). Deaths registered in 1997 onwards are classified according to the 10th revision (ICD-10). Homicide deaths are defined in the data presented here as a cause of death in the following ICD-10 codes: X85–Y09.

Generally, mortality data are reported for 5 states and territories—New South Wales, Queensland, Western Australia, South Australia and the Northern Territory. These jurisdictions are considered to have adequate levels of Indigenous identification. For this response, given that remoteness and socioeconomic areas cross state boundaries, deaths by Indigenous status and remoteness were reported for whole of Australia – therefore, totals in this response may differ from those published elsewhere.

For more information about Australian mortality data, including scope and coverage of the collection and a quality declaration, please refer to [Deaths, Australia](#) and [Causes of death, Australia](#) available from the ABS website.

For more information about Australian mortality data, including scope and coverage of the collection and a quality declaration, please refer to and [Causes of death, Australia](#) available from the ABS website.

For more information on the AIHW National Mortality Database see [About National Mortality Database](#) available from the AIHW website.

National Hospital Morbidity Database

The National Hospital Morbidity Database (NHMD) is a compilation of episode-level records for admitted patients from essentially all public and private hospitals in Australia.

The data are supplied by jurisdictions to the AIHW based on the National minimum data set (NMDS) for Admitted patient care and include demographic, administrative and length of stay data, as well as data on the diagnoses of the patients, the procedures they underwent in hospital and external causes of injury and poisoning.

Comprehensive information on the quality of data is available on the AIHW [MyHospitals](#) website.

Diagnosis, intervention and external cause data for 2019–21 were reported to the NHMD by all states and territories using the 11th edition of the International statistical classification of diseases and related health problems, 10th revision, Australian modification (ICD-10-AM) (ACCD 20195).

The Indigenous status data in the NHMD are considered to be of sufficient quality for statistical reporting for all states and territories from 2010–11 onwards.

Data are presented for hospitalisations⁶ where the principal diagnosis was recorded as injury and poisoning (ICD-10-AM S00–T98), and the first reported external cause was assault (X85–Y09).

⁵ ACCD (Australian Consortium for Classification Development) 2019a. The international statistical classification of diseases and related health problems, 10th revision, Australian modification (ICD-10-AM), 11th edn. Tabular list of diseases and alphabetic index of diseases. Adelaide: Independent Hospital Pricing Authority (IHPA), Lane Publishing

⁶ A hospitalisation is an episode of admitted patient care, which can be a total hospital stay (from admission to discharge, transfer or death) or a portion of a hospital stay beginning or ending in a change of type of care (e.g., from acute care to rehabilitation).

Calculating rates

To calculate rates:

- for the remoteness analysis: Populations based on ABS projections (series B) projections based on 2016 Census have been used for Indigenous Australians (noting that estimates based on the 2021 Census are not yet available), with ABS estimates based on the 2021 Census used for the total population (to derive non-Indigenous estimates).
- for the socioeconomic analysis: The ABS does not publish the necessary population data by Indigenous status to derive denominators. As such, populations by socioeconomic quintile were estimated by the AIHW using a Bayesian smoothing of Census counts, followed by Iterative Proportional Fitting of relevant published ABS population estimates, together with ABS geographic correspondences.

Remoteness and socioeconomic status definitions

Geographic remoteness is essentially a measure of a location's level of access to services. Larger population centres tend to have a greater level of service provision than small centres. This analysis uses the Australian Statistical Geography Standard [Remoteness Structure](#) classification

Remoteness measures are calculated using Accessibility/Remoteness Index of Australia (ARIA+) scores, which are based on the road distance from a populated locality to the nearest Urban Centre. The lower the ARIA+ score for a populated locality the greater the access to services. For this analysis, is based on area of usual residence—Statistical Local Area Level 2 (SA2)—classified according to *Remoteness Area 2016*. Correspondence files are sourced from Australian Statistical Geography Standard (ASGS): Volume 5 - Remoteness Structure, July 2016 (ABS cat. no. 1270.0.55.005).

Socioeconomic status can be measured using an individual characteristic, such as a person's level of income, education or occupation, or it may be constructed as a composite measure using a range of socioeconomic information. This analysis uses the [ABS Socio-Economic Indexes for Areas](#) (SEIFA) 2016, which consists of four composite measures (indexes) created using social and economic information from the 2016 Census. For this analysis, the SEIFA Index of Relative Socio-economic Disadvantage (IRSD) has been used.

The IRSD classifies individuals according to the socioeconomic characteristics of the area in which they live. It scores each area by summarising attributes of the population, such as low income, low educational attainment, high unemployment and jobs in relatively unskilled occupations. Areas can then be ranked according to their score. The population living in the 20% of areas with the greatest overall level of disadvantage is described as the 'lowest socioeconomic group'. The 20% at the other end of the scale – the top fifth – is described as the 'highest socioeconomic group'.

Note that the IRSD reflects the overall or average level of disadvantage of the population of an area; it does not show how individuals living in the same area differ from each other in their socioeconomic position. Inequality estimates based on area-level measures of socioeconomic position will underestimate inequalities because of the substantial variation in socioeconomic position within areas (Mather 2014)⁷.

In this analysis, socioeconomic status is based on area of usual residence—Statistical Local Area Level 2 (SA2)—classified into population-based quintiles by using the 2016 IRSD. Correspondence files are sourced from Census of Population and Housing: Socio-Economic Indexes for Areas (SEIFA), Australia, 2016 (ABS cat. no. 2033.0.55.001).

⁷ Mather T, Banks E, Joshy G, Bauman A, Phongsavan P and Korda RJ (2014) 'Variation in health inequalities according to measures of socioeconomic status and age', *Australian and New Zealand Journal of Public Health*, 38(5):436–440, doi:10.1111/1753-6405.12239.

Attachment Tables

Table A1: Number and rates of deaths due to assault (ICD-10 X85-Y09) among females, by Indigenous status and remoteness area, 2016-2020

Remoteness area	Indigenous females		Non-Indigenous females		Rate ratio ^(a)
	Deaths	Crude rate (per 100,000)	Deaths	Crude rate (per 100,000)	
Major cities	17	2.2	231	0.5	4.2
Inner and outer regional areas	12	1.3	81	0.5	2.5
Remote and very remote areas	23	6.0	4	0.5	11.0
Australia^{(b)(c)}	54	2.6	323	0.5	4.9

(a) Rate ratio is calculated as the crude rate for Indigenous females divided by the crude rate for non-Indigenous females. Rates may vary due to rounding numbers.

(b) Includes unknown/missing remoteness area.

(c) This includes data for all jurisdictions. However, for general reporting purposes, mortality data is typically reported for 5 states and territories—New South Wales, Queensland, Western Australia, South Australia and the Northern Territory. These jurisdictions are considered to have adequate levels of Indigenous identification in mortality data. Therefore, this total may differ to that published elsewhere. When limited to the usual 5 jurisdictions, the number of assault deaths among Indigenous females in 2016-2020 was 54 (a crude rate of 2.9 per 100,000 population), and the number for non-Indigenous females was 219 (0.5 per 100,000).

Notes

1. Cause of Death Unit Record File data are provided to the AIHW by the Registries of Births, Deaths and Marriages and the National Coronial Information System (managed by the Victorian Department of Justice) and include cause of death coded by the Australian Bureau of Statistics (ABS). The data are maintained by the AIHW in the National Mortality Database
2. Deaths registered in 2018 and earlier are based on the final version of cause of death data; deaths registered in 2019 are based on the revised version; deaths registered in 2020 are based on the preliminary version. Revised and preliminary versions are subject to further revision by the ABS.
3. Cause of death information are based on underlying cause of death and are classified according to the International Classification of Diseases and Related Health Problems (ICD). Deaths registered in 1997 onwards are classified according to the 10th revision (ICD-10).
4. Cause-specific deaths data have been adjusted for Victorian additional death registrations in 2019. A time series adjustment has been applied to causes of death to enable a more accurate comparison of mortality over time. When the time series adjustment is applied, deaths are presented in the year in which they were registered (i.e., removed from 2019 and added to 2017 or 2018). For more detail, please refer to Technical note: Victorian additional registrations and time series adjustments in Causes of death, Australia, 2019 (ABS Cat. no. 3303.0).
5. Remoteness area is based on area of usual residence—Statistical Local Area Level 2 (SA2)—classified according to Remoteness Area 2016. Correspondence files are sourced from Australian Statistical Geography Standard (ASGS): Volume 5 - Remoteness Structure, July 2016 (ABS cat. no. 1270.0.55.005). Deaths with unknown/missing area of usual residence were excluded in the analysis.
6. Deaths with unknown Indigenous status were excluded from the analysis.
7. Only crude rates are shown. Age-standardised rates are not provided due to small numbers and therefore concerns around reliability of the rates. However, AIHW analysis indicates that crude rates are adequate when comparing rates of assault death.
8. Rates by remoteness were calculated using ABS population estimates and projections based on the 2016 Census.

Source: AIHW National Mortality Database.

Table A2: Number and rates of deaths due to assault (ICD-10 X85-Y09) among females, by Indigenous status and socioeconomic group, 2016-2020

Socioeconomic group	Indigenous females		Non-Indigenous females		Rate ratio ^(a)
	Deaths	Crude rate (per 100,000)	Deaths	Crude rate (per 100,000)	
Quintile 1 (lowest)	25	2.8	94	0.8	3.4
Quintile 2	14	2.8	56	0.5	5.9
Quintile 3	10	3.0	66	0.5	5.7
Quintile 4 and 5 (highest)	3	0.8	101	0.4	2.0
Australia^{(b)(c)}	54	2.6	323	0.5	4.9

(a) Rate ratio is calculated as the crude rate for Indigenous females divided by the crude rate for non-Indigenous females.

(b) Includes unknown/missing socioeconomic area.

(c) This includes data for all jurisdictions. However, for general reporting purposes, mortality data is typically reported for 5 states and territories—New South Wales, Queensland, Western Australia, South Australia and the Northern Territory. These jurisdictions are considered to have adequate levels of Indigenous identification in mortality data. Therefore, this total may differ to that published elsewhere. When limited to the usual 5 jurisdictions, the number of assault deaths among Indigenous females in 2016-2020 was 54 (a crude rate of 2.9 per 100,000 population), and the number for non-Indigenous females was 219 (0.5 per 100,000).

Notes

1. Cause of Death Unit Record File data are provided to the AIHW by the Registries of Births, Deaths and Marriages and the National Coronial Information System (managed by the Victorian Department of Justice) and include cause of death coded by the Australian Bureau of Statistics (ABS). The data are maintained by the AIHW in the National Mortality Database
2. Deaths registered in 2018 and earlier are based on the final version of cause of death data; deaths registered in 2019 are based on the revised version; deaths registered in 2020 are based on the preliminary version. Revised and preliminary versions are subject to further revision by the ABS.
3. Cause of death information are based on underlying cause of death and are classified according to the International Classification of Diseases and Related Health Problems (ICD). Deaths registered in 1997 onwards are classified according to the 10th revision (ICD-10).
4. Cause-specific deaths data have been adjusted for Victorian additional death registrations in 2019. A time series adjustment has been applied to causes of death to enable a more accurate comparison of mortality over time. When the time series adjustment is applied, deaths are presented in the year in which they were registered (i.e., removed from 2019 and added to 2017 or 2018). For more detail, please refer to Technical note: Victorian additional registrations and time series adjustments in Causes of death, Australia, 2019 (ABS Cat. no. 3303.0).
5. Socioeconomic status is based on area of usual residence—Statistical Local Area Level 2 (SA2)—classified into population-based quintiles by using the Socio-Economic Indexes for Areas (SEIFA) 2016 Index of Relative Socio-Economic Disadvantage (IRSD). Correspondence files are sourced from Census of Population and Housing: Socio-Economic Indexes for Areas (SEIFA), Australia, 2016 (ABS cat. no. 2033.0.55 001). Deaths with unknown/missing area of usual residence were excluded in the analysis.
6. Deaths with unknown Indigenous status were excluded from the analysis.
7. Only crude rates are shown. Age-standardised rates are not provided due to small numbers and therefore concerns around reliability of the rates. However, AIHW analysis indicates that crude rates are adequate when comparing rates of assault death.
8. Populations used in calculating rates by socioeconomic quintile were estimated by the AIHW using a Bayesian smoothing of Census counts, followed by Iterative Proportional Fitting of relevant published ABS population estimates, together with ABS geographic correspondences.

Source: AIHW National Mortality Database.

Table A3: Hospitalisations among females for a principal diagnosis of injury and poisoning and a first reported external cause of assault, by Indigenous status, and remoteness area, Australia, July 2019 to June 2021^{(a)(b)(c)}

Remoteness area	Indigenous Australians			Non-Indigenous Australians				
	Number	Crude rate (per 1,000)	ASR (per 1,000) ^(d)	Number	Crude rate (per 1,000)	ASR (per 1,000) ^(d)	Rate ratio, based on crude rates ^(e)	Rate ratio, based on ASRs ^(f)
Major cities	1,345	4.1	4.5	6,530	0.4	0.4	11.4	12.4
Inner and outer regional	2,026	5.3	6.2	2,170	0.3	0.4	15.6	15.7
Remote and very remote	4,648	30.3	30.9	199	0.6	0.7	48.3	46.5
Australia	8,235	9.5	10.7	9,334	0.4	0.4	25.5	27.3

ASR=Age-standardised rate

(a) Data includes public and private hospitals in all jurisdictions.

(b) Categories are based on the ICD-10-AM 11th edition. Causes of injury are based on the first reported external cause as 'Assault' ICD-10-AM codes X85–Y09, where the principal diagnosis was 'Injury, poisoning and certain other consequences of external causes' (S00–T98).

(c) Age-standardised rates (ASR) have been calculated using the direct method, age-standardised by 5-year age groups to 75+.

(d) Directly age-standardised using the Australian 2001 standard population.

(e) Calculated as the crude rate for Indigenous females divided by the crude rate for non-Indigenous females.

(f) Calculated as the age-standardised rate for Indigenous females, divided by the age-standardised rate for non-Indigenous females.

Notes

1. Rates by remoteness were calculated using ABS population projections based on the 2016 Census.

2. Data exclude separations for Newborns without qualified days, Hospital boarders and Posthumous organ procurement.

3. Data exclude separations where Indigenous status was not stated.

4. Data are reported by remoteness of usual residence, based on the ABS Australian Statistical Geography Standard (ASGS) 2016.

Source: AIHW analysis of National Hospital Morbidity Database.

Table A4: Hospitalisations among females for a principal diagnosis of injury and poisoning and a first reported external cause of assault, by Indigenous status, and socioeconomic group, Australia, July 2019 to June 2021^{(a)(b)(c)}

Socioeconomic group	Indigenous Australians			Non-Indigenous Australians			Rate ratio, based on crude rates ^(e)	Rate ratio, based on ASRs ^(f)
	Number	Crude rate (per 1,000)	ASR (per 1,000) ^(d)	Number	Crude rate (per 1,000)	ASR (per 1,000) ^(d)		
Quintile 1 (lowest)	4,699	14.2	15.8	2,395	0.6	0.6	25.0	25.8
Quintile 2	1,062	5.1	5.9	1,866	0.4	0.4	13.1	13.8
Quintile 3	1,451	9.6	11.0	1,933	0.4	0.4	26.8	29.5
Quintile 4	507	5.2	5.6	1,676	0.3	0.3	16.6	17.7
Quintile 5 (highest)	299	4.0	4.3	1,024	0.2	0.2	20.2	21.8
Australia	8,235	9.5	10.7	9,334	0.4	0.4	25.5	27.3

ASR=Age-standardised rate

a) Data includes public and private hospitals in all jurisdictions.

b) Categories are based on the ICD-10-AM 11th edition. Causes of injury are based on the first reported external cause as 'Assault' ICD-10-AM codes X85–Y09, where the principal diagnosis was 'Injury, poisoning and certain other consequences of external causes' (S00–T98).

c) Age-standardised rates (ASR) have been calculated using the direct method, age-standardised by 5-year age groups to 75+.

d) Directly age-standardised using the Australian 2001 standard population.

e) Calculated as the crude rate for Indigenous females divided by the crude rate for non-Indigenous females.

f) Calculated as the age-standardised rate for Indigenous females, divided by the age-standardised rate for non-Indigenous females.

Notes

1. Rates by SEIFA were calculated using AIHW derived populations using ABS population estimates and projections based on the 2016 Census.

2. Data exclude separations for Newborns without qualified days, Hospital boarders and Posthumous organ procurement.

3. Data exclude separations where Indigenous status was not stated.

4. Data are reported by remoteness of usual residence, based on the ABS Australian Statistical Geography Standard (ASGS) 2016.

5. Populations used to calculate rates by socioeconomic quintile were estimated by the AIHW using a Bayesian smoothing of Census counts, followed by Iterative Proportional Fitting of relevant published ABS population estimates, together with ABS geographic correspondences.

Source: AIHW analysis of National Hospital Morbidity Database.