



MONASH
University

INJURY DEATHS VICTORIA 2019–2021

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SUGGESTED CITATION

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SUMMARY OF INJURY DEATHS, VICTORIA 2019–2021

ALL AGES

- In the three-year period 2019–2021, 9784 Victorians died as a result of injury. Seventy-three percent of these deaths were unintentional (n=7181, 73.4%), 25.6% were intentional (n=2503: suicide=2278 & homicide=225) and the remaining 1.0% were classified as undetermined intent (n=100).
- The overall average annual injury death rate was 49.7 per 100,000 population.
- Males were overrepresented accounting for 57.7% (n=4143) of unintentional injury deaths, 75.0% (n=1877) of intentional injury deaths and 57.0% (n=57) of undetermined intent injury deaths.
- Three causes: falls (n=4178, 42.7%), suicide (n=2278, 23.3%) and unintentional poisoning (n=1348, 13.8%) combined accounted for 79.8% of injury deaths.

CHILDREN (0–14 YEARS)

- In the period 2019–2021, 95 Victorian children died as a result of injury. More than two-thirds of these deaths were unintentional (n=68, 71.6%) and 28.4% were intentional (n=27). In this three-year period there were less than six deaths of undetermined intent among children: these have been excluded from *the entire analysis* for reasons of confidentiality.
- The overall average annual injury death rate was 2.6 per 100,000 children.
- Males were overrepresented among all injury (55.8%) and unintentional injury (54.4%) deaths.
- The annual all injury and unintentional injury death rates were highest among children aged 0–4 years (4.1 and 3.3/100,000 respectively).
- The leading causes of child injury death were transport (25.3%, mainly as car occupants and pedestrians), and drowning/near drowning (16.8%). Suicide was the cause of 14.7% of child injury deaths.

ADOLESCENTS AND YOUNG ADULTS (15–24 YEARS)

- In the period 2019–2021, 597 Victorian adolescents and young adults died as a result of injury. More than half of these deaths were intentional (n=325, 54.4%) and 44.2% were unintentional (n=264). The remaining 1.3% of deaths were of undetermined intent (n=8).
- The overall average annual injury death rate was 24.1 per 100,000 adolescents and young adults.
- Males were overrepresented, accounting for 76.9% of unintentional and 76.3% of intentional injury deaths.
- Suicide (49.7%) and transport incidents (25.6%) were the leading causes of injury deaths among adolescents and young adults (n=293 and n=151, respectively).

ADULTS (25–64 YEARS)

- In the period 2019–2021, 3929 Victorian adults died as a result of injury. More than half of these deaths were unintentional (n=2098, 53.4%), 44.5% were intentional (n=1750) and the remaining 2.1% were classified as undetermined intent (n=81).
- The overall average annual injury death rate was 37.4 per 100,000 adults.
- Males were overrepresented accounting for approximately three-quarters of unintentional (74.3%) and intentional (75.6%) injury deaths.
- Suicide accounted for 41.0% of injury deaths (most commonly by hanging). Other common causes of injury death were unintentional poisoning (29.7%) and transport incidents (12.9%, most commonly car occupants).

OLDER ADULTS (65+ YEARS)

- In the period 2019–2021, 5163 Victorian older adults died as a result of injury. Ninety-two percent of these deaths were unintentional (n=4751), and 7.8% were intentional (n=401). Less than one percent of older adult deaths were of undetermined intent (n=11).
- The overall average annual injury death rate was 164.8 per 100,000 older adults.
- Females were slightly overrepresented in the number of unintentional injury deaths (n=2407, 50.7%), while males accounted for 72.3% of intentional injury deaths (n=290).
- Falls accounted for more than three-quarters of injury deaths among older persons (n=3971, 77.1%), followed by suicide (n=360, 7.0%) and transport incidents (n=259, 5.0%). A high proportion of the fall deaths were coded to 'unspecified fall' (n=3177, 80.0%) but of those with a specified fall mechanism (n=794), almost half were falls on the same level from slipping, tripping or stumbling (n=388, 48.9%).

INTRODUCTION

This E-Bulletin provides a detailed overview of Victorian injury deaths in the three-year period 2019–2021: the latest available cause of death data held by the Victorian Injury Surveillance Unit (VISU). The E-Bulletin shows trends in injury deaths for the period 2007–2021, although the focus is the latest three-year period.

METHODS

DATA SOURCE

Data have been extracted from the VISU-held Cause of Death (COD) dataset supplied by the Australian Coordinating Registry (ACR) and based on the Australian Bureau of Statistics (ABS) cause of death data.

DATA SELECTION

Inclusions:

- Main section: deaths recorded for Victorian residents with a reference year of 2019–2021 (i.e., a three-year period), coded according to the WHO International Classification of Diseases 10th revision (ICD-10).
- Trends section: deaths recorded for Victorian residents with a reference year of 2007–2021 (i.e., a 15-year period).
- Deaths must have an ICD-10 underlying cause of death code in the range V00–Y36 (unintentional, intentional and undetermined intent injury deaths).
- State of residence at the time of death rather than place of death registration was used for data selection, considering that population rates were calculated (see Appendix 2 Table 24 for the influence of this on the data selected).
- Reference year rather than year of death was used, to be consistent with ABS publications of COD data (see Appendix 2 Table 25 for the influence of this on the data selected).
- For the reference year 2019, deaths among Victorian residents were included that had been registered in 2017 and 2018 *but had not previously been provided to the ABS*. See Appendix 3 for more details.

Exclusions:

- Deaths resulting from medical causes (adverse events and medical misadventure) have been excluded (ICD-10 codes in the range Y40–Y84).
- Deaths coded as ‘undetermined intent’ were removed from various analyses for reasons of confidentiality. Deaths of undetermined intent among children (0–14) (<6 deaths in each of the reference years) were excluded from *the entire analysis*.
- In the period 2019–2021, deaths coded as ‘undetermined intent’ were removed from the analyses *in the adolescents and young adult section* (15–24 years) (n=8 deaths over the 3-year period) for reasons of confidentiality. Similarly, undetermined intent deaths were removed from the *section describing deaths among older adults* (65+ years) (n=11 deaths over the 3-year period).

DATA ISSUES

To improve the quality of ICD coding, the ABS introduced a revisions process for all coroner certified deaths registered after 1 January 2006. The process means data are *preliminary* when published for the first time, *revised* when published the following year and *final* when published two years after initial publication. For more detailed information regarding the ABS causes of death coding and revisions processes, readers are directed to the ABS website and in particular:

<http://www.abs.gov.au/ausstats/abs@.nsf/Lookup/3303.0Technical+Note12012>

As a result of the revisions process, the current release of data from the ACR contains final data for the period 2006 to 2019, revised data for 2020 and preliminary data for 2021. Data for the 2006 reference year has not been included in this E-Bulletin because the revisions process in 2006 was different to that of the 2007–2021 reference years.

Data for the main analysis covers the three-year period 2019–2021 and as a result of the revisions process, the numbers for two of these three years are subject to revision and will likely change in future E-Bulletin editions. Consequently, only thirteen of the fifteen years presented in trend figures are final and statistical analysis of trends has not been conducted. However, trend figures have been provided to give an indication of current trends in Victorian injury deaths. The following symbols have been used throughout this report to distinguish between the data at different stages of the revisions process:

- Frequency (final) (◆)
- Rate (final) (●)
- Frequency (revised) (◊)
- Rate (revised) (⊕)
- Frequency (preliminary) (◇)
- Rate (preliminary) (○)

The age groups used in this E-Bulletin (0–14, 15–24, 25–64, 65+ years) have been selected to match those in the *National Injury Prevention and Safety Promotion Plan: 2004–2014* (NIPSPP Plan) and will be maintained for consistency.

STATISTICAL ANALYSIS

Age specific rates per 100,000 population have been calculated for all years. The denominators used for calculating rates were June population estimates from the Australian Bureau of Statistics (Source: 3101.0 Australian Demographic Statistics. TABLE 52. Estimated Resident Population by Single Year Of Age, Victoria). Age standardisation of the rates was considered unnecessary for the purpose of this report, as the shifts in the Victorian age distribution over the period 2007–2021 were minor (Appendix 2, Figure 26). Age-group specific rates are presented throughout this report. Where direct comparisons between groups are made, differences in rate have been tested using chi-square tests (results not shown); *p*-values of <0.05 were considered statistically significant.

For reasons of confidentiality, deaths coded to ‘intentional self-harm’ were not broken down by age and sex in the section describing child deaths (0–14 years).

ALL AGES

An overview of injury deaths in Victoria over the three-year period 2019-2021 is provided in Appendix 1 (Table 22). Any differences between these three years should be interpreted with caution: these can be indicative of an underlying trend in injury deaths, an artefact of the step-wise data revisions process, or both. However, overall injury intent proportions did not differ significantly between the year that is final (2019), that which is revised (2020) and the year that is preliminary (2021), with more than 70% of deaths being unintentional in the three years (71.0% in 2019, 73.9% in 2020 and 75.7% in 2021); approximately one quarter being intentional (27.9% in 2019, 25.0% in 2020 and 23.5% in 2021); and less than 2% coded as undetermined intent (1.1% in 2019, 1.0% in 2020 and 0.9% in 2021); (chi-square test $p < .001$). Overall, males accounted for sixty-two percent of injury deaths ($n=6077$). Almost one quarter of injury deaths were due to suicide (23.3%): 2278 Victorians died by suicide in the period 2019–2021.

Overall, there were 9784 injury deaths recorded for Victoria over the period 2019–2021: an average annual rate of 49.7 deaths per 100,000 Victorians (Table 1).

- All intents annual injury death rates were highest in older adults (164.8 per 100,000 older adults) and lowest in children (2.6 per 100,000 children).
- The all ages unintentional annual injury death rate was 36.5 per 100,000 Victorians; rates were highest in older adults (151.7 per 100,000 older adults) and lowest in children (1.9 per 100,000 children).

- The all ages intentional annual injury death rate was 12.7 per 100,000 Victorians, comprising a 11.6/100,000 suicide rate and a 1.1/100,000 homicide rate. Intentional death rates were highest in adults (16.7 per 100,000 adults) and lowest in children (0.8 per 100,000 children). Suicide rates also followed this age pattern (15.3 per 100,000 adults and 0.4 per 100,000 children). Homicide rates were lowest among children (0.4 per 100,000 children) but similar across all other age groups (1.3 per 100,000 for adolescents and young adults, adults and older adults).
- The all ages undetermined intent annual injury death rate was 0.6 per 100,000 Victorians aged 15 years and over.

Over the period 2019–2021, the male average annual age-specific *unintentional injury death rate* was higher than the female rate in all 5-year age groups, apart from youngest age group where the female *unintentional injury death rate* was higher (3.5 per 100,000 female 0–4 year olds) compared to males (3.1 per 100,000 male 0–4 year olds). Overall, rates rose after childhood, were fairly stable to age 65 years before increasing and peaking in the oldest adults (Figure 1).

Over the period 2019-2021, the male average annual age-specific *intentional injury death rate* was higher than the female rate in all 5-year age bands (**where rates could be calculated based on $n=10$ or more**). Age-specific intentional injury death rates were lowest in children aged 0–4 years and 10–14 years (5–9 years are suppressed in the figure) and were highest in adults aged 55–59 years, followed by adults aged 40–44 years and 50–54 years (Figure 2).

TABLE 1: FREQUENCY AND AVERAGE ANNUAL RATES OF INJURY DEATHS BY INTENT AND BROAD AGE GROUPS, VICTORIA 2019–2021

	CHILDREN (0–14 YEARS)		ADOLESCENTS AND YOUNG ADULTS (15–24 YEARS)		ADULTS (25–64 YEARS)		OLDER ADULTS (65+ YEARS)		ALL AGES	
	n	RATE PER 100,000	n	RATE PER 100,000	n	RATE PER 100,000	n	RATE PER 100,000	n	RATE PER 100,000
Unintentional	68	1.9	264	10.7	2098	20.0	4751	151.7	7181	36.5
Intentional	27	0.8	325	13.1	1750	16.7	401	12.8	2503	12.7
Suicide	14	0.4	293	11.8	1611	15.3	360	11.5	2278	11.6
Homicide	13	0.4	32	1.3	139	1.3	41	1.3	225	1.1
Undetermined intent	NA	NA	8	**	81	0.8	11	0.4	100	0.6*
Total	95	2.6	597	24.1	3929	37.4	5163	164.8	9784	49.7

Note: Rates based on frequency less than 10 have been suppressed with "**".

NA=Deaths among children coded to 'undetermined intent' were excluded from the entire analysis (see methods section).

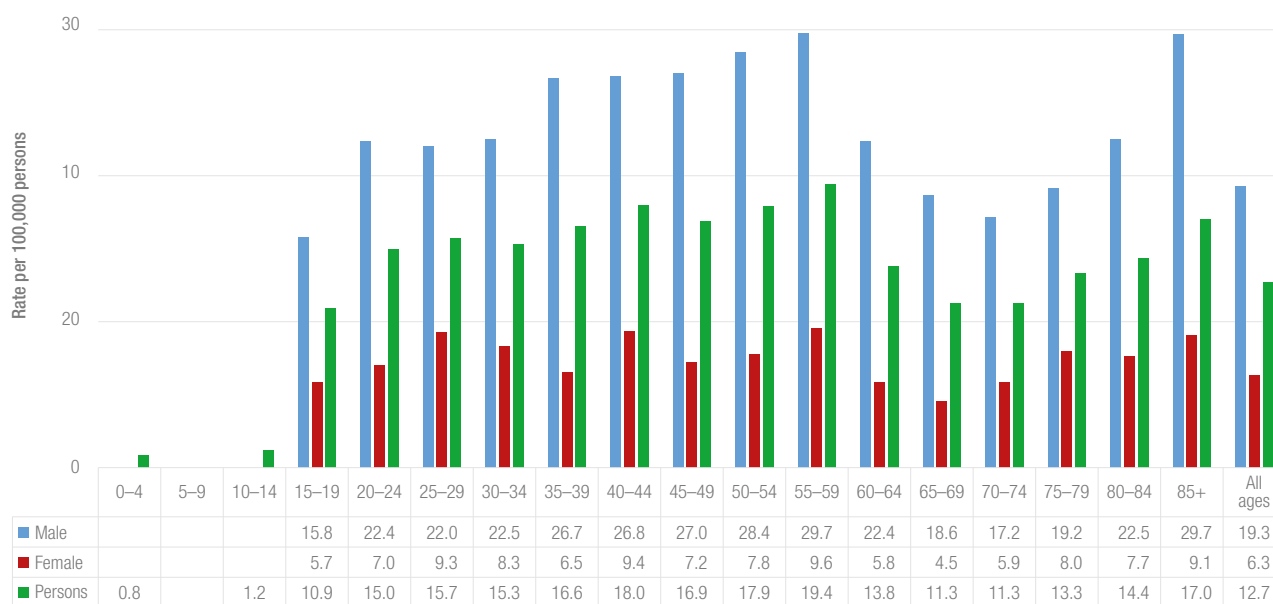
*Undetermined intent annual injury death rate applies only to those aged 15 years and over.

FIGURE 1: AVERAGE ANNUAL UNINTENTIONAL INJURY DEATH RATES BY AGE GROUP AND SEX, VICTORIA 2019–2021



Note: Rates based on frequency less than 10 have been suppressed (these appear as blank cells).

FIGURE 2: AVERAGE ANNUAL INTENTIONAL INJURY DEATH RATES BY AGE GROUP AND SEX, VICTORIA 2019–2021



Note: Rates based on frequency less than 10 have been suppressed (these appear as blank cells).

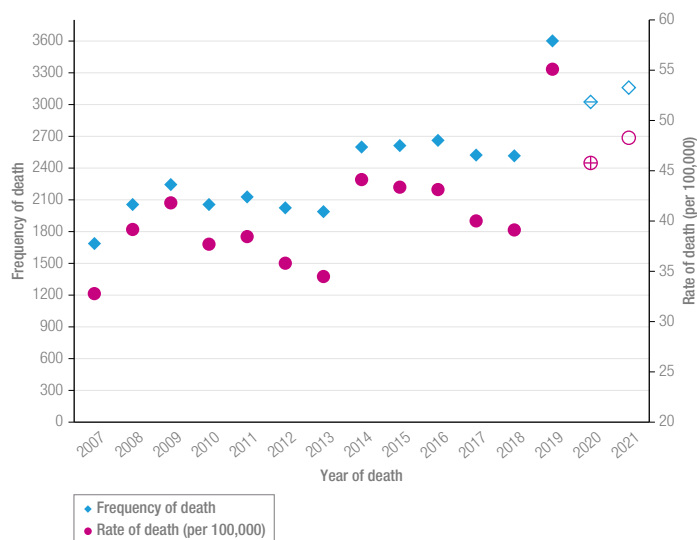
TREND IN INJURY DEATHS (2007–2021)

Data presented for the years 2020 & 2021 are not final and subject to revision (see page 2 for more information). Consequently, statistical analysis of trends has not been conducted but figures have been provided here to give an indication of current trends in Victorian injury deaths.

For the reference year 2019, deaths among Victorian residents were included that had been registered in 2017 and 2018 *but had not previously been provided to the ABS*. Inclusion of these additional registrations has resulted in increased counts of deaths by particular causes in 2019. See Appendix 3 for more details.

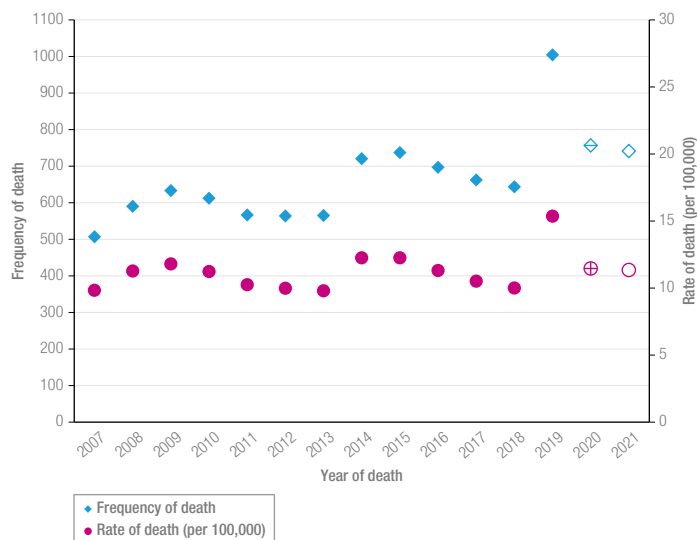
ALL INTENTS INJURY DEATHS

FIGURE 3: TREND IN FREQUENCY AND ANNUAL RATE OF ALL INJURY DEATHS, VICTORIA 2007–2021¹



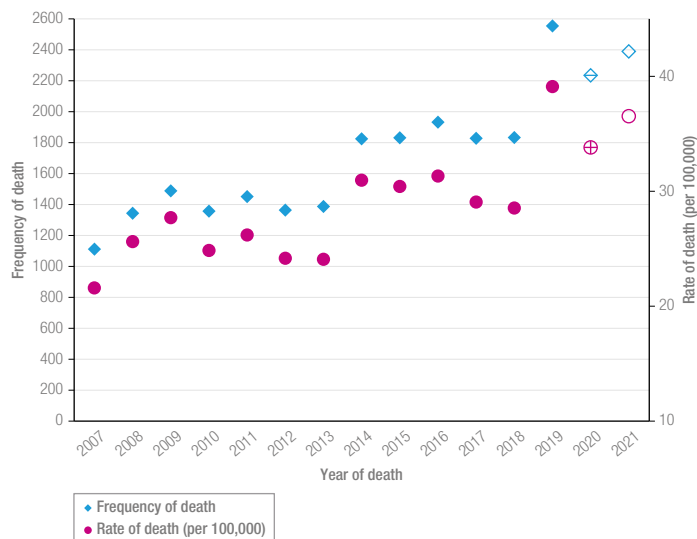
INTENTIONAL INJURY DEATHS

FIGURE 5: TREND IN FREQUENCY AND ANNUAL RATE OF INTENTIONAL INJURY DEATHS, VICTORIA 2007–2021¹



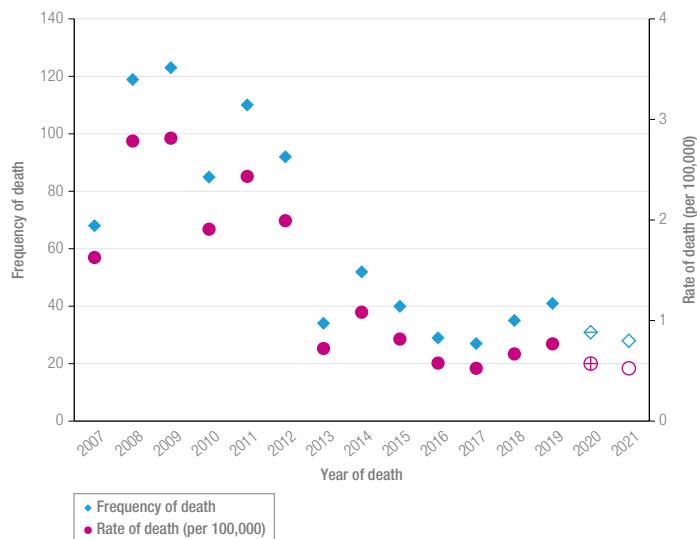
UNINTENTIONAL INJURY DEATHS

FIGURE 4: TREND IN FREQUENCY AND ANNUAL RATE OF UNINTENTIONAL INJURY DEATHS, VICTORIA 2007–2021¹



UNDETERMINED INTENT INJURY DEATHS

FIGURE 6: TREND IN FREQUENCY AND ANNUAL RATE OF UNDETERMINED INTENT INJURY DEATHS, VICTORIA 2007–2021¹



Note: Undetermined intent injury deaths among children aged 0–14 were excluded from the analysis.

¹The 2019 reference year includes deaths that had been registered in 2017 and 2018 but not previously provided to the ABS. See Appendix 3 for more details.

- ◆ Frequency (final)
- ◆ Frequency (revised)
- ◆ Frequency (preliminary)
- Rate (final)
- ⊕ Rate (revised)
- Rate (preliminary)

PATTERN OF ALL INJURY DEATHS (2019–2021)

SEX DISTRIBUTION

- Males were overrepresented, accounting for 57.7% of unintentional injury deaths (n=4143), 75.0% of intentional injury deaths (n=1877) and 57.0% of undetermined intent injury deaths (n=57) in Victoria over the period 2019–2021 (Table 2).
- The average annual male injury death rate was 1.7 times higher than the female death rate (62.3/100,000 vs. 37.2/100,000). Higher death rates among males were observed in unintentional, intentional and undetermined intent deaths (1.4 times, 3.1 times and 1.4 times respectively) (Table 2).

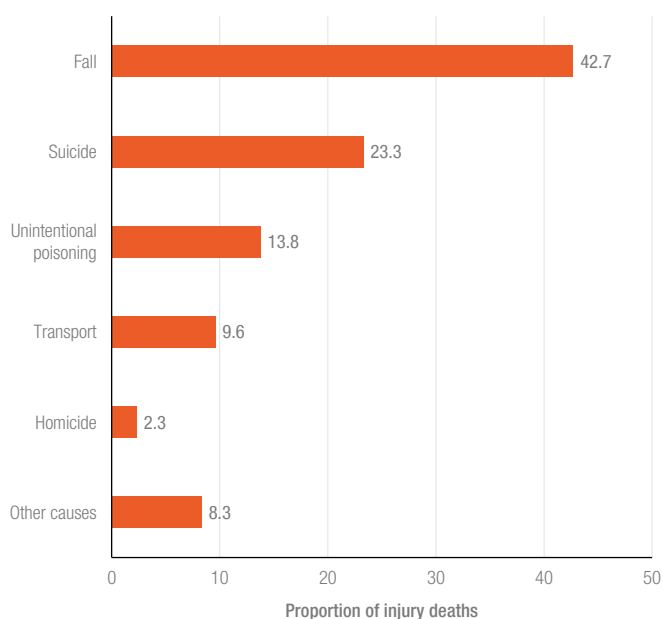
AGE DISTRIBUTION

- Persons aged 65 years and older had the highest annual all injury (164.8/100,000) and unintentional injury death rates (151.7/100,000) whereas children aged 0–14 years had the lowest (2.6 and 1.9/100,000, respectively) (Table 3).
- Adults aged 25–64 years had the highest annual intentional injury death rate (16.7/100,000) and children aged 0–14 years had the lowest intentional injury death rate (0.8/100,000) (Table 3)

LEADING CAUSES OF ALL INJURY DEATHS

- Figure 7 shows the leading causes of injury deaths. Falls (n=4178, 42.7%), suicide (n=2278, 23.3%) and unintentional poisoning (n=1348, 13.8%) together accounted for more than three-quarters of all injury deaths (79.8%) and transport for a further 9.6% (n=939).
- For more detail on causes of injury deaths see Appendix 1 Table 22.

FIGURE 7: LEADING CAUSES OF INJURY DEATHS, VICTORIA 2019–2021 (n=9784)



Note: The cause categories "other specified unintentional", "unspecified unintentional" and "undetermined intent" were included in the "other causes" category

TABLE 2: FREQUENCY AND AVERAGE ANNUAL RATE OF ALL INJURY DEATHS BY INTENT AND SEX, VICTORIA 2019–2021

	UNINTENTIONAL			INTENTIONAL			UNDETERMINED INTENT*			ALL		
	n	%	RATE PER 100,000	n	%	RATE PER 100,000	n	%	RATE PER 100,000	n	%	RATE PER 100,000
Male	4143	57.7	42.5	1877	75.0	19.3	57	57.0	0.7	6077	62.1	62.3
Female	3038	42.3	30.5	626	25.0	6.3	43	43.0	0.5	3707	37.9	37.2
Persons	7181	100.0	36.5	2503	100.0	12.7	100	100.0	0.6	9784	100.0	49.7

Note: Deaths among children coded to 'undetermined intent' were excluded from the entire analysis (see methods section)

*Undetermined intent annual injury death rates apply only to those aged 15 years and over.

TABLE 3: FREQUENCY AND AVERAGE ANNUAL RATE OF ALL INJURY DEATHS BY INTENT AND AGE GROUP, VICTORIA 2019–2021

	UNINTENTIONAL			INTENTIONAL			UNDETERMINED INTENT*			ALL		
	n	%	RATE PER 100,000	n	%	RATE PER 100,000	n	%	RATE PER 100,000	n	%	RATE PER 100,000
0–14	68	0.9	1.9	27	1.1	0.8	NA	NA	NA	95	0.9	2.6
15–24	264	3.7	10.7	325	13.0	13.1	8	8.0	**	597	6.1	24.1
25–64	2098	29.2	20.0	1750	69.9	16.7	81	81.0	0.8	3929	40.2	37.4
65+	4751	66.2	151.7	401	16.0	12.8	11	11.0	0.4	5163	52.8	164.8
All ages	7181	100.0	36.5	2503	100.0	12.7	100	100.0	0.6	9784	100.0	49.7

Note: Rates based on frequency less than 10 have been suppressed with "**".

NA=Deaths among children coded to 'undetermined intent' were excluded from the entire analysis (see methods section)

*Undetermined intent annual injury death rates apply only to those aged 15 years and over.

LEADING CAUSES IN MORE DETAIL

- A high proportion of fall deaths were coded to 'unspecified fall' (n=3283, 78.6%). Of those with a specified fall mechanism (n=895), nearly half were falls on the same level from slipping, tripping or stumbling (n=419, 46.8%) (Table 4).

TABLE 4: UNINTENTIONAL FALL INJURY DEATHS, VICTORIA 2019–2021

DETAILED CAUSE	n	%
Same level: slipping, tripping, stumbling	419	10.0
Involving bed	124	3.0
On and from stairs and steps	98	2.3
Other fall on same level	61	1.5
Involving chair	57	1.4
On and from ladder	34	0.8
From, out of or through building or structure	30	0.7
Involving wheelchair	28	0.7
Other specified fall	23	0.5
Other fall from one level to another	21	0.5
Unspecified fall	3283	78.6
All falls	4178	100.0

- Hanging was the most common method of suicide (n=1249, 54.8%), followed by poisoning by pharmaceuticals (n=358, 15.7%) or another substance (n=129, 5.7%) (Table 5).

TABLE 5: SUICIDE DEATHS, VICTORIA 2019–2021

DETAILED CAUSE	n	%
Hanging, strangulation & suffocation	1249	54.8
Poisoning- pharmaceuticals	358	15.7
Poisoning other substances	129	5.7
Firearms	118	5.2
Jumping or lying before moving object	115	5.0
Jumping from a high place	112	4.9
Sharp object	69	3.0
Drowning & submersion	57	2.5
Crashing of motor-vehicle	37	1.6
Smoke, fire & flames	23	1.0
Other or unspecified means	11	0.5
All suicide deaths	2278	100.0

- Narcotics & psychodysleptics (hallucinogens) were the most common specific agents involved in unintentional poisoning deaths (n=209, 15.5%) (Table 6).

TABLE 6: UNINTENTIONAL POISONING DEATHS, VICTORIA 2019–2021

DETAILED CAUSE	n	%
Narcotics & psychodysleptics {hallucinogens} not elsewhere classified	209	15.5
Alcohol	146	10.8
Antiepileptic, sedative-hypnotic, antiparkinsonism & psychotropic drugs, not elsewhere classified	133	9.9
Nonopioid analgesics, antipyretics & antirheumatics	8	0.6
Other specified poisonings	14	1.0
Other & unspecified drugs, medicaments & biological subs	838	62.2
All poisonings	1348	100.0

- Unintentional transport deaths mostly involved car occupants (n=488, 52.0%), pedestrians (n=147, 15.7%) or motorcycle riders (n=141, 15.0%) (Table 7).

TABLE 7: UNINTENTIONAL TRANSPORT DEATHS, VICTORIA 2019–2021

DETAILED CAUSE	n	%
Car occupant injured in transport incident	488	52.0
Pedestrian injured in transport incident	147	15.7
Motorcycle rider injured in transport incident	141	15.0
Pedal cyclist injured in transport incident	45	4.8
Other land transport incident	42	4.5
Water transport incident	29	3.1
Occupant of heavy transport vehicle	20	2.1
Air and space transport incident	15	1.6
Other specified transport incident	12	1.3
All transport deaths	939	100.0

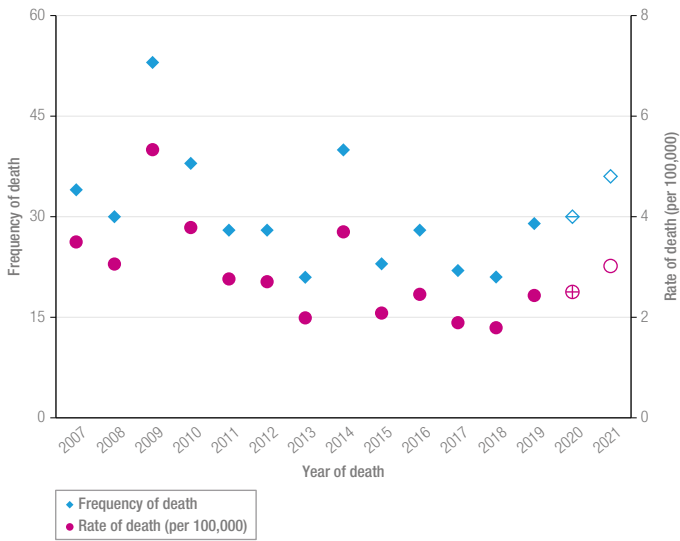
CHILDREN (0–14 YEARS)

TREND IN INJURY DEATHS (2007–2021)

Data presented for the years 2020–2021 are not final and subject to revision (see page 2 for more information). Consequently, statistical analysis of trends has not been conducted but figures have been provided here to give an indication of current trends in Victorian child injury deaths. Trend figures are presented for all injury and unintentional injury deaths only, due to there being less than six intentional deaths among children for most years of the fifteen-year period. Undetermined intent child deaths have been excluded from the entire analysis for reasons of confidentiality.

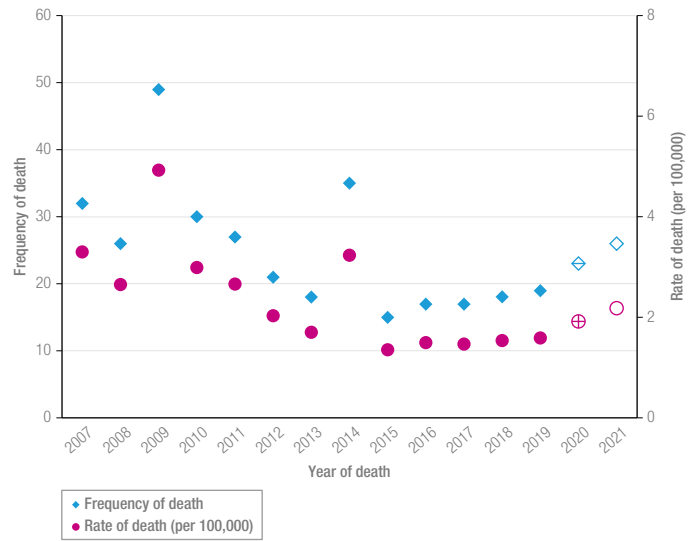
ALL INTENTS INJURY DEATHS

FIGURE 8: TREND IN FREQUENCY AND ANNUAL RATE OF CHILD INJURY DEATHS, VICTORIA 2007–2021¹



UNINTENTIONAL INJURY DEATHS

FIGURE 9: TREND IN FREQUENCY AND ANNUAL RATE OF CHILD UNINTENTIONAL INJURY DEATHS, VICTORIA 2007–2021¹



¹The 2019 reference year includes deaths that had been registered in 2017 and 2018 but not previously provided to the ABS. See Appendix 3 for more details.

- ◆ Frequency (final)
- ◆ Frequency (revised)
- ◆ Frequency (preliminary)
- Rate (final)
- ⊕ Rate (revised)
- Rate (preliminary)

PATTERN OF CHILD INJURY DEATHS (2019–2021)

In the period 2019–2021, 95 Victorian children died as a result of injury. More than two-thirds of these deaths were unintentional (n=68, 71.6%). There were 27 intentional deaths among children during the three-year period. These intentional deaths are not broken down by age and sex in this section for reasons of confidentiality.

SEX DISTRIBUTION

- Males were overrepresented among all injury (n=53, 55.8%), and unintentional injury deaths (n=37, 54.4%).
- The annual all injury and unintentional injury death rates were also higher for males than females (2.9 & 2.0/100,000 vs. 2.4 & 1.8/100,000 respectively).

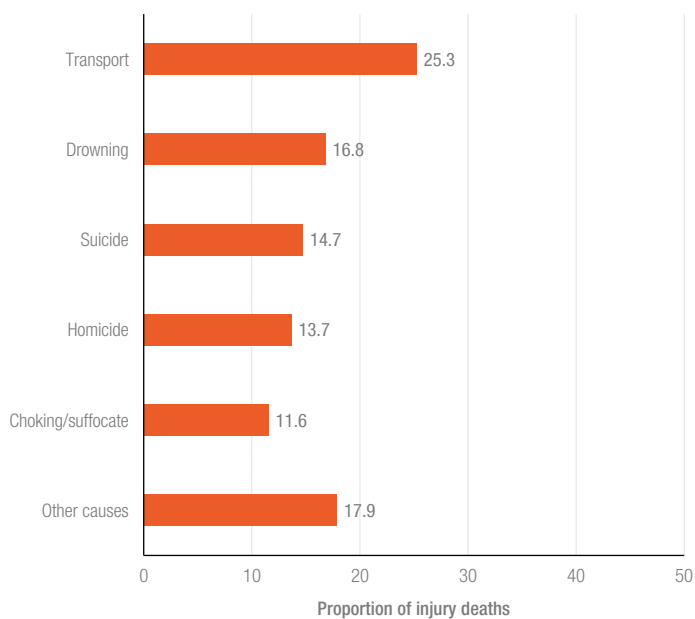
AGE DISTRIBUTION

- The annual all injury death rates were highest for children aged 0–4 years (4.1/100,000), followed by 10–14 year olds (2.3/100,000) and 5–9 year olds (1.6/100,000). A slightly different pattern was found for unintentional injury deaths, with children 0–4 years having the highest rate (3.3/100,000), followed by 5–9 year olds (1.3/100,000) and 10–14 year olds (1.1/100,000).

LEADING CAUSES OF CHILD INJURY DEATHS

- Figure 10 shows the leading causes of child injury deaths. Transport accounted for 25.3% of injury deaths (n=24), followed by drowning (n=16, 16.8%). Suicide was the cause of 14.7% of child injury deaths (n=14) and homicide the cause of 13.7% of injury deaths (n=13). Child transport deaths mainly involved car occupants (n=10) and pedestrians (n=8).
- For more detail on causes of injury deaths see Appendix 1 Table 23.

FIGURE 10: LEADING CAUSES OF CHILD INJURY DEATHS, VICTORIA 2019–2021 (n=95)



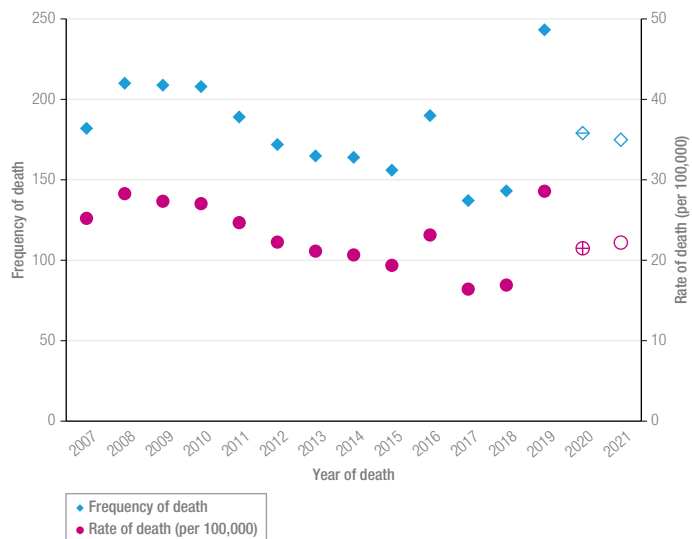
ADOLESCENTS AND YOUNG ADULTS (15–24 YEARS)

TREND IN INJURY DEATHS (2007–2021)

Data presented for the years 2020–2021 are not final and subject to revision (see page 2 for more information). Consequently, statistical analysis of trends has not been conducted but figures have been provided here to give an indication of current trends in Victorian injury deaths among adolescents and young adults.

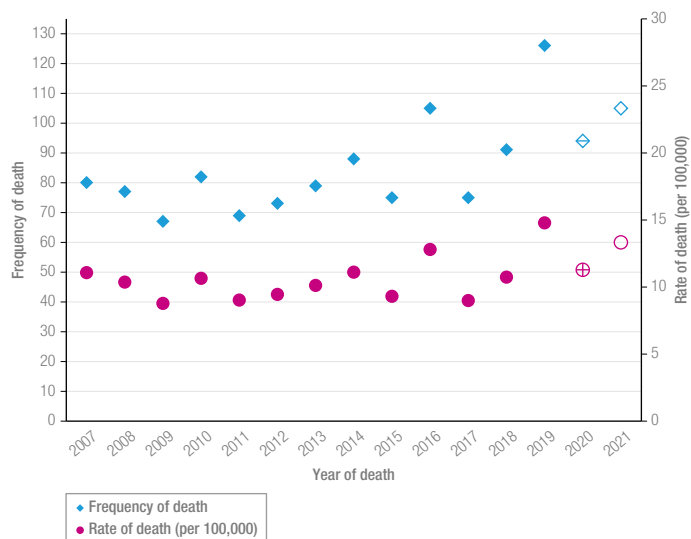
ALL INTENTS INJURY DEATHS

FIGURE 11: TREND IN FREQUENCY AND ANNUAL RATE OF ADOLESCENT AND YOUNG ADULT INJURY DEATHS, VICTORIA 2007–2021¹



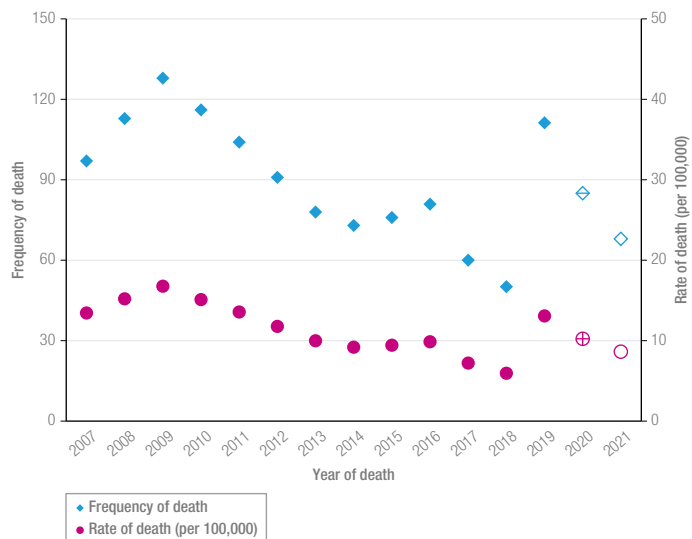
INTENTIONAL INJURY DEATHS

FIGURE 13: TREND IN FREQUENCY AND ANNUAL RATE OF ADOLESCENT AND YOUNG ADULT INTENTIONAL INJURY DEATHS, VICTORIA 2007–2021¹



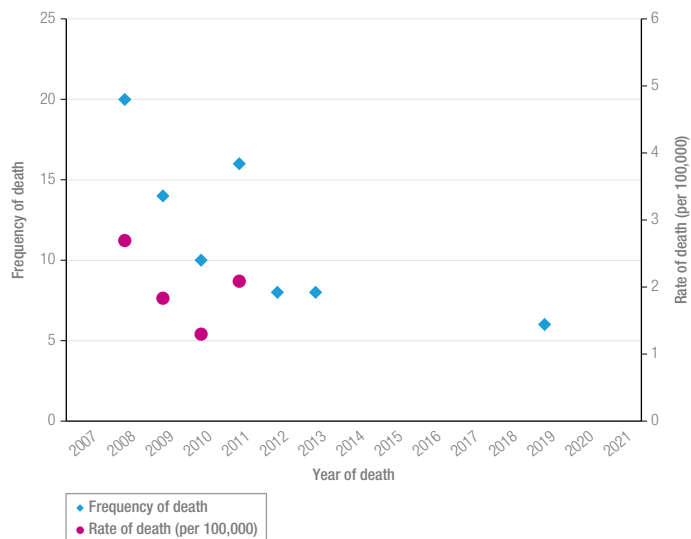
UNINTENTIONAL INJURY DEATHS

FIGURE 12: TREND IN FREQUENCY AND ANNUAL RATE OF ADOLESCENT AND YOUNG ADULT UNINTENTIONAL INJURY DEATHS, VICTORIA 2007–2021¹



UNDETERMINED INTENT INJURY DEATHS

FIGURE 14: TREND IN FREQUENCY AND ANNUAL RATE OF ADOLESCENT AND YOUNG ADULT UNDETERMINED INTENT INJURY DEATHS, VICTORIA 2007–2021¹



Note: Frequency of 5 or less and rates based on frequency less than 10 have been suppressed (these appear as blank cells)

¹The 2019 reference year includes deaths that had been registered in 2017 and 2018 but not previously provided to the ABS. See Appendix 3 for more details.

- ◆ Frequency (final)
- ◆ Frequency (revised)
- ◆ Frequency (preliminary)
- Rate (final)
- ⊕ Rate (revised)
- Rate (preliminary)

PATTERN OF ADOLESCENT AND YOUNG ADULT INJURY DEATHS (2019–2021)

In the period 2019–2021, 589 Victorian adolescents and young adults died as a result of injury. More than half of the deaths were intentional (n=325, 55.2%) and 44.8% were unintentional (n=264) (Table 8). Deaths among adolescents and young adults coded to undetermined intent are not reported in this section for reasons of confidentiality.

SEX DISTRIBUTION

- Males were overrepresented, accounting for 76.9% of unintentional (n=203) and 76.3% of intentional (n=248) injury deaths among adolescents and young adults (Table 8).
- The corresponding adolescent and young adult unintentional and intentional annual injury death rates were also higher for males than females (15.9 & 19.4/100,000 vs. 5.1 & 6.4/100,000 respectively) (Table 8).

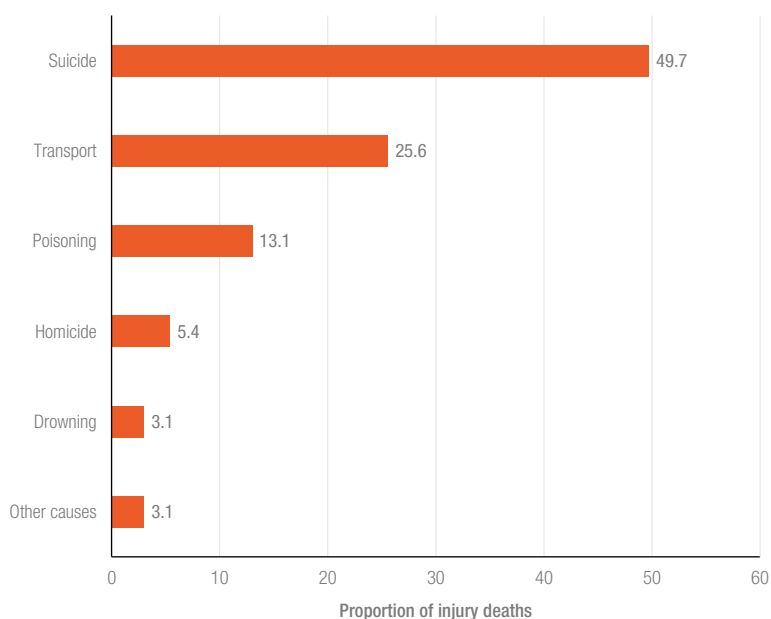
AGE DISTRIBUTION

- Persons aged 20–24 years accounted for 64.7% of all injury deaths (n=381) and 67.4% of unintentional injury deaths (n=178) among adolescents and young adults. Young adults aged 20–24 years accounted for 62.5% of intentional injury deaths (n=203).
- Intentional annual injury death rates were higher among persons aged 20–24 years than among persons aged 15–19 years (15.0/100,000 vs. 10.9/100,000) (Table 9).

LEADING CAUSES OF ADOLESCENT AND YOUNG ADULT INJURY DEATHS

- Figure 15 shows the leading causes of adolescent and young adult injury deaths. Suicide accounted for 49.7% of injury deaths (n=293), followed by transport incidents (n=151, 25.6%) and unintentional poisoning (n=77, 13.1%).
- For more detail on causes of injury deaths see Appendix 1 Table 23.

FIGURE 15: LEADING CAUSES OF ADOLESCENT AND YOUNG ADULT INJURY DEATHS, VICTORIA 2019–2021 (n=589)



Note: The cause categories "other specified unintentional" and "unspecified unintentional" were included in the "other causes" category.

TABLE 8: FREQUENCY AND AVERAGE ANNUAL RATE OF ADOLESCENT AND YOUNG ADULT INJURY DEATHS BY INTENT AND SEX, VICTORIA 2019–2021

	UNINTENTIONAL			INTENTIONAL			ALL*		
	n	%	RATE PER 100,000	n	%	RATE PER 100,000	n	%	RATE PER 100,000
Male	203	76.9	15.9	248	76.3	19.4	451	76.6	35.3
Female	61	23.1	5.1	77	23.7	6.4	138	23.4	11.5
All	264	100.0	10.7	325	100.0	13.1	589	100.0	23.8

Note: *Adolescent and young adult deaths coded to 'undetermined intent' were excluded from this analysis (see methods section)

TABLE 9: FREQUENCY AND AVERAGE ANNUAL RATE OF ADOLESCENT AND YOUNG ADULT INJURY DEATHS BY INTENT AND AGE GROUP, VICTORIA 2019–2021

	UNINTENTIONAL			INTENTIONAL			ALL*		
	n	%	RATE PER 100,000	n	%	RATE PER 100,000	n	%	RATE PER 100,000
15–19 years	86	32.6	7.7	122	37.5	10.9	208	35.3	18.6
20–24 years	178	67.4	13.1	203	62.5	15.0	381	64.7	28.1
All	264	100.0	10.7	325	100.0	13.1	589	100.0	23.8

Note: *Adolescent and young adult deaths coded to 'undetermined intent' were excluded from this analysis (see methods section)

LEADING CAUSES IN MORE DETAIL

- Hanging was the most common method of suicide (n=185, 63.1%) (Table 10).

TABLE 10: SUICIDE DEATHS, VICTORIA 2019–2021

DETAILED CAUSE	n	%
Hanging, strangulation & suffocation	185	63.1
Jumping or lying before moving object	28	9.6
Poisoning – pharmaceuticals	22	7.5
Jumping from a high place	21	7.2
Poisoning other substances	10	3.4
Drowning & submersion	7	2.4
Sharp object	7	2.4
Other specified means	13	4.4
All suicide deaths	293	100.0

- Unintentional transport deaths mostly involved car occupants (n=98, 64.9%) (Table 11).

TABLE 11: TRANSPORT INJURY DEATHS, VICTORIA 2019–2021

DETAILED CAUSE	n	%
Car occupant	98	64.9
Motorcycle rider	20	13.2
Pedestrian	17	11.3
Pedal cyclist	6	4.0
Other transport	10	6.6
All transport deaths	151	100.0

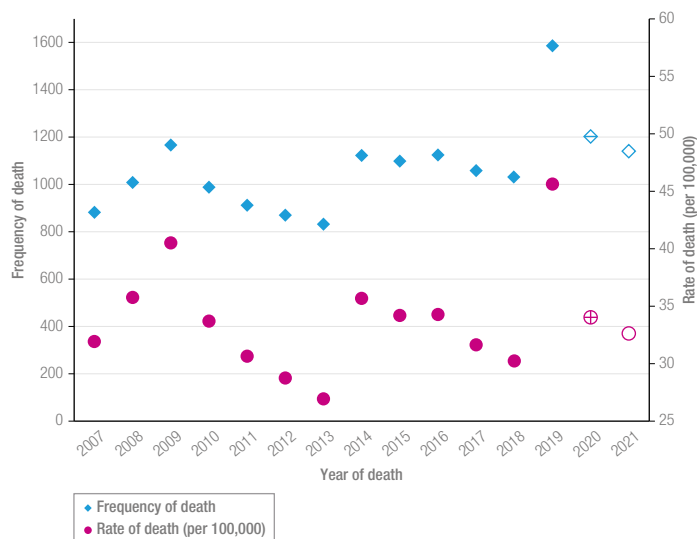
ADULTS (25–64 YEARS)

TREND IN INJURY DEATHS (2007–2021)

Data presented for the years 2020–2021 are not final and subject to revision (see page 2 for more information). Consequently, statistical analysis of trends has not been conducted but figures have been provided here to give an indication of current trends in Victorian adult injury deaths.

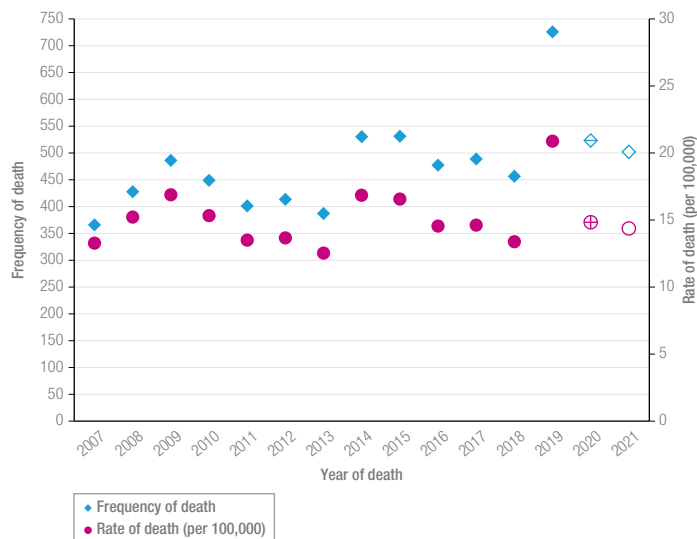
ALL INTENTS INJURY DEATHS

FIGURE 16: TREND IN FREQUENCY AND ANNUAL RATE OF ADULT INJURY DEATHS, VICTORIA 2007–2021¹



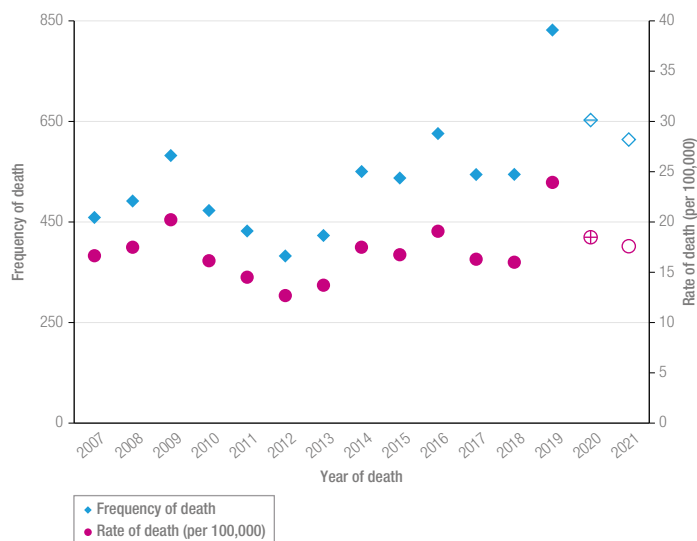
INTENTIONAL INJURY DEATHS

FIGURE 18: TREND IN FREQUENCY AND ANNUAL RATE OF ADULT INTENTIONAL INJURY DEATHS, VICTORIA 2007–2021¹



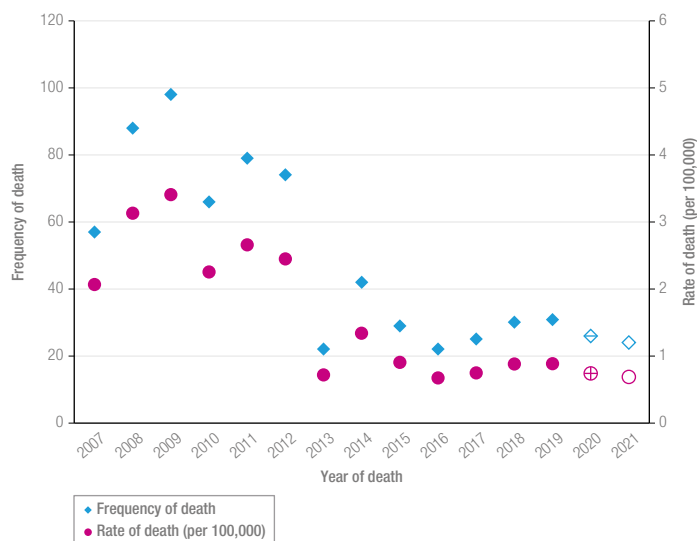
UNINTENTIONAL INJURY DEATHS

FIGURE 17: TREND IN FREQUENCY AND ANNUAL RATE OF ADULT UNINTENTIONAL INJURY DEATHS, VICTORIA 2007–2021¹



UNDETERMINED INTENT INJURY DEATHS

FIGURE 19: TREND IN FREQUENCY AND ANNUAL RATE OF ADULT UNDETERMINED INTENT INJURY DEATHS, VICTORIA 2007–2021¹



¹The 2019 reference year includes deaths that had been registered in 2017 and 2018 but not previously provided to the ABS. See Appendix 3 for more details.

- ◆ Frequency (final)
- ◆ Frequency (revised)
- ◆ Frequency (preliminary)
- Rate (final)
- ⊕ Rate (revised)
- Rate (preliminary)

PATTERN OF ADULT INJURY DEATHS (2019–2021)

In the period 2019–2021, 3929 Victorian adults died as a result of injury. More than half of these deaths were unintentional (n=2098, 53.4%), 44.5% were intentional (n=1750) and the remaining 2.1% were classified as undetermined intent (n=81) (Table 12). Adult deaths are presented for 10-year instead of 5-year age groups in Table 13 due to low numbers of Undetermined intent deaths in the 25–29 and 60–64 year age groups.

SEX DISTRIBUTION

- Males were overrepresented in adult injury deaths, accounting for around three-quarters of unintentional (n=1559, 74.3%) and intentional injury deaths (n=1323, 75.6%) (Table 12).
- The unintentional and intentional injury annual death rates were higher for males than females (30.1 & 25.5/100,000 vs. 10.1 & 8.0/100,000, respectively) (Table 12).

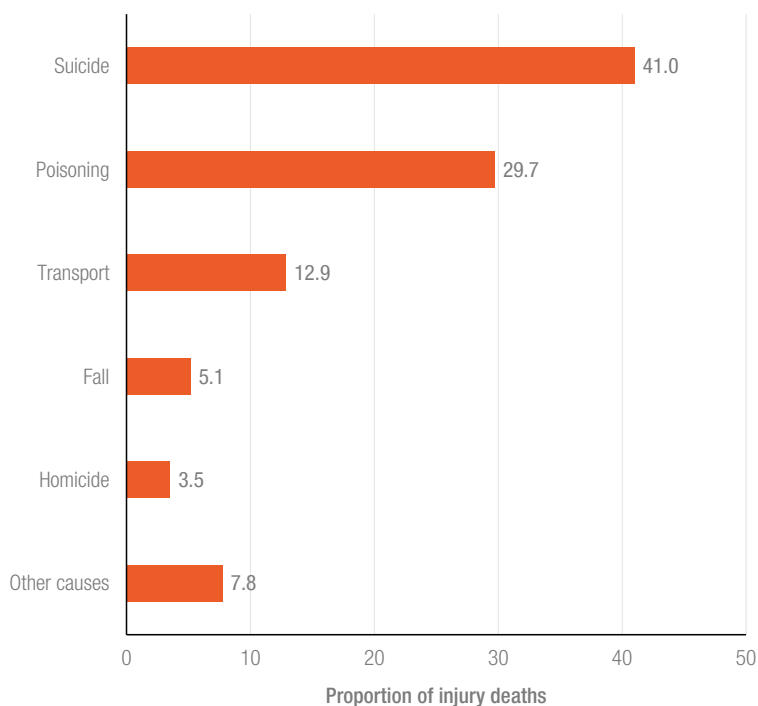
AGE DISTRIBUTION

- Average annual rates for unintentional injury deaths were lowest among adults aged 25–34 years (14.9/100,000). For intentional injury deaths, average annual rates were also lowest among adults aged 25–34 years (15.5/100,000) (Table 13).

LEADING CAUSES OF ADULT INJURY DEATHS

- Figure 20 shows the leading causes of adult injury deaths. Suicide accounted for 41.0% of injury deaths (n=1611), followed by unintentional poisoning (n=1167, 29.7%) and transport (n=505, 12.9%).
- For more detail on causes of injury deaths see Appendix 1 Table 23.

FIGURE 20: LEADING CAUSES OF ADULT INJURY DEATHS, VICTORIA 2019–2021 (n=3929)



Note: The cause categories "other specified unintentional", "unspecified unintentional" and "undetermined intent" were included in the "other causes" category.

TABLE 12: FREQUENCY AND AVERAGE ANNUAL RATE OF ADULT INJURY DEATHS BY INTENT AND SEX, VICTORIA 2019–2021

	UNINTENTIONAL			INTENTIONAL			UNDETERMINED INTENT			ALL		
	n	%	RATE PER 100,000	n	%	RATE PER 100,000	n	%	RATE PER 100,000	n	%	RATE PER 100,000
Male	1559	74.3	30.1	1323	75.6	25.5	47	58.0	0.9	2929	74.5	56.5
Female	539	25.7	10.1	427	24.4	8.0	34	42.0	0.6	1000	25.5	18.8
All	2098	100.0	20.0	1750	100.0	16.7	81	100.0	0.8	3929	100.0	37.4

TABLE 13: FREQUENCY AND AVERAGE ANNUAL RATE OF ADULT INJURY DEATHS BY INTENT AND AGE GROUP, VICTORIA 2019–2021

	UNINTENTIONAL			INTENTIONAL			UNDETERMINED INTENT			ALL		
	n	%	RATE PER 100,000	n	%	RATE PER 100,000	n	%	RATE PER 100,000	n	%	RATE PER 100,000
25–34 years	457	21.8	14.9	477	27.3	15.5	22	27.2	0.7	956	24.3	31.1
35–44 years	548	26.1	20.1	470	26.9	17.2	22	27.2	0.8	1040	26.5	38.1
45–54 years	613	29.2	24.7	431	24.6	17.4	28	34.6	1.1	1072	27.3	43.2
55–64 years	480	22.9	21.6	372	21.3	16.7	9	11.1	**	861	21.9	38.7
All	2098	100.0	20.0	1750	100.0	16.7	81	100.0	0.8	3929	100.0	37.4

Note: Rates based on frequency less than 10 have been suppressed ***.

LEADING CAUSES IN MORE DETAIL

- Hanging was the most common method of suicide (n=915, 56.8%) among adults, followed by poisoning with pharmaceutical substances (n=251, 15.6%) and non-pharmaceutical substances (n=87, 5.4%) (Table 14).

TABLE 14: SUICIDE DEATHS, VICTORIA 2019–2021

DETAILED CAUSE	n	%
Hanging, strangulation & suffocation	915	56.8
Poisoning – pharmaceuticals	251	15.6
Poisoning – other substances	87	5.4
Jumping or lying before moving object	80	5.0
Firearms	80	5.0
Jumping from a high place	77	4.8
Sharp object	43	2.7
Drowning and submersion	30	1.9
Crashing of motor-vehicle	29	1.8
Smoke fire & flames	**	**
Other specified or unspecified means	*	*
All suicide deaths	1611	100.0

Note: Frequency of 5 or less has been suppressed with an "**". Other cells in the same column are suppressed with an "***" to maintain confidentiality.

- Narcotics & psychodysleptics (hallucinogens) were the most common specific agents involved in unintentional poisoning deaths among adults (n=186, 15.9%) (Table 15).

TABLE 15: UNINTENTIONAL POISONING DEATHS, VICTORIA 2019–2021

DETAILED CAUSE	n	%
Narcotics & psychodysleptics {hallucinogens} not elsewhere classified	186	15.9
Antiepileptic, sedative-hypnotic, antiparkinsonism & psychotropic drugs, not elsewhere classified	111	9.5
Alcohol	111	9.5
Nonopioid analgesics, antipyretics & antirheumatics	7	0.6
Other gases and vapours	6	0.5
Pesticides	*	*
Other & unspecified chemicals & noxious substances	*	*
Other drugs acting on the autonomic nervous system	*	*
Other & unspecified drugs, medicaments & biological subs	742	63.6
All poisonings	1167	100.0

Note: Frequency of 5 or less has been suppressed with an "**".

- Unintentional transport deaths among adults mostly involved car occupants (n=239, 47.3%) and motorcycle riders (n=111, 22.0%) (Table 16).

TABLE 16: UNINTENTIONAL TRANSPORT DEATHS, VICTORIA 2019–2021

DETAILED CAUSE	n	%
Car occupant injured in transport incident	239	47.3
Motorcycle rider injured in transport incident	111	22.0
Pedestrian injured in transport incident	58	11.5
Pedal cyclist injured in transport incident	27	5.3
Other land transport incident	21	4.2
Water transport incident	17	3.4
Occupant of heavy transport vehicle	15	3.0
Air and space transport incident	9	1.8
Bus occupant injured in transport incident	*	*
Occupant of pick-up truck or van incident	*	*
All transport deaths	505	100.0

Note: Frequency of 5 or less has been suppressed with an "**".

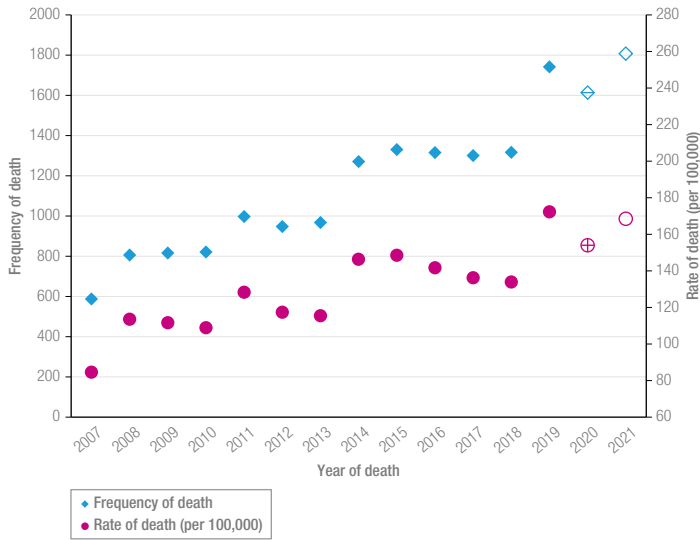
OLDER ADULTS (65 YEARS+)

TREND IN INJURY DEATHS (2007–2021)

Data presented for the years 2020–2021 are not final and subject to revision (see page 2 for more information). Consequently, statistical analysis of trends has not been conducted but figures have been provided here to give an indication of current trends in Victorian injury deaths among older adults.

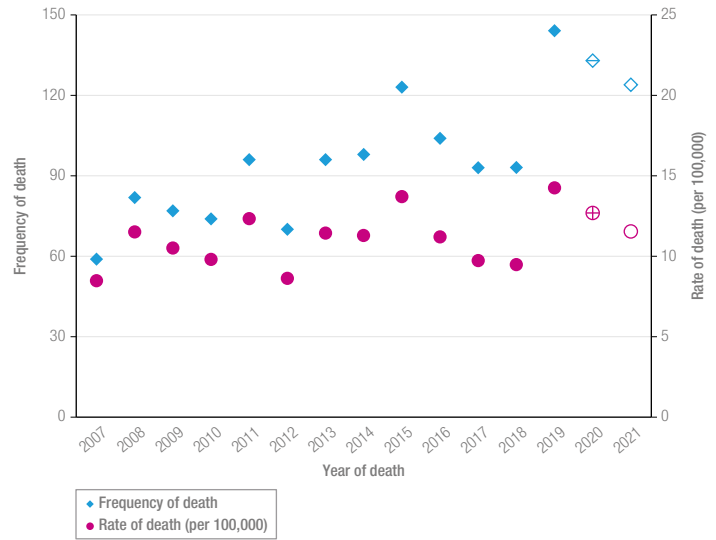
ALL INTENTS INJURY DEATHS

FIGURE 21: TREND IN FREQUENCY AND ANNUAL RATE OF OLDER ADULT INJURY DEATHS, VICTORIA 2007–2021¹



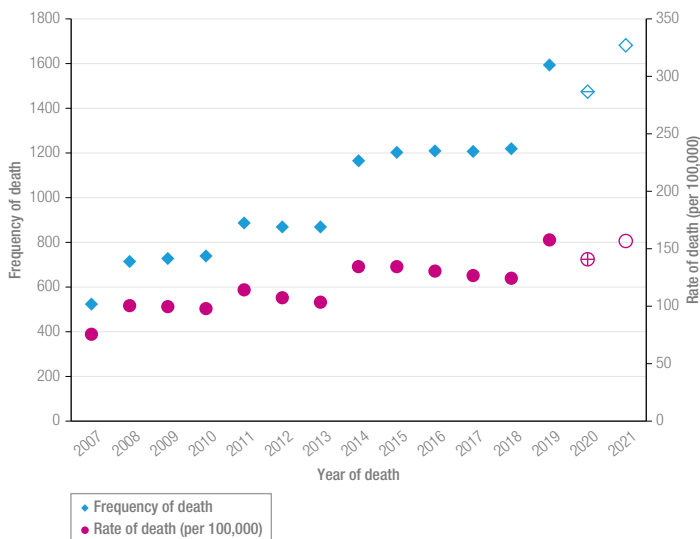
INTENTIONAL INJURY DEATHS

FIGURE 23: TREND IN FREQUENCY AND ANNUAL RATE OF OLDER ADULT INTENTIONAL INJURY DEATHS, VICTORIA 2007–2021¹



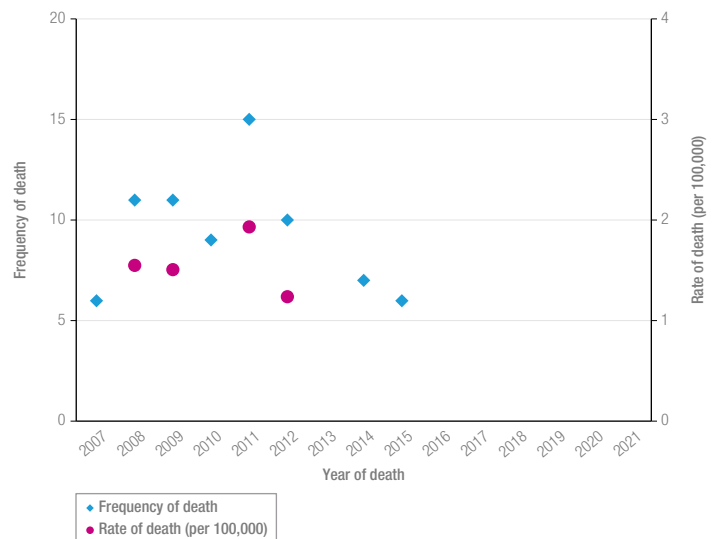
UNINTENTIONAL INJURY DEATHS

FIGURE 22: TREND IN FREQUENCY AND ANNUAL RATE OF OLDER ADULT UNINTENTIONAL INJURY DEATHS, VICTORIA 2007–2021¹



UNDETERMINED INTENT INJURY DEATHS

FIGURE 24: TREND IN FREQUENCY AND ANNUAL RATE OF OLDER ADULT UNDETERMINED INTENT INJURY DEATHS, VICTORIA 2007–2021¹



Note: Frequency of 5 or less and rates based on frequency less than 10 have been suppressed.

¹The 2019 reference year includes deaths that had been registered in 2017 and 2018 but not previously provided to the ABS. See Appendix 3 for more details.

- ◆ Frequency (final)
- ◇ Frequency (revised)
- ◇ Frequency (preliminary)
- Rate (final)
- ⊕ Rate (revised)
- Rate (preliminary)

PATTERN OF OLDER ADULT INJURY DEATHS (2019–2021)

In the period 2019–2021, 5152 Victorian older adults died as a result of injury. Ninety-two percent of these deaths were unintentional (n=4751, 92.2%) and 7.8% were intentional (n=401) (Table 17). Deaths among older adults coded to undetermined intent are not reported in this section for reasons of confidentiality.

SEX DISTRIBUTION

- Just over half of the unintentional injury deaths were among females (n=2407, 50.7%), while males accounted for 72.3% of intentional injury deaths (n=290) (Table 17).
- The all injury annual death rates were higher for males compared to females (182.0/100,000 vs 149.4/100,000, respectively), as were the unintentional injury annual deaths rates (162.0/100,000 males vs. 142.8/100,000 for females) (Table 17).
- The intentional injury annual death rates were higher for males (20.0/100,000) compared to females (6.6/100,000) (Table 17).

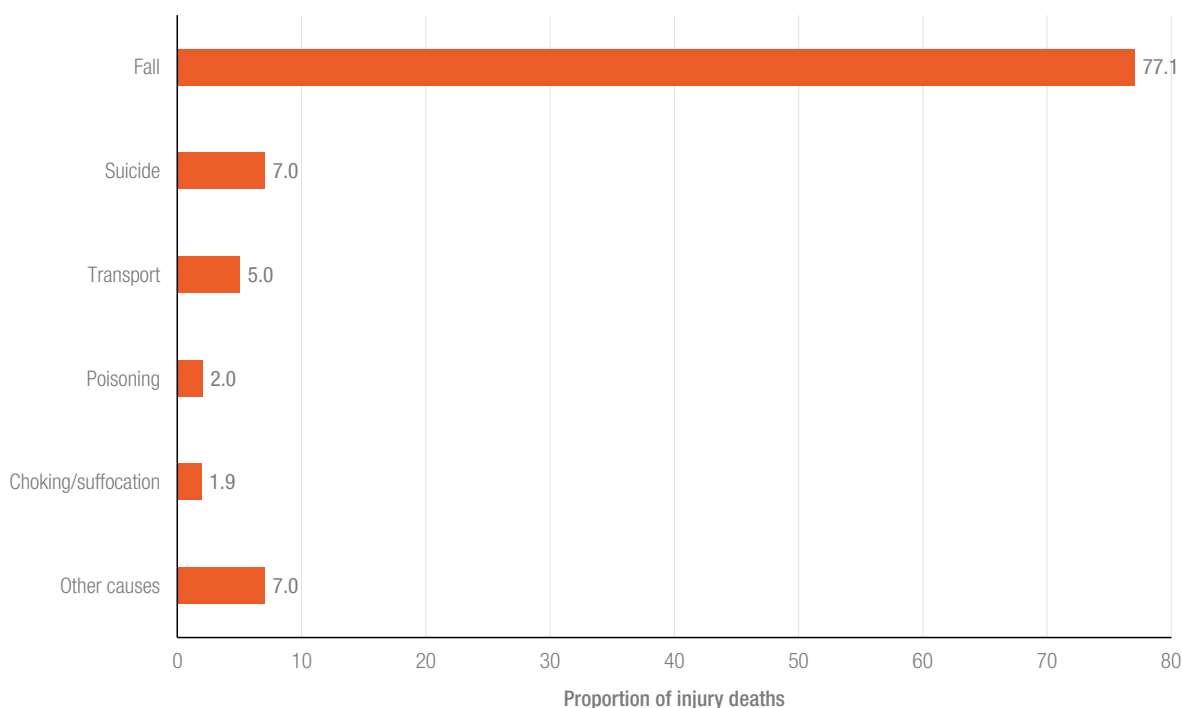
AGE DISTRIBUTION

- Unintentional injury annual death rates increased as age increased, with the highest rates observed in persons aged 85 years and older (712.1/100,000) (Table 18).
- A similar pattern was found for intentional injury annual death rates, with rates peaking in the oldest age group of 85 years and older (17.0/100,000) (Table 18).

LEADING CAUSES OF OLDER ADULT INJURY DEATHS

- Figure 25 shows the leading causes of older adult injury deaths. Falls accounted for more than three-quarters of injury deaths (n=3971, 77.1%), followed by suicide (n=360, 7.0%), transport incidents (n=259, 5.0%), unintentional poisoning (n=103, 2.0%), and choking/suffocation (n=99, 1.9%). For more detail on causes of injury deaths see Appendix 1 Table 23.

FIGURE 25: LEADING CAUSES OF OLDER ADULT INJURY DEATHS, VICTORIA 2019–2021 (n=5152)



Note: The cause categories "other specified unintentional" and "unspecified unintentional" were included in the "other causes" category.

TABLE 17: FREQUENCY AND AVERAGE ANNUAL RATE OF OLDER ADULT INJURY DEATHS BY INTENT AND SEX, VICTORIA 2019–2021

	UNINTENTIONAL			INTENTIONAL			ALL*		
	n	%	RATE PER 100,000	n	%	RATE PER 100,000	n	%	RATE PER 100,000
Male	2344	49.3	162.0	290	72.3	20.0	2634	51.1	182.0
Female	2407	50.7	142.8	111	27.7	6.6	2518	48.9	149.4
All	4751	100.0	151.7	401	100.0	12.8	5152	100.0	164.5

*Note: Deaths among older adults coded to 'undetermined intent' were excluded from this analysis (see methods section)

TABLE 18: FREQUENCY AND AVERAGE ANNUAL RATE OF OLDER ADULT INJURY DEATHS BY INTENT AND AGE GROUP, VICTORIA 2019–2021

	UNINTENTIONAL			INTENTIONAL			ALL*		
	n	%	RATE PER 100,000	n	%	RATE PER 100,000	n	%	RATE PER 100,000
65–69 years	242	5.1	26.0	105	26.2	11.3	347	6.7	37.3
70–74 years	310	6.5	38.0	92	22.9	11.3	402	7.8	49.3
75–79 years	486	10.2	85.0	76	19.0	13.3	562	10.9	98.3
80–84 years	787	16.6	194.8	58	14.5	14.4	845	16.4	209.1
85+ years	2926	61.6	712.1	70	17.5	17.0	2996	58.2	729.1
All	4751	100.0	151.7	401	100.0	12.8	5152	100.0	164.5

*Note: Deaths among older adults coded to 'undetermined intent' were excluded from this analysis (see methods section)

LEADING CAUSES IN MORE DETAIL

- A high proportion of fall deaths among older adults were coded to 'unspecified fall' (n=3177, 80.0%) (Table 19). Of those with a specified fall mechanism (n=794), almost half were falls on the same level from slipping, tripping or stumbling (n=388, 48.9%).

TABLE 19: UNINTENTIONAL FALL DEATHS, VICTORIA 2019–2021

DETAILED CAUSE	n	%
Same level from slipping, tripping, stumbling	388	9.8
Involving bed	123	3.1
On and from stairs and steps	79	2.0
Other fall on same level	61	1.5
Involving chair	54	1.4
On and from ladder	28	0.7
Involving wheelchair	27	0.7
Other fall from one level to another	12	0.3
From, out of or through building or structure	10	0.3
While being carried or supported by other persons	*	*
Involving other furniture	*	*
On same level – collision with pushing by another person	*	*
From tree	*	*
From cliff	*	*
Unspecified fall	3177	80.0
All falls	3971	100.0

Note: Frequency of 5 or less has been suppressed with an ***.

- Hanging was the most common method of suicide (n=137, 38.1%) among older adults, followed by poisoning with pharmaceutical substances (n=85, 23.6%), firearms (n=33, 9.2%) and non-pharmaceutical substances (n=32, 8.9%) (Table 20).

TABLE 20: SUICIDE DEATHS, VICTORIA 2019–2021

DETAILED CAUSE	n	%
Hanging, strangulation & suffocation	137	38.1
Poisoning- pharmaceuticals	85	23.6
Firearms	33	9.2
Poisoning- other substances	32	8.9
Drowning and submersion	20	5.6
Sharp object	19	5.3
Jumping from a high place	13	3.6
Smoke fire & flames	9	2.5
Jumping or lying before moving object	6	1.7
Other specified or unspecified means	6	1.7
All suicide deaths	360	100.0

- Unintentional transport deaths among older adults mostly involved car occupants (n=141, 54.4%) and pedestrians (n=64, 24.7%) (Table 21).

TABLE 21: UNINTENTIONAL TRANSPORT DEATHS, VICTORIA 2019–2021

DETAILED CAUSE	n	%
Car occupant injured in transport incident	141	54.4
Pedestrian injured in transport incident	64	24.7
Other land transport incident	15	5.8
Pedal cyclist injured in transport incident	12	4.6
Water transport incident	9	3.5
Motorcycle rider injured in transport incident	8	3.1
Occupant of heavy transport vehicle	*	*
Air and space transport incident	*	*
Bus occupant injured in transport incident	*	*
Occupant of pick-up truck or van incident	*	*
All transport deaths	259	100.0

Note: Frequency of 5 or less has been suppressed with an "*".

APPENDIX 1

TABLE 22: OVERVIEW OF INJURY DEATHS, VICTORIA 2019–2021

		2019 ⁽¹⁾		2020 ⁽²⁾		2021 ⁽³⁾		TOTAL*	
		n	%	n	%	n	%	n	%
	ALL	3601	100.0	3024	100.0	3159	100.0	9784	100.0
Age	0–14 years	29	0.8	30	1.0	36	1.1	95	0.9
	15–24 years	243	6.7	179	5.9	175	5.5	597	6.0
	25–64 years	1587	44.1	1202	39.7	1140	36.1	3929	40.2
	65+ years	1742	48.4	1613	53.3	1808	57.2	5163	52.9
Sex	Male	2270	63.0	1884	62.3	1923	60.9	6077	62.1
	Female	1331	37.0	1140	37.7	1236	39.1	3707	37.9
Cause	UNINTENTIONAL	2555	71.0	2236	73.9	2390	75.7	7181	73.4
	Fall	1385	38.5	1308	43.3	1485	47.0	4178	42.7
	Poisoning	532	14.8	450	14.9	366	11.6	1348	13.8
	Transport	394	10.9	259	8.6	286	9.1	939	9.6
	Choking/suffocate	47	1.3	43	1.4	57	1.8	147	1.5
	Drowning/near drowning	36	1.0	34	1.1	45	1.4	115	1.2
	Fires/burns/scalds	25	0.7	30	1.0	23	0.7	78	0.8
	Hit/struck/crush	21	0.6	18	0.6	12	0.4	51	0.5
	Natural/environmental/animals	23	0.6	13	0.4	11	0.3	47	0.5
	Machinery	*	*	*	*	*	*	18	0.2
	Cutting/piercing	*	*	*	*	*	*	11	0.1
	Overexertion and/or strenuous movements	*	*	*	*	*	*	*	*
	Explosions/firearms	*	*	*	*	*	*	*	*
	Foreign body – natural orifice	*	*	*	*	*	*	*	*
	Other specified unintentional	6	0.2	8	0.3	7	0.2	21	0.2
	Unspecified unintentional	73	2.0	62	2.1	84	2.7	219	2.2
	INTENTIONAL	1005	27.9	757	25.0	741	23.5	2503	25.6
	Suicide	913	25.4	691	22.9	674	21.4	2278	23.3
	Homicide	92	2.5	66	2.1	67	2.1	225	2.3
	UNDETERMINED INTENT*	41	1.1	31	1.0	28	0.9	100	1.0

Notes: Data for different years are at different stages of the ABS revisions process: (1) Final, (2) Revised & (3) Preliminary.
 Frequency of 5 or less has been suppressed with an '*'.
 *Deaths among children coded to 'undetermined intent' were excluded from the entire analysis (see methods section).

TABLE 23: RANKING OF CAUSES OF INJURY DEATHS (ALL AGES), VICTORIA 2019–2021

RANK	AGE GROUPS (YEARS)																	ALL			
	0–4 yrs	5–9 yrs	10–14 yrs	15–19 yrs	20–24 yrs	25–29 yrs	30–34 yrs	35–39 yrs	40–44 yrs	45–49 yrs	50–54 yrs	55–59 yrs	60–64 yrs	65–69 yrs	70–74 yrs	75–79 yrs	80–84 yrs		85+ yrs		
1	n 10	transport 6	suicide 14	suicide 112	suicide 181	suicide 218	suicide 208	suicide 226	suicide 203	suicide 207	suicide 206	suicide 215	suicide 140	fall 117	fall 202	fall 372	fall 664	fall 2616	fall 4178		
%	20.4	31.6	51.9	53.8	47.5	47.1	42.2	43.3	39.2	37.7	39.4	47.0	34.7	33.7	50.2	66.2	78.6	87.3	42.8		
2	n 10	drowning/ near drowning	transport	transport	transport	unint. poisoning	unint. poisoning	unint. poisoning	suicide	suicide	unint. poisoning	unint. poisoning	fall	suicide	suicide	suicide	suicide	suicide	unspec. unintention.	suicide	
%	20.4	*	29.6	28.8	23.9	22.7	27.6	34.7	38.0	35.5	34.0	21.9	18.1	28.5	21.4	12.1	6.3	14.3	4.8	2278	
3	n 10	fires/burns/scalds	drowning/ near drowning	unint. poisoning	unint. poisoning	transport	transport	transport	transport	transport	transport	transport	transport	transport	transport	transport	transport	transport	transport	unint. poisoning	unint. poisoning
%	20.4	*	*	6.3	16.8	19.2	9.4	9.4	9.8	12.0	10.7	12.0	17.3	13.8	9.0	9.6	5.9	7.1	1348	13.8	
4	n 9	homicide	fires/burns/scalds	homicide	homicide	homicide	homicide	homicide	homicide	fall	fall	fall	unint. poisoning	unint. poisoning	unint. poisoning	unint. poisoning	unint. poisoning	unint. poisoning	unint. poisoning	homicide	homicide
%	18.4	*	*	4.8	5.8	4.8	3.1	3.1	4.8	4.0	2.9	4.0	15.6	12.7	2.8	2.8	3.7	1.8	54	225	2.3
5	n *	fires/burns/scalds	fall	drowning/ near drowning	drowning/ near drowning	drowning/ near drowning	fall	fall	homicide	homicide	oth. or undet. intent	homicide	choking/suffocate	choking/suffocate	unspec. unintention.	choking/suffocate	choking/suffocate	choking/suffocate	choking/suffocate	transport	transport
%	*	14	*	3.8	2.9	3.0	2.5	2.5	2.1	3.8	3.1	2.2	3.7	2.9	3.7	2.3	2.0	1.6	48	939	9.6
6	n *	hit/struck/crush	choking/suffocate	oth. unintention.	fall	fall	oth. or undet. intent	oth. or undet. intent	oth. or undet. intent	oth. or undet. intent	homicide	hit/struck/crush	drowning/ near drowning	drowning/ near drowning	choking/suffocate	choking/suffocate	unint. poisoning	unint. poisoning	homicide	unspec. unintention.	unspec. unintention.
%	*	*	*	*	*	*	13	13	9	12	9	6	10	8	11	13	9	16	219	219	2.2
7	n *	unint. poisoning	choking/suffocate	choking/suffocate	hit/struck/crush	hit/struck/crush	drowning/ near drowning	drowning/ near drowning	fires/burns/scalds	drowning/ near drowning	fires/burns/scalds	hit/struck/crush	fires/burns/scalds	fires/burns/scalds	homicide	homicide	drowning/ near drowning	fires/burns/scalds	choking/suffocate	choking/suffocate	choking/suffocate
%	*	*	*	*	*	*	1.1	1.1	*	*	7	6	10	6	10	8	0.8	14	147	147	1.5
8	n *	nat./ enviro/ animals	hit/struck/crush	hit/struck/crush	machinery	machinery	hit/struck/crush	choking/suffocate	drowning/ near drowning	choking/suffocate	choking/suffocate	oth. or undet. intent	homicide	nat./ enviro/ animals	homicide	fires/burns/scalds	homicide	nat./ enviro/ animals	nat./ enviro/ animals	drowning/ near drowning	drowning/ near drowning
%	*	*	*	*	*	*	*	*	*	*	6	6	7	*	6	2.5	*	12	115	115	1.2
9	n *	cutting/piercing	choking/suffocate	choking/suffocate	nat./ enviro/ animals	oth. unintention.	fires/burns/scalds	oth. unintention.	hit/struck/crush	hit/struck/crush	drowning/ near drowning	drowning/ near drowning	hit/struck/crush	unspec. unintention.	hit/struck/crush	nat./ enviro/ animals	fires/burns/scalds	unint. poisoning	unint. poisoning	oth. or undet. intent	oth. or undet. intent
%	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	8	81	81	0.8
10	n *	nat./ enviro/ animals	unspec. unintention.	unspec. unintention.	oth. or undet. intent	unspec. unintention.	fires/burns/scalds	fires/burns/scalds	choking/suffocate	machinery	machinery	fires/burns/scalds	nat./ enviro/ animals	fires/burns/scalds	drowning/ near drowning	fires/burns/scalds	nat./ enviro/ animals	drowning/ near drowning	fires/burns/scalds	fires/burns/scalds	fires/burns/scalds
%	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.2	78	78	0.8
11	n *	choking/suffocate	choking/suffocate	choking/suffocate	choking/suffocate	fires/burns/scalds	hit/struck/crush	hit/struck/crush	cutting/piercing	cutting/piercing	cutting/piercing	choking/suffocate	unspec. unintention.	hit/struck/crush	hit/struck/crush	hit/struck/crush	hit/struck/crush	hit/struck/crush	hit/struck/crush	hit/struck/crush	hit/struck/crush
%	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
12	n *	machinery	machinery	machinery	machinery	machinery	explosions/firearms	explosions/firearms	machinery	fires/burns/scalds	nat./ enviro/ animals	oth. unintention.	oth. or undet. intent	explosions/firearms	explosions/firearms	explosions/firearms	machinery	cutting/piercing	cutting/piercing	cutting/piercing	cutting/piercing
%	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
13	n *	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	strenuous movements	strenuous movements	oth. unintention.	unspec. unintention.	machinery	machinery	machinery	machinery	machinery	machinery	machinery	oth. unintention.	oth. unintention.
%	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
14	n *	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	explosions/firearms	explosions/firearms	oth. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.
%	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
15	n *	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	oth. unintention.	oth. unintention.	unspec. unintention.	cutting/piercing	cutting/piercing	cutting/piercing	cutting/piercing	cutting/piercing	cutting/piercing	cutting/piercing	cutting/piercing	cutting/piercing	cutting/piercing
%	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
16	n *	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.
%	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
17	n *	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.
%	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
18	n *	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.	unspec. unintention.
%	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*
ALL	49	19	27	208	381	463	493	522	518	549	523	457	404	347	402	562	845	2996	9765	9765	9765

Notes: Oth. or undet. intent = other or undetermined intent; nat./ enviro/ animals = natural/environmental/animals; oth. unintention. = other specified unintentional; unspec. unintention. = unspecified unintentional; strenuous movements = overexertion/strenuous movements; oth. unintention. poisoning = unintentional poisoning. Frequency of 5 or less has been suppressed with an “*”; Other cells in the same row and/or column may be suppressed in order to maintain confidentiality. *Deaths coded to ‘undetermined intent’ for children, adolescents/young adults and older adults were excluded from this analysis (see methods section).

APPENDIX 2

TABLE 24: INJURY DEATHS: STATE OF RESIDENCE VS STATE OF DEATH REGISTRATION, 2019-2021

STATE OF RESIDENCE	REGISTRATION STATE								
	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Total
NSW	9342	72	98	13	*	*	*	76	9614
VIC	77	9647	24	12	12	8	*	*	9784
QLD	94	19	6671	7	11	*	10	*	6818
SA	17	14	6	2616	*	*	*	*	2663
WA	*	6	*	15	4285	0	*	0	4313
TAS	6	10	*	0	0	924	0	**	943
NT	*	*	*	6	*	0	408	*	**
ACT	32	*	*	*	*	*	*	485	527
Other^	*	0	0	0	0	0	0	**	*
Total	9573	9772	6812	2670	4321	942	432	568	35090

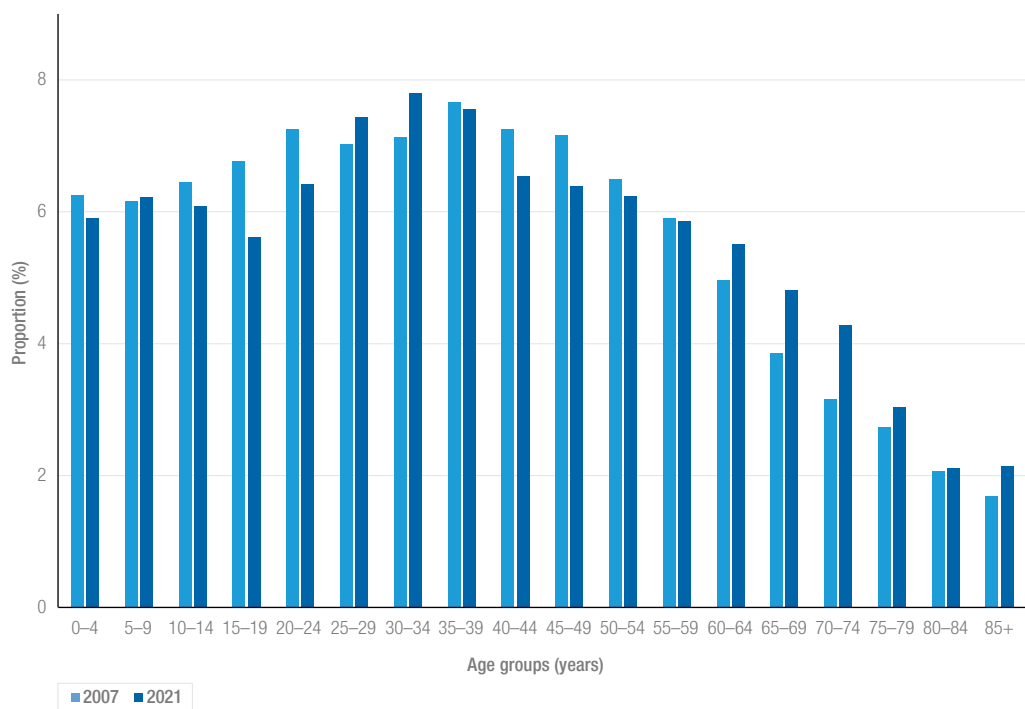
Note: Excludes medical injury and late effects. Also excludes undetermined intent injury deaths among children aged 0-14 years. Frequency of 5 or less has been suppressed with an "**". Other cells in the same row and/or column may be suppressed with an "*" in order to maintain confidentiality. ^Other Territories (Cocos (Keeling) Islands, Christmas Island, Jervis Bay Territory).

TABLE 25: REFERENCE YEAR OF INJURY DEATH VS ACTUAL YEAR OF INJURY DEATH FOR VICTORIAN RESIDENTS

DEATH YEAR	REFERENCE YEAR															Total
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	
<2005	16	*	*	*	*	*	*	*	*	*	*	*	0	*	0	43
2005	11	*	0	*	0	*	0	0	0	*	0	0	0	*	0	23
2006	122	*	*	0	0	0	*	0	0	0	0	0	0	*	*	129
2007	1537	352	7	*	0	0	*	0	0	0	0	0	0	*	0	1900
2008		1692	330	*	*	*	0	*	*	*	0	0	0	*	0	2035
2009			1903	319	21	*	*	*	0	*	0	0	0	0	0	2248
2010				1724	286	*	*	0	*	0	0	*	0	0	0	2016
2011					1814	252	7	*	0	*	*	*	*	0	0	2081
2012						1759	334	8	*	*	*	*	*	8	0	2120
2013							1640	524	6	*	*	*	*	6	0	2184
2014								2060	333	9	*	*	0	*	0	2407
2015									2263	320	*	0	0	0	0	2584
2016										2319	342	0	24	*	*	2687
2017											2165	298	345	**	*	2817
2018												2202	642	20	0	2864
2019													2587	**	*	2972
2020														2591	390	2981
2021															2761	2761
Total	1686	2055	2244	2055	2127	2020	1987	2597	2609	2659	2519	2510	3601	3024	3159	36852

Note: Excludes medical injury and late effects. Also excludes undetermined intent injury deaths among children aged 0-14 year. Frequency of 5 or less has been suppressed with an "**". Other cells in the same row and/or column may be suppressed with an "*" in order to maintain confidentiality. An increase in deaths for the 2019 reference year is due to inclusion of deaths that had been registered in 2017, 2018 and 2019. See Appendix 3 for more details.

FIGURE 26: HISTOGRAM OF AGE DISTRIBUTION OF THE RESIDENT POPULATION OF VICTORIA, 2007–2021



Source: ABS catalogue no: 3101.0 – National, state and territory population; TABLE 52 – Estimated Resident Population by Single Year of Age, Victoria. Downloaded January 2024.
 .Stat Data Explorer (BETA) • Quarterly Population Estimates (ERP), by State/Territory, Sex and Age (abs.gov.au)

APPENDIX 3: ABS TECHNICAL NOTE: VICTORIAN ADDITIONAL REGISTRATIONS AND TIME SERIES ADJUSTMENT

Further information relevant to data trend interpretation is available via the following link: <https://www.abs.gov.au/methodologies/causes-death-australia-methodology/2019#technical-note-victorian-additional-registrations-and-time-series-adjustment>

How to access VISU data

VISU collects and analyses information on injury problems to underpin the development of prevention strategies and their implementation. VISU analyses are publicly available for teaching, research and prevention purposes. Requests for information can be lodged via the data request form on the VISU website or by contacting the VISU office by phone.

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