



MONASH
University

INJURY DEATHS VICTORIA 2014 – 2016

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Health
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Services

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SUMMARY OF INJURY DEATHS, VICTORIA 2014 – 2016

ALL AGES

- In the three-year period 2014-2016, 7814 Victorians died as a result of injury. Seventy-one percent of these deaths were unintentional (70.9%, n=5544), 27.3% were intentional (n=2130: suicide=1948 & homicide=182) and the remaining 1.8% were classified as undetermined intent (n=140).
- The overall average annual injury death rate was 43.8 per 100,000 population.
- Males were overrepresented accounting for 56.8% of unintentional and 62.1% of undetermined intent injury deaths.
- Three causes: falls (37.6%), suicide (24.9%) and transport (12.5%) combined accounted for three-quarters of injury deaths (75.0%).

CHILDREN (0-14 YEARS)

- In the period 2014-2016, 90 Victorian children died as a result of injury. More than 70% of these deaths were unintentional (n=66, 73.3%) and 26.6% were intentional (n=24).
- The overall average annual injury death rate was 2.7 per 100,000 children.
- Boys were overrepresented among all injury (62.2%) and unintentional injury (66.7%) deaths.
- Children aged 0-4 years accounted for 53.3% of child injury deaths (n=48), 51.5% of unintentional injury deaths (n=34) and 58.3% of intentional injury deaths (n=14).
- The leading causes of child injury death were transport (31.1%, mainly as car occupants and pedestrians), and homicide and drowning (each 17.8%).

ADOLESCENTS AND YOUNG ADULTS (15-24 YEARS)

- In the period 2014-2016, 509 Victorian adolescents and young adults died as a result of injury. More than half of these deaths were intentional (52.1%, n=265), 45.0% were unintentional (n=229) and the remaining 2.9% were classified as undetermined intent (n=15).
- The overall average annual injury death rate was 21.5 per 100,000 adolescents and young adults.
- Males were overrepresented, accounting for 76.4% of unintentional and 76.2% of intentional injury deaths.
- Suicide (47.9%) and transport incidents (31.0%) were the leading causes of injury deaths among adolescents and young adults (n=244 and n=158, respectively).

ADULTS (25-64 YEARS)

- In the period 2014-2016, 3333 Victorian adults aged 25-64 years died as a result of injury. More than half of these deaths were unintentional (51.2%, n=1706), 45.6% were intentional (n=1519) and the remaining 3.2% were classified as undetermined intent (n=108).
- The overall average annual injury death rate was 35.0 per 100,000 adults aged 25-64 years.
- Males were overrepresented accounting for approximately three-quarters of unintentional (75.8%) and intentional injury deaths (74.6%) and 62.0% of undetermined intent injury deaths.
- Suicide accounted for 41.9% of injury deaths (most commonly by hanging). Other common causes of injury death were unintentional poisoning (26.2%) and transport incidents (15.7%, most commonly as car occupants).

OLDER ADULTS (65+ YEARS)

- In the period 2014-2016, 3882 Victorian older adults died as a result of injury. Ninety-one percent of these deaths were unintentional (n=3543), 8.3% were intentional (n=322: suicide=301 & homicide=21) and 0.4% were classified as undetermined intent (n=17).
- The overall average annual injury death rate was 145.3 per 100,000 older adults.
- Females were slightly overrepresented in unintentional injury deaths (53.9%, n=1909) while males accounted for more than three-quarters of intentional injury deaths (77.0%, n=248).
- Falls accounted for almost three-quarters of injury deaths among older persons (72.3%, n=2805), followed by suicide (7.8%, n=301) and transport incidents (6.8%, n=265). A very high proportion of the fall deaths were coded to 'unspecified fall' (n=2232, 79.6%) but of those with a specified fall mechanism (n=573), approximately half were falls on the same level from slipping, tripping or stumbling (50.4%, n=289).

INTRODUCTION

This E-bulletin provides a detailed overview of Victorian injury deaths in the three-year period 2014-2016: 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 2007-2016, 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). VISU acknowledges the following custodians of the COD data used in this report: the Victorian Registry of Births, Deaths and Marriages, the Victorian Department of Justice and the National Coronial Information System (NCIS).

Data selection

Inclusions:

- Main section: deaths recorded for Victorian residents with a reference year of 2014-2016, 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 2007-2016.
- Deaths must have an ICD-10 underlying cause of death code in the range V00–Y84 (unintentional, intentional and undetermined intent injury deaths).

Exclusions:

- Deaths resulting from medical causes (adverse events and medical misadventure) have been excluded (ICD-10 codes in the range Y40–Y84).
- Child deaths occurring over the three-year period 2014-2016 coded as 'undetermined intent' were removed from the entire analysis for reasons of confidentiality (less than five deaths over the three-year period). Child 'undetermined intent' deaths were also excluded for the period 2007-2013.







State of residence rather than registration was chosen considering population rates were to be calculated (see Appendix 2 Table 24 for the influence of this on the data selected). Reference year rather than year of death was chosen to be consistent with Australian Bureau of Statistics (ABS) publications of COD data (see Appendix 2 Table 25 for the influence of this on the data selected).

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 2014, revised data for 2015, and preliminary data for 2016. Data for the 2006 reference year has not been included in this E-bulletin because the revisions process was different to that of the 2007-2016 reference years.

Data for main analysis covers the 3-year period 2014-2016 and as a result of the revisions process, the numbers for two of the three years are subject to revision and will likely change in future Ebulletin editions. Consequently, just six of the 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.

For data covering the period 2007 to 2012, place of occurrence of injury deaths was derived using the 4th digit of the ICD-10 code assigned to the underlying cause of death field. From 2013 data onwards place of occurrence has been coded directly from the comments in the reports relating to the coroners' investigation. Due to this inconsistency in data collection between these time periods, place of occurrence of injury deaths is not included in this E-bulletin.

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 2007-2016 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 were tested using chi-square tests (results not shown); P-values of <0.05 were considered statistically significant.

ALL AGES

An overview of injury deaths in Victoria over the 3-year period 2014-2016 is provided in Appendix 1 (Table 22). Previous E-bulletin editions have focused on only the most recent available one year of data, but due to the preliminary/revised nature of the 2014 & 2015 data held by VISU, the latest three years of data will be presented in this E-bulletin. Any differences between these three years as presented in Table 22 (Appendix 1) 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 of data that is final (2014), that which is revised (2015) and the year of data that is preliminary (2016), with more than two-thirds of deaths being unintentional in all years of the period (70.2% in 2014, 69.8% in 2015 and 72.8% in 2016); more than a quarter being intentional (27.8% in 2014, 28.2% in 2015 and 25.8% in 2016); and 2% or less coded as undetermined (2.0% in both 2014 and 2015 and 1.4% in 2016); (chi-square test $p=0.08$). Overall, males accounted for over sixty percent of injury deaths (61.8%, $n=4829$). One quarter of injury deaths were due to suicide (24.9%): 1948 Victorians died by suicide in the period 2014-2016.

Overall, there were 7814 injury deaths recorded for Victoria over the period 2014-2016: an average annual rate of 43.8 deaths per 100,000 Victorians (Table 1).

- All-intents annual injury death rates were highest in older adults (145.3 per 100,000 older adults) and lowest in children (2.7 per 100,000 children).
- The all-ages unintentional annual injury death rate was 31.1 per 100,000 Victorians; rates were highest in older adults (132.6 per 100,000 older adults) and lowest in children (2.0 per 100,000 children).
- The all-ages intentional annual injury death rate was 11.9 per 100,000 Victorians (comprising a 10.9/100,000 suicide rate and a 1.0/100,000 homicide rate). Intentional death rates were highest in adults (15.9 per 100,000 adults aged 25-64 years) and lowest in children (0.7 per 100,000 children). Both suicide and homicide rates followed this age pattern.
- The all-ages undetermined intent annual injury death rate was 0.8 per 100,000 Victorians and rates were highest in adults (1.1 per 100,000 adults aged 25-64 years).

Table 1: Frequency and average annual rates of injury deaths by intent and broad age groups, Victoria 2014-2016

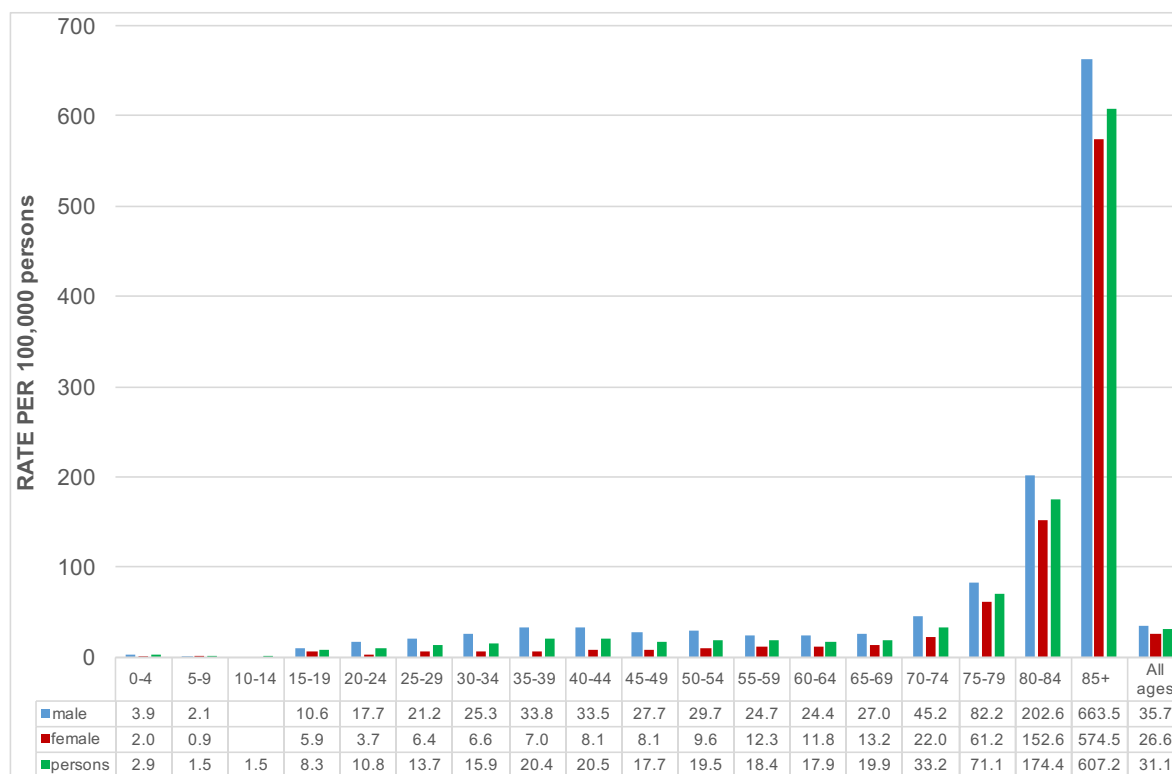
	CHILDREN (0-14 YEARS)		ADOLESCENTS AND YOUNG ADULTS (15-24 YEARS)		ADULTS (25-64 YEARS)		OLDER ADULTS (65+ YEARS)		ALL AGES	
	n	Rate per 100,000	n	Rate per 100,000	n	Rate per 100,000	n	Rate per 100,000	n	Rate per 100,000
Unintentional	66	2.0	229	9.7	1,706	17.9	3,543	132.6	5,544	31.1
Intentional	24	0.7	265	11.2	1,519	15.9	322	12.1	2,130	11.9
Suicide	8	*	244	10.3	1,395	14.6	301	11.3	1,948	10.9
Homicide	16	0.5	21	0.9	124	1.3	21	0.8	182	1.0
Undetermined intent	NA	NA	15	0.6	108	1.1	17	0.6	140	0.8
Total	90	2.7	509	21.5	3,333	35.0	3,882	145.3	7,814	43.8

Note: (1) Rates based on frequency less than 10 have been suppressed with "**".

NA = Child deaths coded to 'undetermined intent' were deleted from the entire analysis (see methods section)

Over the period 2014-2016, the male average annual age-specific *unintentional injury death rate* was higher than the female rate in all 5-year age groups. Overall, rates rose after childhood, were fairly stable to age 65 years before increasing dramatically and peaking in the oldest adults (Figure 1)

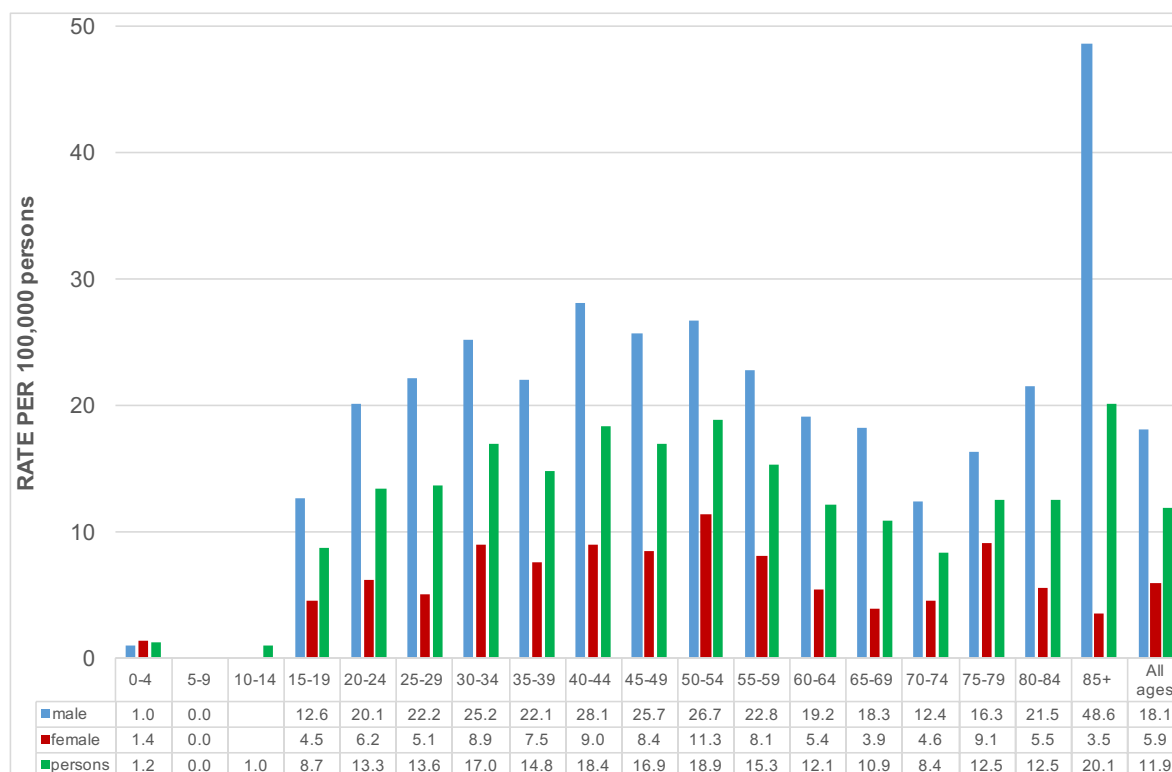
Figure 1: Average annual unintentional injury death rates by age group and gender, Victoria 2014-2016



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

Over the period 2014-2016, the male average annual age-specific intentional injury death rate was higher than the female rate in all 5-year age bands except 0-4 years. Age-specific intentional injury death rates were lowest in children aged 5-9 and 10-14 (suppressed in figure) and were highest in adults aged 85+ years (Figure 2).

Figure 2: Average annual intentional injury death rates by age group and gender, Victoria 2014-2016



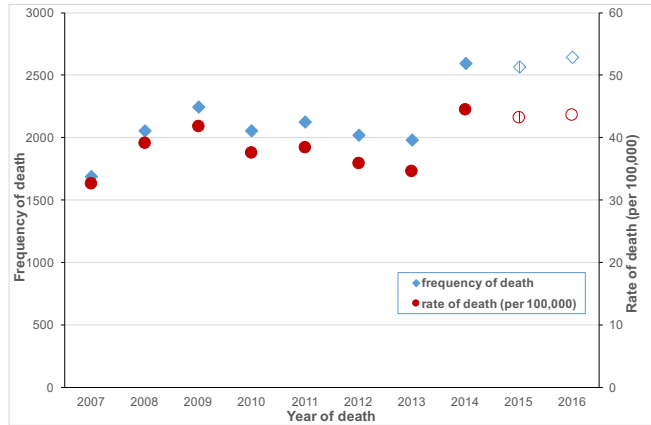
Note: Rates based on frequency less than 10 have been suppressed.

TREND IN INJURY DEATHS (2007-2016)

Data presented for the years 2015 and 2016 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.

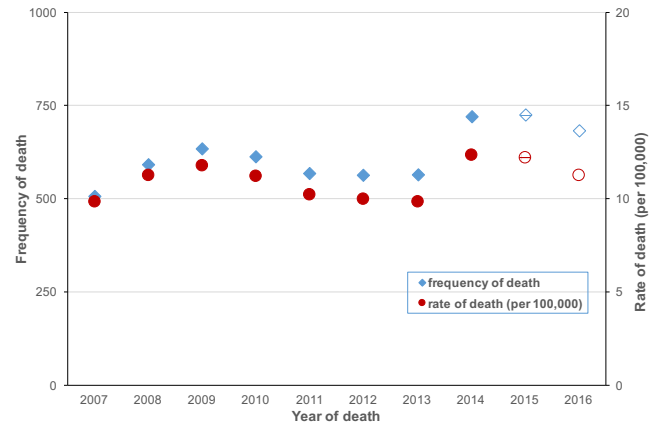
ALL INTENTS INJURY DEATHS

Figure 3: Trend in frequency and annual rate of all injury deaths, Victoria 2007-16



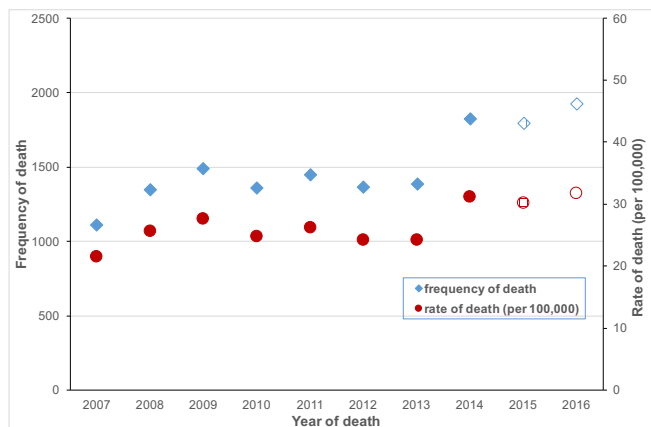
INTENTIONAL INJURY DEATHS

Figure 5: Trend in frequency and annual rate of intentional injury deaths, Victoria 2007-16



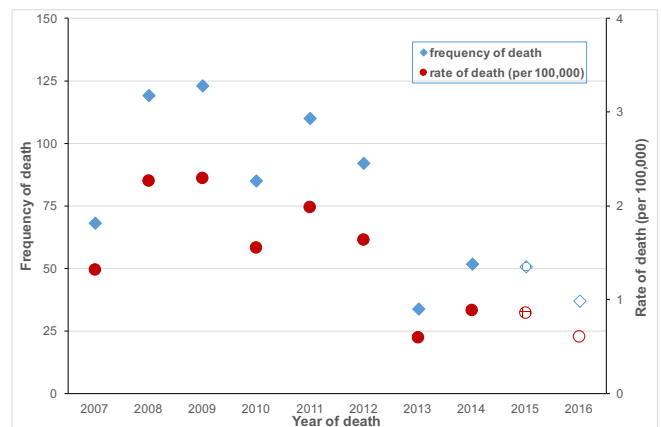
UNINTENTIONAL INJURY DEATHS

Figure 4: Trend in frequency and annual rate of unintentional injury deaths, Victoria 2007-16



UNDETERMINED INTENT INJURY DEATHS

Figure 6: Trend in frequency and annual rate of undetermined intent injury deaths, Victoria 2007-16



KEY

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

PATTERN OF INJURY DEATHS (2014-2016)

Gender distribution

- Males were overrepresented accounting for 56.8% of unintentional injury deaths (n=3147), 74.9% of intentional injury deaths (n=1595) and 62.1% of undetermined intent injury deaths (n=87) in Victoria over the period 2014-2016 (Table 2).
- The average annual male injury death rate was 1.7 times higher than the female death rate (54.7/100,000 vs. 33.1/100,000). Men's higher death rates were observed in unintentional, intentional and undetermined intent deaths (by 1.3 times, 3.1 times and 1.7 times, respectively) (Table 2).

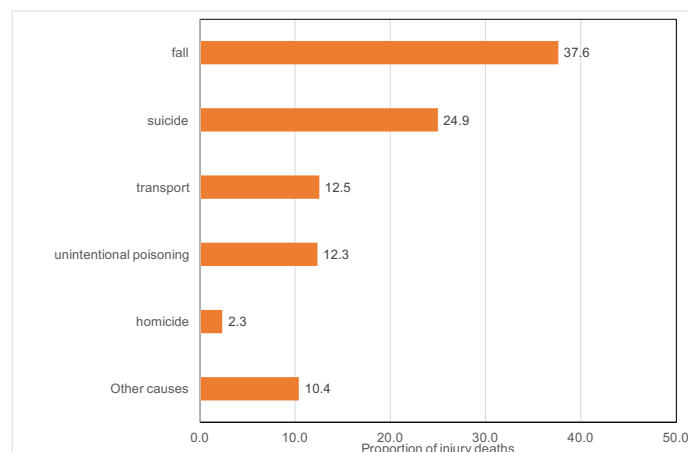
Age distribution

- Persons aged 65 years and older had the highest annual all-injury (145.3/100,000) and unintentional injury death rates (132.6/100,000) whereas children aged 0-14 years had the lowest (2.7 and 2.0/100,000, respectively) (Table 3).
- Adults aged 25-64 years had the highest intentional (15.9/100,000) and undetermined intent annual injury death rates (1.1/100,000) and children aged 0-14 years had the lowest intentional annual injury death rate (2.0/100,000) (Table 3).

Leading causes of injury deaths

- Figure 7 shows the leading causes of injury deaths. Falls (37.6%, n=2936), suicide (24.9%, n=1948) and transport (12.5%, n=975) accounted for three-quarters of all injury deaths and unintentional poisoning for a further 12.3% (n=962).
- For more detail on causes of injury deaths see Appendix 1 Table 23.

Figure 7: Leading causes of injury deaths, Victoria 2014-2016 (n=7814)



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 injury deaths by intent and gender, Victoria 2014-2016

	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	3,147	56.8	35.7	1,595	74.9	18.1	87	62.1	1.0	4,829	61.8	54.7
Female	2,397	43.2	26.6	535	25.1	5.9	53	37.9	0.6	2,985	38.2	33.1
All	5,544	100.0	31.1	2,130	100.0	11.9	140	100.0	0.8	7,814	100.0	43.8

Table 3: Frequency and average annual rate of injury deaths by intent and age group, Victoria 2014-2016

	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 years	66	1.2	2.0	24	1.1	0.7	NA	NA		90	1.2	2.7
15-24 years	229	4.1	9.7	265	12.4	11.2	15	10.7	0.6	509	6.5	21.5
25-64 years	1,706	30.8	17.9	1,519	71.3	15.9	108	77.1	1.1	3,333	42.7	35.0
65+ years	3,543	63.9	132.6	322	15.1	12.1	17	12.1	0.6	3,882	49.7	145.3
All	5,544	100.0	31.1	2,130	100.0	11.9	140	100.0	0.8	7,814	100.0	43.8

Note: NA child deaths coded to 'undetermined intent' were deleted from the entire analysis (see methods section)

LEADING CAUSES IN MORE DETAIL

A high proportion of fall deaths were coded to 'unspecified fall' (n=2297, 78.2%). Of those with a specified fall mechanism (n=639), most were falls on the same level from slipping, tripping or stumbling (47.9%, n=306). (Table 4)

Table 4: Unintentional fall injury deaths, Victoria 2014-2016

DETAILED CAUSE	N	%
Same level from slipping, tripping, stumbling	306	10.4
Involving bed	81	2.8
On and from stairs and steps	65	2.2
Involving chair	59	2.0
On and from ladder	28	1.0
From, out of or through building or structure	22	0.7
Involving wheelchair	15	0.5
Other fall from one level to another	11	0.4
Involving other furniture	8	0.3
From cliff	7	0.2
Other specified fall	37	1.3
Unspecified fall	2,297	78.2
All falls	2,936	100

Hanging was the most common method of suicide (n=1028, 52.8%), followed by poisoning by pharmaceuticals (n=289, 14.8%) or another substance (n=152, 7.8%). (Table 5)

Table 5: Suicides, Victoria 2014-2016

DETAILED CAUSE	N	%
Hanging, strangulation and suffocation	1,028	52.8
Poisoning – pharmaceuticals	289	14.8
Poisoning other substances	152	7.8
Jumping or lying before moving object	136	7.0
Firearms	109	5.6
Jumping from a high place	73	3.7
Sharp object	61	3.1
Smoke, fire and flames	31	1.6
Crashing of motor-vehicle	28	1.4
Drowning and submersion	26	1.3
Other specified means	10	0.5
Unspecified means	5	0.3
All suicides	1948	100.0

Unintentional transport deaths mostly involved car occupants (n=515, 52.8%), pedestrians (n=162, 16.6%) or motorcycle riders (n=137, 14.1%). (Table 6).

Table 6: Unintentional transport deaths, Victoria 2014-2016

DETAILED CAUSE	N	%
Car occupant injured in transport accident	515	52.8
Pedestrian injured in transport accident	162	16.6
Motorcycle rider injured in transport accident	137	14.1
Other land transport accident	48	4.9
Pedal cyclist injured in transport accident	34	3.5
Water transport accident	23	2.4
Air and space transport accident	21	2.2
Occupant of heavy transport vehicle	15	1.5
Other specified transport accident	20	2.1
All transport deaths	975	100

Narcotics & psychodysleptics (hallucinogens) were the most common specific agents involved in unintentional poisoning deaths (n=192, 21.5%) (Table 7).

Table 7: Unintentional poisoning deaths, Victoria 2014-2016

DETAILED CAUSE	N	%
Narcotics and psychodysleptics {hallucinogens} not elsewhere classified	207	21.5
Antiepileptic, sedative-hypnotic, antiparkinsonism and psychotropic drugs, not elsewhere classified	99	10.3
Alcohol	64	6.7
Nonopioid analgesics, antipyretics & antirheumatics	8	0.8
Other specified poisonings	13	1.4
Other and unspecified drugs, medicaments and biological subs	571	59.4
All poisonings	962	100

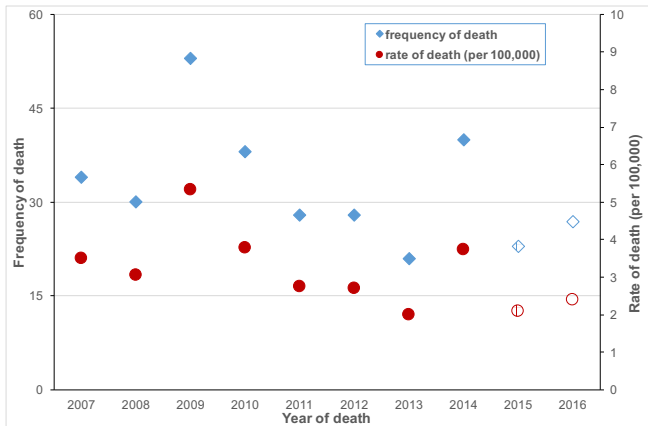
CHILDREN (0-14 YEARS)

TREND IN INJURY DEATHS (2007-2016)

Data presented for the years 2015 and 2016 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 five intentional deaths among children for most years of the nine year period. (Note: undetermined intent child deaths have been excluded from the entire analysis for reasons of confidentiality)

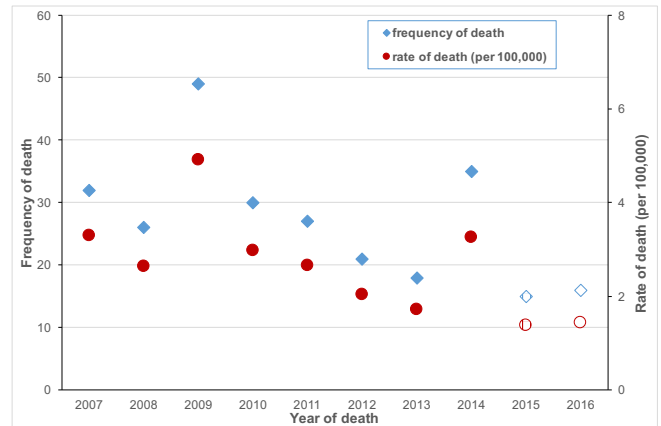
ALL INTENTS INJURY DEATHS

Figure 8: Trend in frequency and annual rate of child injury deaths, Victoria 2007-2016



UNINTENTIONAL INJURY DEATHS

Figure 9: Trend in frequency and annual rate of child unintentional injury deaths, Victoria 2007 - 2016



PATTERN OF INJURY DEATHS (2014-2016)

In the period 2014-2016, 90 Victorian children died as a result of injury. More than 70% of these deaths were unintentional (73.3%, n=66) (Table 8).

Gender distribution

- Boys were overrepresented among all injury (62.2%), and unintentional (66.7%) injury deaths (Table 8). Boys and girls were equally represented among intentional injury deaths.
- The annual all-injury and unintentional injury death rates were also higher for boys than girls (boys: 3.3 & 2.6/100,000, respectively vs. girls: 2.1 & 1.4/100,000, respectively) (Table 8).

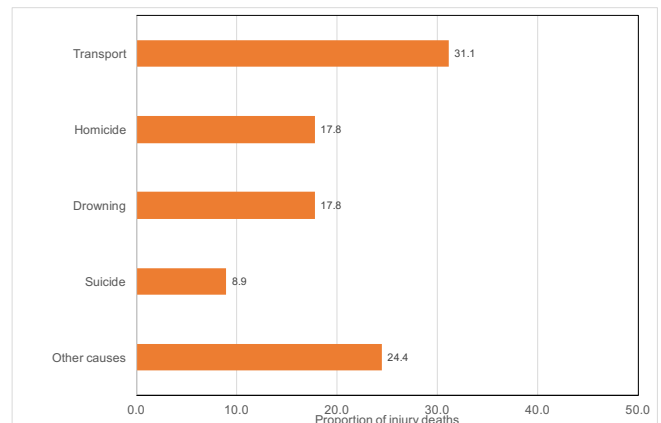
Age distribution

- Children aged 0-4 years accounted for 53.3% of child injury deaths (n=48), 51.5% of unintentional injury deaths (n=34) and 58.3% of intentional injury deaths (n=14) in children. (Table 9).
- Child unintentional annual injury death rates were highest in children aged 0-4 years (2.9 per 100,000) (Table 9).

Leading causes of child injury deaths

- Figure 10 shows the leading causes of child injury deaths. Transport accounted for 31.1% of injury deaths (n=28), followed by homicide and drowning (each 17.8%, n=16).
- Child transport deaths mainly involved car occupants (n=17) and pedestrians (n=7).
- For more detail on causes of injury deaths see Appendix 1 Table 23.

Figure 10: Leading causes of child injury deaths, Victoria 2014-2016 (n=90)



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

KEY

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

Table 8: Frequency and average annual rate of child injury deaths by intent and gender, Victoria 2014-2016

	UNINTENTIONAL			INTENTIONAL			ALL		
	n	%	Rate per 100,000	n	%	Rate per 100,000	n	%	Rate per 100,000
Male	44	66.7	2.6	12	50.0	0.7	56	62.2	3.3
Female	22	33.3	1.4	12	50.0	0.8	34	37.8	2.1
All	66	100.0	2.0	24	100.0	0.7	90	100.0	2.7

Notes: * Child deaths coded to 'undetermined intent' were deleted from the entire analysis (see methods section)

Table 9: Frequency and average annual rate of child injury deaths by intent and age group, Victoria 2014- 2016

	UNINTENTIONAL			INTENTIONAL			ALL		
	n	%	Rate per 100,000	n	%	Rate per 100,000	n	%	Rate per 100,000
0-4 years	34	51.5	2.9	14	58.3	1.2	48	53.3	4.2
5-9 years	17	25.8	1.5	0	0.0	0.0	17	18.9	1.5
10-14 years	15	22.7	1.5	10	41.7	1.0	25	27.8	2.4
0-14 years	66	100.0	2.0	24	100.0	0.7	90	100.0	2.7

Notes: * Child deaths coded to 'undetermined intent' were deleted from the entire analysis (see methods section)

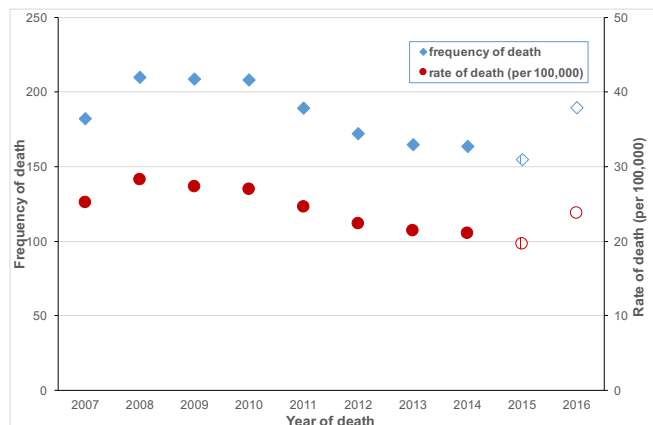
ADOLESCENTS AND YOUNG ADULTS (15-24 YEARS)

TREND IN INJURY DEATHS (2007-2016)

Data presented for the years 2015 and 2016 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.

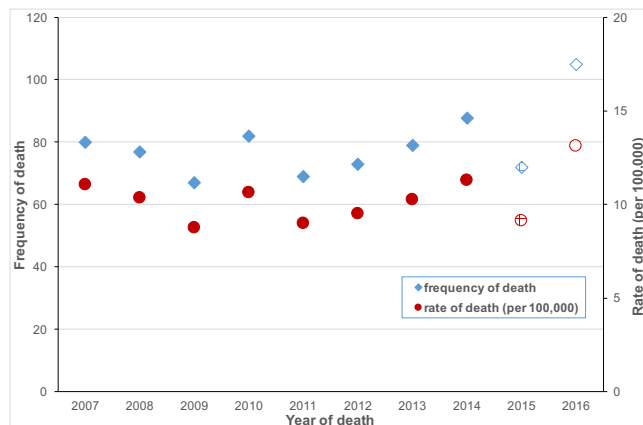
ALL INTENTS INJURY DEATHS

Figure 11: Trend in frequency and annual rate of adolescent and young adult injury deaths, Victoria 2007-2016



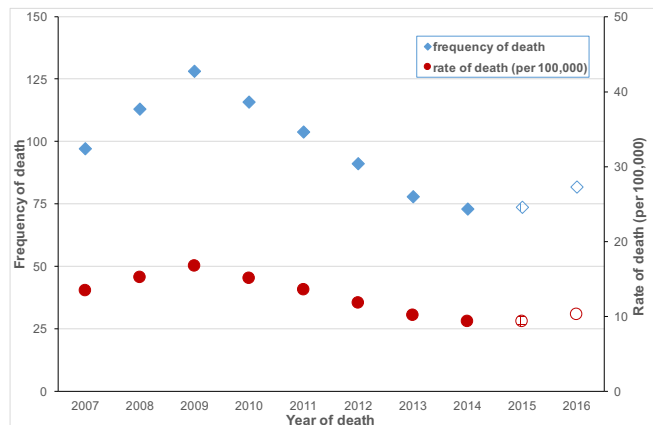
INTENTIONAL INJURY DEATHS

Figure 13: Trend in frequency and annual rate of adolescent and young adult intentional injury deaths, Victoria 2007-2016



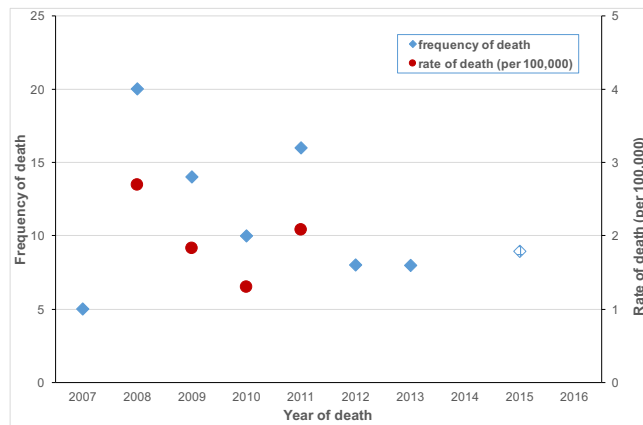
UNINTENTIONAL INJURY DEATHS

Figure 12: Trend in frequency and annual rate of adolescent and young adult unintentional injury deaths, Victoria 2007-2016



UNDETERMINED INTENT INJURY DEATHS

Figure 14: Trend in frequency and annual rate of adolescent and young adult undetermined intent injury deaths, Victoria 2007-2016



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

KEY

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

PATTERN OF INJURY DEATHS (2014-2016)

In the period 2014-2016, 509 Victorian adolescents and young adults died as a result of injury. More than half of the deaths were intentional (52.1%, n=265), 45.0% were unintentional (n=229) and 2.9% were classified as undetermined intent (n=15) (Table 10)..

Gender distribution

- Males were overrepresented, accounting for 76.4% of unintentional (n=175) and 76.2% of intentional (n=202) injury deaths among adolescents and young adults (Table 10).
- The adolescent and young adult unintentional and intentional annual injury death rates were also higher for males than females (males: 14.4 & 16.7/100,000, respectively vs. females: 4.7 & 5.5/100,000, respectively) (Table 10).

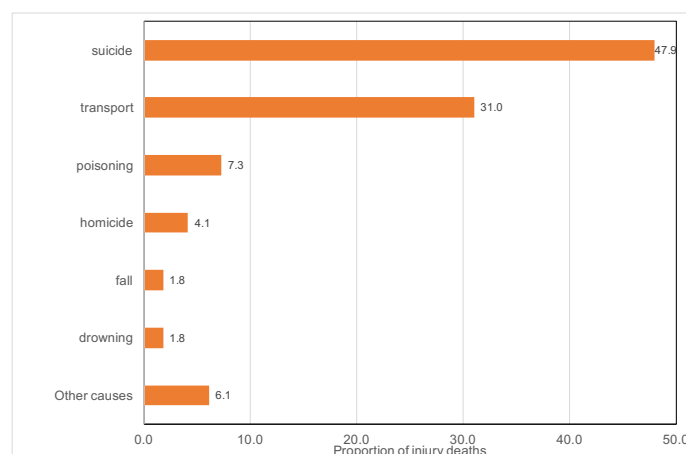
Age distribution

- The unintentional and intentional annual injury death rates were higher among persons aged 20-24 years than persons aged 15-19 years (10.8 & 13.3/100,000 respectively vs. 8.3 & 8.7/100,000, respectively) (Table 11).

Leading causes of adolescent and young adult injury deaths

- Figure 15 shows the leading causes of adolescent and young adult injury death. Suicide accounted for 47.9% of injury deaths (n=244), followed by transport incidents (31.0%, n=158) and unintentional poisoning (7.3%, n=37).
- 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 2014-2016 (n=509)



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

Table 10: Frequency and average annual rate of adolescent and young adult injury deaths by intent and gender, Victoria 2014-2016

	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	175	76.4	14.4	202	76.2	16.7	9	60.0	**	386	75.8	31.9
Female	54	23.6	4.7	63	23.8	5.5	6	40.0	**	123	24.2	10.7
All	229	100.0	9.7	265	100.0	11.2	15	100.0	0.6	509	100.0	21.5

Table 11: Frequency and average annual rate of adolescent and young adult injury deaths by intent and age group, Victoria 2014-2016

	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
15-19 years	90	39.3	8.3	94	35.5	8.7	7	46.7	**	191	37.5	17.6
20-24 years	139	60.7	10.8	171	64.5	13.3	8	53.3	**	318	62.5	24.8
15-24 years	229	100.0	9.7	265	100.0	11.2	15	100.0	0.6	509	100.0	21.5

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

LEADING CAUSES IN MORE DETAIL

Hanging was the most common method of suicide (n=135, 55.3%) (Table 12).

Table 12: Suicides, Victoria 2014-2016

DETAILED CAUSE	N	%
Hanging, strangulation & suffocation	135	55.3
Jumping or lying before moving object	40	16.4
Poisoning - pharmaceuticals	17	7.0
Jumping from a high place	14	5.7
Firearms	11	4.5
Poisoning other substances	8	3.3
Crashing of motor-vehicle	8	3.3
Sharp object	6	2.5
Smoke, fire & flames	*	*
Drowning & submersion	*	*
All suicides	244	100

Note: Frequency less than 5 has been suppressed with an "**".
Other cells may be suppressed in order to maintain confidentiality.

Unintentional transport deaths mostly involved car occupants (n=106, 67.1%), motorcycle riders (n=20, 12.7%) and pedestrians (n=18, 11.4%) (Table 13).

Table 13: Unintentional transport injury deaths, Victoria 2014-2016

DETAILED CAUSE	N	%
Car occupant	106	67.1
Motorcycle rider	20	12.7
Pedestrian	18	11.4
Other land transport	*	*
Occupant of pick-up truck or van	*	*
Pedal cyclist	*	*
Water transport	*	*
Air and space transport	*	*
Occupant of three-wheeled vehicle	*	*
All transport	158	100

Note: Frequency less than 5 has been suppressed with an "**".
Other cells may be suppressed in order to maintain confidentiality.

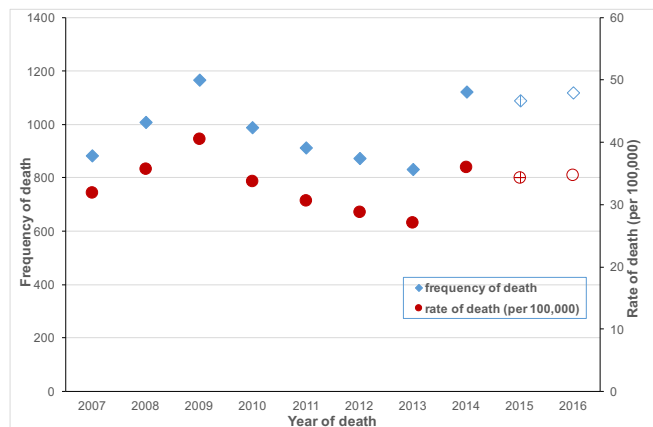
ADULTS (25-64 YEARS)

TREND IN INJURY DEATHS (2007-2016)

Data presented for the years 2015 and 2016 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.

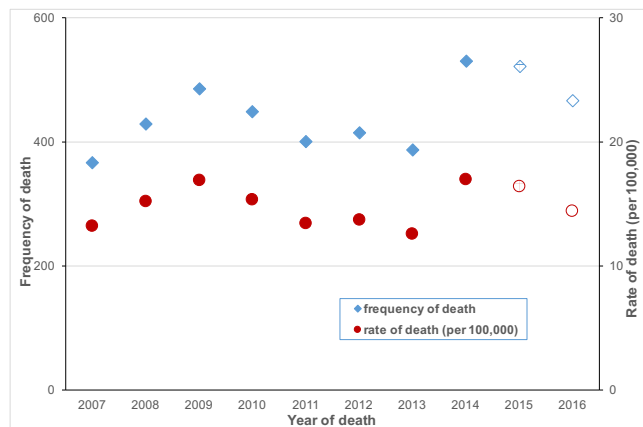
ALL INTENTS INJURY DEATHS

Figure 16: Trend in frequency and annual rate of adult injury deaths, Victoria 2007-2016



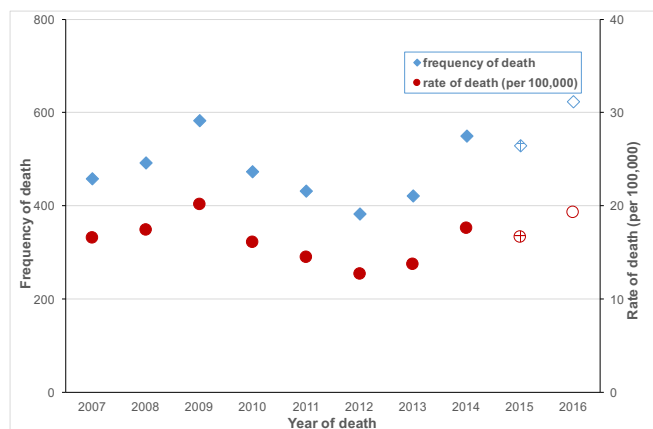
INTENTIONAL INJURY DEATHS

Figure 18: Trend in frequency and annual rate of adult intentional injury deaths, Victoria 2007-2016



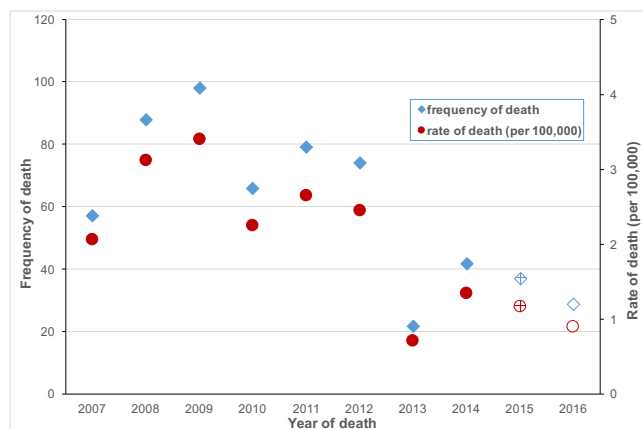
UNINTENTIONAL INJURY DEATHS

Figure 17: Trend in frequency and annual rate of adult unintentional injury deaths, Victoria 2007-2016



UNDETERMINED INTENT INJURY DEATHS

Figure 19: Trend in frequency and annual rate of adult undetermined intent injury deaths, Victoria 2007-2016



KEY

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

PATTERN OF INJURY DEATHS (2014-2016)

In the period 2014-2016, 3333 Victorian adults aged 25-64 years died as a result of injury. More than half of these deaths were unintentional (51.2%, n=1706), 45.6% were intentional (n=1519) and the remaining 3.2% were classified as undetermined intent (n=108) (Table 14).

Gender distribution

- Males were overrepresented in adult injury deaths, accounting for around three-quarters of unintentional (75.8%, n=1294) and intentional injury deaths (74.6%, n=1133) (Table 14).
- The unintentional and intentional injury annual death rates were higher for males than females (males: 27.5 & 24.1/100,000, respectively vs. females: 8.5 & 8.0/100,000, respectively) (Table 14).

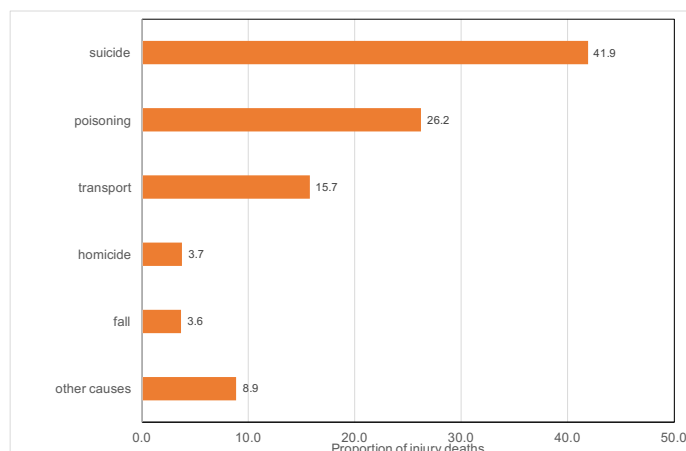
Age distribution

- Average annual rates were fairly evenly spread across the adult age groups for both unintentional injury and intentional injury deaths (Table 15).

Leading causes of adult injury deaths

- Figure 20 shows the leading causes of adult injury death. Suicide accounted for 41.9% of injury deaths (n=1395), followed by unintentional poisoning (26.2%, n=874) and transport (15.7%, n=524).
- For more detail on causes of injury deaths see Appendix 1 Table 23.

Figure 20: Leading causes of adult injury deaths, Victoria 2014-2016 (n=3333)



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

Table 14: Frequency and average annual rate of adult injury deaths by intent and gender, Victoria 2014-2016

	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	1,294	75.8	27.5	1,133	74.6	24.1	67	62.0	1.4	2,494	74.8	53.1
Female	412	24.2	8.5	386	25.4	8.0	41	38.0	0.8	839	25.2	17.4
All	1,706	100.0	17.9	1,519	100.0	15.9	108	100.0	1.1	3,333	100.0	35.0

Table 15: Frequency and average annual rate of adult injury deaths by intent and age group, Victoria 2014-2016

	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
25-29 years	189	11.1	13.7	187	12.3	13.6	9	8.3	**	385	11.6	28.0
30-34 years	216	12.7	15.9	231	15.2	17.0	8	7.4	**	455	13.7	33.5
35-39 years	247	14.5	20.4	179	11.8	14.8	23	21.3	1.9	449	13.5	37.0
40-44 years	255	14.9	20.5	228	15.0	18.4	19	17.6	1.5	502	15.1	40.4
45-49 years	211	12.4	17.7	201	13.2	16.9	12	11.1	1.0	424	12.7	35.6
50-54 years	223	13.1	19.5	216	14.2	18.9	20	18.5	1.7	459	13.8	40.1
55-59 years	196	11.5	18.4	163	10.7	15.3	6	5.6	**	365	11.0	34.2
60-64 years	169	9.9	17.9	114	7.5	12.1	11	10.2	1.2	294	8.8	31.1
25-64 years	1,706	100.0	17.9	1,519	100.0	15.9	108	100.0	1.1	3,333	100.0	35.0

LEADING CAUSES IN MORE DETAIL

Hanging was the most common method of suicide (n=771) among adults, followed by poisoning with pharmaceutical substances (n=214) and non-pharmaceutical substances (n=115) (Table 16).

Table 16: Suicides, Victoria 2014-2016

DETAILED CAUSE	N	%
Hanging, strangulation and suffocation	771	55.3
Poisoning – pharmaceuticals	214	15.3
Poisoning – other substances	115	8.2
Jumping or lying before moving object	82	5.9
Jumping from a high place	55	3.9
Firearms	49	3.5
Sharp object	44	3.2
Smoke, fire and flames	22	1.6
Crashing of motor-vehicle	19	1.4
Drowning and submersion	15	1.1
Other specified means	*	*
Unspecified means	*	*
All suicides	1395	100

Note: Frequency less than 5 has been suppressed with an “*”.
Other cells may be suppressed in order to maintain confidentiality.

Narcotics & psychodysleptics (hallucinogens) were the most common specific agents involved in unintentional poisoning deaths among adults (n=197) (Table 17).

Table 17: Unintentional poisoning deaths, Victoria 2014-2016

DETAILED CAUSE	N	%
Narcotics and psychodysleptics {hallucinogens} not elsewhere classified	197	22.5
Antiepileptic, sedative-hypnotic, antiparkinsonism & psychotropic drugs, not elsewhere classified	87	10.0
Alcohol	55	6.3
Nonopioid analgesics, antipyretics & antirheumatics	7	0.8
Other drugs acting on the autonomic nervous system	*	*
Other gases & vapours	*	*
Other & unspecified chemicals & noxious substances	*	*
Other & unspecified drugs, medicaments & biological subs	522	59.7
All poisoning	874	100

Note: Frequency less than 5 has been suppressed with an “*”.
Other cells may be suppressed in order to maintain confidentiality.

Unintentional transport deaths among adults mostly involved car occupants (47.7%, n=250), motorcycle riders (21.9%, n=115) and pedestrians (12.8%, n=67) (Table 18).

Table 18: Unintentional transport deaths, Victoria 2014-2016

DETAILED CAUSE	N	%
Car occupant injured in transport accident	250	47.7
Motorcycle rider injured in transport accident	115	21.9
Pedestrian injured in transport accident	67	12.8
Other land transport accident	23	4.4
Pedal cyclist injured in transport accident	19	3.6
Occupant of heavy transport vehicle	15	2.9
Air and space transport accident	13	2.5
Water transport accident	12	2.3
Occupant of pick-up truck or van	5	1.0
Other specified	5	1.0
All transport	524	100

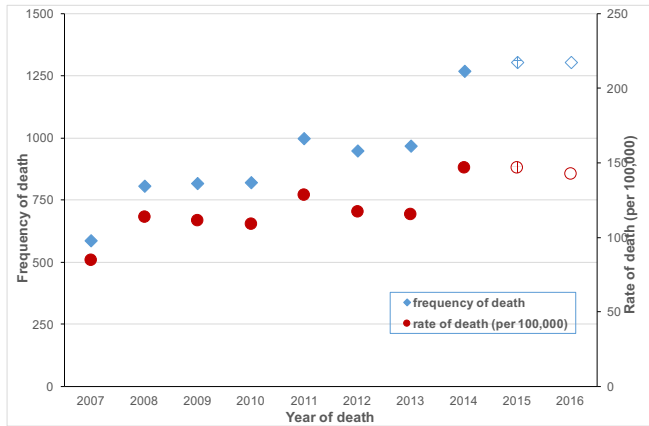
OLDER ADULTS (65 YEARS+)

TREND IN INJURY DEATHS (2007-2016)

Data presented for the years 2015 and 2016 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.

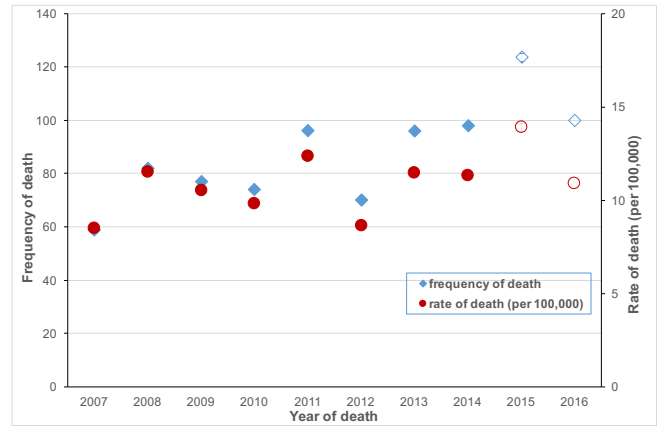
ALL INTENTS INJURY DEATHS

Figure 21: Trend in frequency and annual rate of older adult injury deaths, Victoria 2007-2016



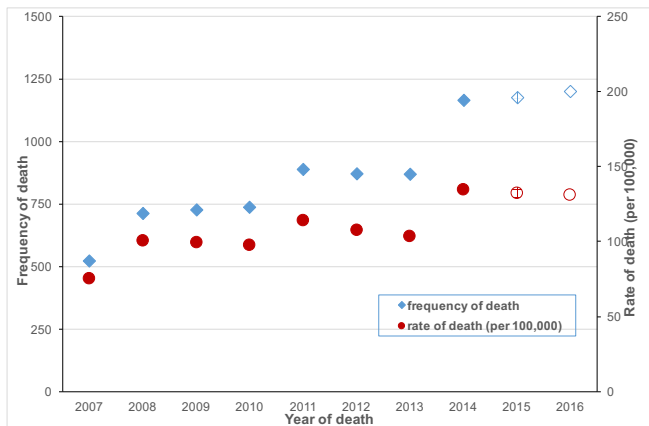
INTENTIONAL INJURY DEATHS

Figure 23: Trend in frequency and annual rate of older adult intentional injury deaths, Victoria 2007-2016



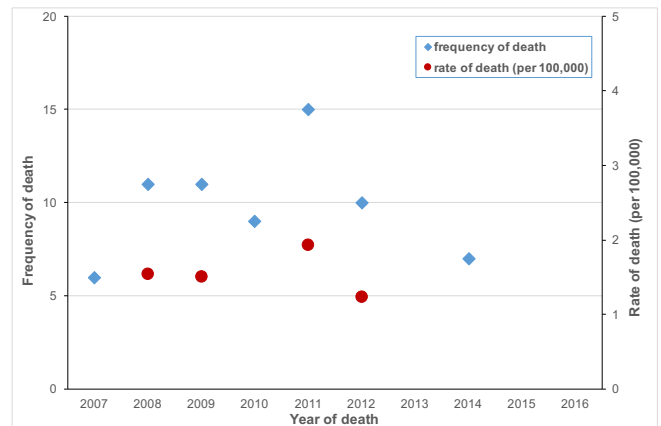
UNINTENTIONAL INJURY DEATHS

Figure 22: Trend in frequency and annual rate of older adult unintentional injury deaths, Victoria 2007-2016



UNDETERMINED INTENT INJURY DEATHS

Figure 24: Trend in frequency and annual rate of older adult undetermined intent injury deaths, Victoria 2007-2016



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

PATTERN OF INJURY DEATHS (2014-2016)

In the period 2014-2016, 3882 Victorian older adults died as a result of injury. Ninety-one percent of these deaths were unintentional (91.3%, n=3543), 8.3% were intentional (n=322) and 0.4% were classified as undetermined intent (n=17) (Table 19).

Gender distribution

- More than half of the unintentional injury deaths (53.9%, n=1909) were among females, while males accounted for more than three-quarters of intentional injury deaths (77.0%, n=248) (Table 19).
- The all-injury and unintentional injury annual death rates were similar for males (153.9/100,000 and 132.9/100,000, respectively) and females (137.9/100,000 and 132.4/100,000 respectively) (Table 19).
- The intentional injury annual death rates were higher for males (20.2/100,000) compared to females (5.1/100,000) (Table 19)

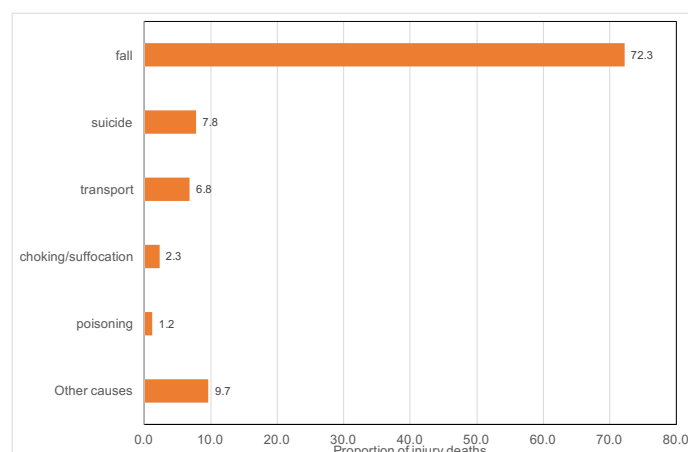
Age distribution

- Unintentional injury annual death rates increased as age increased with the highest rates observed in persons aged 85 years and older (607.2/100,000) (Table 20).
- Intentional injury annual death rates were fairly consistent across the older adult age groups in the 65-84 year range but were higher among those aged 85 years and older (20.1/100,000) (Table 20).

Leading causes of older adult injury deaths

- Figure 25 shows the leading causes of older adult injury deaths. Falls account for almost three-quarters of injury deaths (72.3%, n=2805), followed by suicide (7.8%, n=301), transport incidents (6.8%, n=265), choking/suffocation (2.3%, n=88), and unintentional poisoning (1.2%, n=48).
- For more detail on causes of injury deaths see Appendix 1 Table 23

Figure 25: Leading causes of older adult injury deaths, Victoria 2014-2016 (n=3,882)



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

Table 19: Frequency and average annual rate of older adult injury deaths by intent and gender, Victoria 2014-2016

	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	1,634	46.1	132.9	248	77.0	20.2	11	64.7	0.9	1,893	48.8	153.9
Female	1,909	53.9	132.4	74	23.0	5.1	6	35.3	**	1,989	51.2	137.9
All	3,543	100.0	132.6	322	100.0	12.1	17	100.0	0.6	3,882	100.0	145.3

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

Table 20: Frequency and average annual rate of older adult injury deaths by intent and age group, Victoria 2014-2016*

	UNINTENTIONAL			INTENTIONAL			ALL		
	n	%	Rate per 100,000	n	%	Rate per 100,000	n	%	Rate per 100,000
65-69 years	168	4.7	19.9	92	28.6	10.9	260	6.7	30.8
70-74 years	210	5.9	33.2	53	16.5	8.4	263	6.8	41.6
75-79 years	341	9.6	71.1	60	18.6	12.5	401	10.3	83.6
80-84 years	614	17.3	174.4	44	13.7	12.5	658	17.0	186.9
85+ years	2,210	62.4	607.2	73	22.7	20.1	2,283	58.8	627.3
65+ years	3,543	100.0	132.6	322	100.0	12.1	3,865	99.6	144.7

Note: * undetermined intent deaths (n=19) excluded from this table and from the "ALL" column to maintain confidentiality

LEADING CAUSE IN MORE DETAIL

A high proportion of fall deaths were coded to 'unspecified fall' (n=2232, 79.6%) (Table 21). Of those with a specified fall mechanism (n=573), approximately half were falls on the same level from slipping, tripping or stumbling (50.4%, n=289).

Table 21: Unintentional fall deaths, Victoria 2014-2016

DETAILED CAUSE	N	%
Same level from slipping, tripping, stumbling	289	10.3
Involving bed	78	2.8
Involving chair	59	2.1
On and from stairs and steps	54	1.9
Other fall on same level	27	1.0
On and from ladder	24	0.9
Involving wheelchair	12	0.4
From, out of or through building or structure	9	0.3
Other fall from one level to another	9	0.3
Involving other furniture	8	0.3
From cliff	*	*
Other specified	*	*
Unspecified fall	2,232	79.6
All falls	2,805	100

Note: Frequency less than 5 has been suppressed with an "**".
Other cells may be suppressed in order to maintain confidentiality.

APPENDIX 1:

Table 22: Overview of injury deaths, Victoria 2014-2016

		2014 ⁽¹⁾		2015 ⁽²⁾		2016 ⁽²⁾		TOTAL*	
		n	%	n	%	n	%	n	%
ALL		2,597	100	2,572	100	2,645	100	7,814	100
Age group	0-14 years	40	1.5	23	0.9	27	1.0	90	1.2
	15-24 years	164	6.3	155	6.0	190	7.2	509	6.5
	25-64 years	1123	43.2	1089	42.3	1121	42.4	3333	42.7
	65+ years	1270	48.9	1305	50.7	1307	49.4	3882	49.7
Sex	Male	1605	61.8	1601	62.2	1623	61.4	4829	61.8
	Female	992	38.2	971	37.8	1022	38.6	2985	38.2
UNINTENTIONAL		1824	70.2	1795	69.8	1925	72.8	5544	70.9
Fall		953	36.7	995	38.7	988	37.4	2936	37.6
Transport		336	12.9	310	12.1	329	12.4	975	12.5
Poisoning		294	11.3	299	11.6	369	14.0	962	12.3
Choking/suffocation		45	1.7	34	1.3	45	1.7	124	1.6
Drowning		42	1.6	25	1.0	33	1.2	100	1.3
Fires/burns/scalds		23	0.9	15	0.6	14	0.5	52	0.7
Natural/environmental/animals		30	1.2	6	0.2	10	0.4	46	0.6
Hit/struck/crush		16	0.6	13	0.5	14	0.5	43	0.6
Explosions/firearms		*	*	*	*	7	0.3	14	0.2
Machinery		*	*	*	*	*	*	7	0.1
Cutting/piercing		*	*	*	*	*	*	7	0.1
Foreign body - natural orifice		0	0.0	*	*	*	*	*	*
Overexertion and/or strenuous movements		*	*	0	0.0	0	0.0	*	*
Natural/environmental/animals		9	0.3	6	0.2	7	0.3	22	0.3
Unspecified unintentional		65	2.5	82	3.2	104	3.9	251	3.2
INTENTIONAL		721	27.8	726	28.2	683	25.8	2130	27.3
Suicide		658	25.3	668	26.0	622	23.5	1948	24.9
Homicide		63	2.4	58	2.3	61	2.3	182	2.3
UNDETERMINED INTENT*		52	2.0	51	2.0	37	1.4	140	1.8
Event of undetermined intent		52	2.0	51	2.0	37	1.4	140	1.8

Notes: (1) Data for different years are at different stages of the ABS revisions process: (1) Final, (2) Revised & (3) Preliminary.

(2) Frequency less than 5 has been suppressed with an "**". Other cells in the same row and/or column may be suppressed in order to maintain confidentiality.

(3) Child deaths coded to 'undetermined intent' were deleted from the entire analysis (see methods section)

Table 23: Ranking of causes of injury deaths (all ages), Victoria 2014-2016

RANK	AGE GROUPS (YEARS)																		
	0-4yrs	5-9yrs	10-14yrs	15-19yrs	20-24yrs	25-29yrs	30-34yrs	35-39yrs	40-44yrs	45-49yrs	50-54yrs	55-59yrs	60-64yrs	65-69yrs	70-74yrs	75-79yrs	80-84yrs	85+ yrs	ALL
1 n %	homicide 14 29.2%	transport 10 58.8%	suicide 8 32.0%	suicide 87 45.5%	suicide 157 49.4%	suicide 179 46.5%	suicide 211 46.4%	poisoning 171 38.1%	suicide 204 40.6%	suicide 181 42.7%	suicide 204 44.4%	suicide 155 42.5%	suicide 102 34.7%	suicide 83 31.3%	fall 115 43.1%	fall 241 60.1%	fall 490 74.1%	fall 1,896 82.9%	fall 2,936 37.6%
2 n %	drowning 12 25.0%	drowning * *	transport 7 28.0%	transport 75 39.3%	transport 83 26.1%	transport 94 24.4%	poisoning 122 26.8%	suicide 159 35.4%	poisoning 160 31.9%	poisoning 127 30.0%	poisoning 99 21.6%	poisoning 81 22.2%	transport 54 18.4%	fall 63 23.8%	suicide 51 19.1%	suicide 53 13.2%	transport 46 7.0%	unspec. unintentional 152 6.6%	suicide 1,948 24.9%
3 n %	transport 11 22.9%	choking / suffocation * *	oth. unintentional * *	poisoning 7 3.7%	poisoning 30 9.4%	poisoning 68 17.7%	transport 69 15.2%	transport 56 12.5%	transport 66 13.1%	transport 61 14.4%	transport 67 14.6%	transport 57 15.6%	poisoning 46 15.6%	transport 57 21.5%	transport 47 17.6%	transport 45 11.2%	suicide 42 6.4%	suicide 72 3.1%	transport 975 12.5%
4 n %	nat./ env./ animals * *	fires / burns / scalds * *	poisoning * *	homicide 7 3.7%	homicide 14 4.4%	drowning 10 2.6%	homicide 20 4.4%	oth. or undet. intent 23 5.1%	homicide 24 4.8%	homicide 20 4.7%	fall 24 5.2%	fall 30 8.2%	fall 37 12.6%	poisoning 14 5.3%	unspec. unintentional 12 4.5%	unspec. unintentional 20 5.0%	unspec. unintentional 35 5.3%	transport 70 3.1%	poisoning 962 12.3%
5 n %	fires / burns / scalds * *	nat./ env./ animals * *	homicide * *	oth. or undet. intent 7 3.7%	drowning 8 2.5%	oth. or undet. intent 9 2.3%	oth. or undet. intent 8 1.8%	homicide 20 4.5%	oth. or undet. intent 19 3.8%	oth. or undet. intent 12 2.8%	oth. or undet. intent 20 4.4%	homicide 8 2.2%	homicide 12 4.1%	drowning 10 3.8%	choking / suffocation 11 4.1%	choking / suffocation 14 3.5%	choking / suffocation 17 2.6%	choking / suffocation 40 1.7%	unspec. unintentional 251 3.2%
6 n %	choking / suffocation * *		drowning * *	fall 5 2.6%	oth. or undet. intent 8 2.5%	homicide 7 2.1%	drowning 5 1.1%	drowning 6 1.3%	drowning 7 1.4%	fall 10 2.4%	homicide 12 2.6%	unspec. unintentional 7 1.9%	oth. or undet. intent 11 3.7%	unspec. unintentional 9 3.4%	poisoning 8 3.0%	poisoning 7 1.7%	drowning 6 0.9%	poisoning 13 0.6%	homicide 182 2.3%
7 n %	poisoning * *		fall * *	drowning * *	explosions / firearms 6 1.9%	fall 5 1.3%	nat./ env./ animals * *	fall 5 1.1%	fall 7 1.4%	hit / struck / crush * *	drowning 9 2.0%	oth. or undet. intent 6 1.6%	unspec. unintentional 8 2.7%	homicide 9 3.4%	fires / burns / scalds 5 1.9%	homicide 7 1.7%	poisoning 6 0.9%	fires / burns / scalds 12 0.5%	oth. or undet. intent 140 1.8%
8 n %	hit / struck / crush * *		fires / burns / scalds * *	fires / burns / scalds * *	oth. unintentional 5 1.6%	hit / struck / crush * *	hit / struck / crush * *	choking / suffocation * *	choking / suffocation * *	choking / suffocation * *	choking / suffocation 8 1.7%	drowning 5 1.4%	drowning 6 2.0%	choking / suffocation 6 2.3%	drowning * *	fires / burns / scalds 6 1.5%	nat./ env./ animals 6 0.9%	nat./ env./ animals 11 0.5%	choking / suffocation 124 1.6%
9 n %	machinery * *			choking / suffocation * *	fall * *	oth. unintentional * *	fall * *	cutting / piercing * *	fires / burns / scalds * *	drowning * *	nat./ env./ animals * *	choking / suffocation * *	choking / suffocation 5 1.7%	oth. or undet. intent 5 1.9%	oth. or undet. intent * *	drowning * *	fires / burns / scalds 5 0.8%	hit / struck / crush 7 0.3%	drowning 100 1.3%
10 n %	foreign body * *				fires / burns / scalds * *	choking / suffocation * *	choking / suffocation * *	fires / burns / scalds * *	hit / struck / crush * *	fires / burns / scalds * *	hit / struck / crush * *	fires / burns / scalds * *	hit / struck / crush 5 1.7%	fires / burns / scalds * *	hit / struck / crush * *	nat./ env./ animals * *	oth. or undet. intent * *	oth. unintentional 6 0.3%	fires / burns / scalds 52 0.7%
11 n %					nat./ env./ animals * *	fires / burns / scalds * *	cutting / piercing * *	machinery * *	nat./ env./ animals * *	nat./ env./ animals * *	fires / burns / scalds * *	nat./ env./ animals * *	nat./ env./ animals * *	hit / struck / crush * *	nat./ env./ animals * *	oth. unintentional * *	hit / struck / crush * *	oth. or undet. intent 5 0.2%	nat./ env./ animals 46 0.6%
12 n %					hit / struck / crush * *	nat./ env./ animals * *	unspec. unintentional * *	foreign body * *	cutting / piercing * *	cutting / piercing * *	unspec. unintentional * *	hit / struck / crush * *	fires / burns / scalds * *	nat./ env./ animals * *	homicide * *		homicide * *	drowning * *	hit / struck / crush 43 0.6%
13 n %						unspec. unintentional * *	fires / burns / scalds * *	oth. unintentional * *	strenuous movements * *	foreign body * *	explosions / firearms * *	machinery * *	explosions / firearms * *	explosions / firearms * *	machinery * *		machinery * *	explosions / firearms * *	oth. unintentional 22 0.3%
14 n %							machinery * *		unspec. unintentional * *	unspec. unintentional * *	other unintentional * *	explosions / firearms * *	foreign body * *	other unintentional * *	cutting / piercing * *			homicide * *	explosions / firearms 14 0.2%
15 n %							explosions / firearms * *							other unintentional * *		explosions / firearms * *			machinery 7 0.1%
16 n %																			cutting / piercing 7 0.1%
17 n %																			foreign body * *
18 n %																			strenuous movements * *
All	48	17	25	191	318	385	455	449	502	424	459	365	294	265	267	401	661	2288	7814

Note: (1) oth. or undet. intent = other or undetermined intent; nat./env./ animals= natural/environmental/animals; other unintentional= other specified unintentional; unspec.unintentional= unspecified unintentional;
 (2) Frequency less than 5 has been suppressed with an '*'. Other cells in the same row and/or column may be suppressed in order to maintain confidentiality. Child deaths coded to 'undetermined intent' were deleted from the entire analysis (see methods section)

APPENDIX 2:

Table 24: Death by state of residence vs deaths by state of death registration, 2014-2016

STATE OF RESIDENCE	REGISTRATION STATE								
	NSW	VIC	QLD	SA	WA	TAS	NT	ACT	Total
NSW	8,602	86	138	12	10	*	*	66	8,922
VIC	99	7,640	26	21	13	6	*	*	7,814
QLD	94	21	5,930	*	14	*	8	*	6,075
SA	12	17	*	2,280	*	*	*	0	2,323
WA	*	9	10	6	3,711	*	8	*	3,750
TAS	*	*	*	*	*	795	*	0	811
NT	0	*	*	9	*	0	444	0	459
ACT	23	*	6	0	0	*	0	329	363
Other**	*	0	0	0	*	0	0	0	5
Total	8,837	7,784	6,117	2,333	3,760	815	474	402	30,522

Note: Excludes medical injury and late effects.

Frequency less than 5 has been suppressed with an "***". Other cells in the same row and/or column may be suppressed in order to maintain confidentiality

** Other Territories (Cocos (Keeling) Islands, Christmas Island, Jervis Bay Territory)

Table 25: Reference year of death vs actual year of death for Victorian Residents

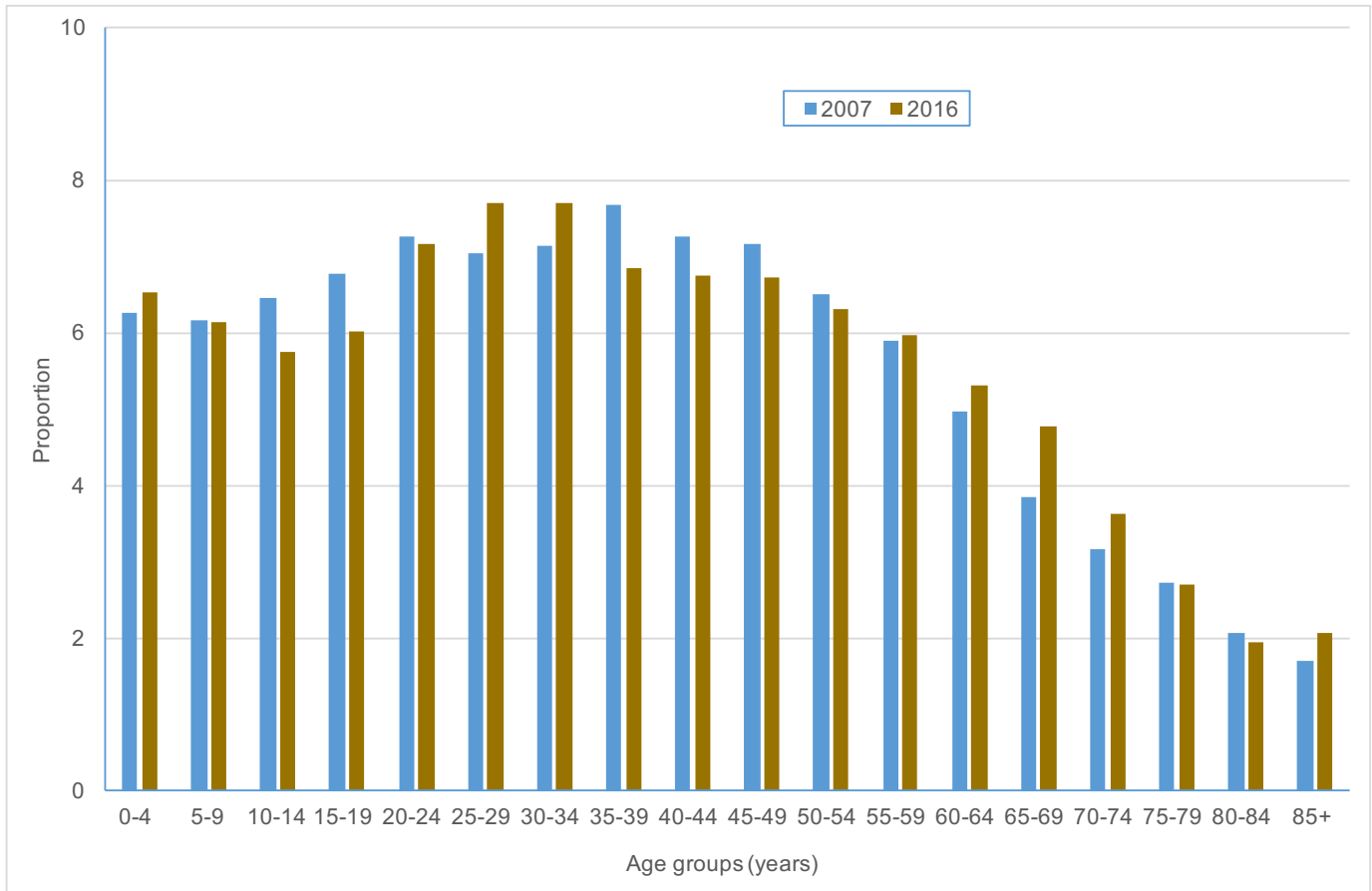
DEATH YEAR	REFERENCE YEAR										
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	Total
<2005	16	5	*	5	*	*	*	*	*	0	36
2005	11	*	0	*	0	*	0	0	0	*	19
2006	123	*	*	0	0	0	*	0	0	0	128
2007	1,539	352	7	*	0	0	*	0	0	0	1,901
2008	0	1,695	330	*	5	*	0	*	*	*	2,037
2009	0	0	1,906	321	21	*	*	*	0	*	2,253
2010	0	0	0	1,724	288	*	*	0	*	0	2,017
2011	0	0	0	0	1,815	252	7	*	0	*	2,078
2012	0	0	0	0	0	1,759	334	8	*	*	2,107
2013	0	0	0	0	0	0	1,640	524	6	*	2,172
2014	0	0	0	0	0	0	0	2,060	323	8	2,391
2015	0	0	0	0	0	0	0	0	2,237	317	2,554
2016	0	0	0	0	0	0	0	0	0	2,308	2,308
Total	1,689	2,058	2,247	2,057	2,130	2,020	1,987	2,597	2,573	2,644	22,002

Note: Excludes medical injury and late effects.

Frequency less than 5 has been suppressed with an "***".

Other cells in the same row and/or column may be suppressed in order to maintain confidentiality.

Figure 26: Histogram of age distribution of the resident population of Victoria, 2007-2016



Source: ABS June 2017; catalogue no: 3101.0 - Australian Demographic Statistics;
TABLE 52 - Estimated Resident Population by Single Year of Age, Victoria.

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 (www.monash.edu/muarc/visu) or by contacting the VISU office by phone (03 9905 1805).

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Other information regarding VISU, all E-bulletins and other VISU publications can be found on our internet home page:

www.monash.edu/muarc/visu



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